FINAL

FORSCOM

CORRECTIVE ACTION PLAN

PART B
ADDENDUM #1

3d Inf Div (Mech)

Underground Storage Tanks 25 & 26
Facility ID #9-025008
Building 1343
Hunter Army Airfield, Georgia

Prepared for

U.S. ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT

Contract No. DACA21-95-D-0022
Delivery Order 0043

June 2001

SAIC®

DOCUMENT 3.9

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FACILITY IDENTIFICATION NUMBER #9-025008
BUILDING 1343
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Prepared for
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Savannah District
Under Contract Number DACA21-95-D-0022
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Prepared by
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION
800 Oak Ridge Turnpike
Oak Ridge, Tennessee 37831

June 2001

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LIST OF ACRONYMS

ACL	alternate concentration limit
ATL	alternate threshold level
BGS	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
CAP	Corrective Action Plan
COPC	chemical of potential concern
DAF	dilution attenuation factor
DPW	Directorate of Public Works
EPA	U.S. Environmental Protection Agency
GA EPD	Georgia Environmental Protection Division
gpm	gallons per minute
GUST	Georgia Underground Storage Tank Management Program
HAAF	Hunter Army Airfield
IWQS	In-Stream Water Quality Standard
MCL	maximum contaminant level
PAH	polynuclear aromatic hydrocarbon
PVC	polyvinyl chloride
SI	site investigation
STL	soil threshold level
TCE	trichloroethene
USACE	U.S. Army Corps of Engineers
UST	underground storage tank
VOC	volatile organic compound

I. CORRECTIVE ACTION PLAN CERTIFICATION – PART B

(Form and certification follow this page.)

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Georgia Department of Natural Resources
Environmental Protection Division
Land Protection Branch
Underground Storage Tank Management Program
4244 International Parkway, Suite 104
Atlanta, Georgia 30354
Phone (404) 362-2687
FAX (404) 362-2654

CORRECTIVE ACTION PLAN
PART B

Facility Name: Building 1343, USTs 25 & 26 Site

Street Address: 2nd BN 3rd Aviation Brigade (previously 260th Quartermaster) Motorpool, Tubb Street

City: Hunter Army Airfield **County:** Liberty

Facility ID #: 9-025008

Submitted by UST Owner/Operator:
Name: Thomas C. Fry/Environmental Branch
Company: US Army/HQ 3d Inf. Div (Mech)
Address: DPW ENRD ENV. Br (Fry)
1557 Frank Cochran, Building 1139
City: Fort Stewart State: GA
Zip Code: 31314-4928

Prepared by:
Name: Patricia Stoll
Company: Science Applications International Corp.
Address: P.O. Box 2502
City: Oak Ridge State: TN
Zip Code: 37831

I. PLAN CERTIFICATION

A. UST Owner/Operator

I hereby certify that the information contained in this plan and in all the attachments is true, accurate, and complete, and the plan satisfies all criteria and requirements of Rule 391-3-15-.09 of the Georgia Rules for Underground Storage Tank Management.

Name: Thomas C. Fry

Signature: Thomas C. Fry Date: 07/09/01

B. Professional Engineer or Professional Geologist

Name: Patricia Stoll

Signature: Patricia A. Stoll

Date: 6/21/01

GEORGIA REGISTERED 22851 PROFESSIONAL ENGINEER P. A. STOLL 6/21/01

Georgia Stamp or Seal

Check all boxes below that apply. Attach supporting documentation, i.e., narrative, figures, tables, maps, boring/well logs, etc., for all items checked. Supporting documentation should be three-hole punched and prepared in conformity with the guidance document "Underground Storage Tank (UST) Release: Corrective Action Plan – Part B (CAP-B) Content", GUST-7B.

II. SITE INVESTIGATION REPORT

A. Horizontal and Vertical Extent of Contamination:

- ☒ Soil (Section II.A.1)
- ☒ Groundwater (Section II.A.2)
- ☐ Free Product (Section II.A.3)
- ☒ Surface Water (Section II.A.4)

B. Local and Site Hydrogeology

- ☒ Documentation of Local Groundwater Conditions (Section II.B.1)
- ☒ Stratigraphic Boring Logs (Section II.B.2)
- ☒ Stratigraphic Cross Sections (Section II.B.3)
- ☒ Referenced or Documented Calculations of Relevant Aquifer Parameters (Section II.B.4)
- ☒ Direction of Groundwater Flow (Section II.B.5)
  - ☒ Table of Monitoring Well Data (Table 2)
  - ☒ Potentiometric Map (Figures 21 & 22)
  - ☒ Flow Net Superimposed on a Base Map (Figures 21 and 22)

III. REMEDIAL ACTION PLAN:

A. Corrective Action Completed or In-Progress:

- ☐ Recovery/Removal of Free-Product (Non-aqueous Phase Hydrocarbons)
- ☐ Remediation/Treatment of Contaminated Backfill Material & Native Soils
- ☒ Other (specify) Monitoring Only Plan for benzene plume

B. Objective of Corrective Action:

- ☐ Remove Free Product That Exceeds One-Eighth Inch
- ☐ Remediate Groundwater Contamination That Exceeds:
  - ☐ Maximum Contaminant Levels (MCLs)

    OR
  - ☐ In-stream Water Quality Standards

B. Objective of Corrective Action (continued):

☐ Remediate Soil Contamination That Exceeds:

☐ Threshold Values Listed in Table A

OR

☐ Threshold Values Listed in Table B

OR

☐ Alternate Threshold Levels (ATLs)

☒ Provide Risk Based Corrective Action for Benzene Plume (CAP-Part B Report)

☐ Remediate Soil and/or Groundwater Contamination That Exceeds Alternate Concentration Limits (ACLs) and Monitor Residual Contaminants

OR

☒ Monitor Soil and/or Groundwater Contamination That Exceeds Levels in Rule -.09 (3) But Is Less Than ACLs

OR

☐ No Further Action Required - Soil and/or Groundwater Contamination is Below Levels in Rule -.09 (3)

C. Design Operation of Corrective Action Systems

☐ Soil ☐ Groundwater ☐ Free Product ☐ Surface Water ☒ Not Applicable

D. Implementation (Section III.D)

Includes, as a minimum, the following:

- Milestone schedule for site remediation
- Inspection and preventive maintenance schedule for all specialized remediation equipment
- Monitoring/sampling and reporting plan for measuring interim progress and project completion
- Plan to decommission equipment/wells and close site

IV. PUBLIC NOTICE

☐ Certified Letters to Adjacent, and Potentially Affected Property Owners and Local Officials

☒ Legal Notice in Newspaper, as approved by EPD (Section III.E)

☐ Other EPD-approved Method (specify) _____

V. CLAIM FOR REIMBURSEMENT: (For GUST Trust Fund sites only)

- ☐ GUST Trust Fund Application (GUST-36), must be attached if applicable
- ☐ Cost Proposal
  - ☐ Non-Reimbursable Costs

    OR
  - ☐ Reimbursable Costs
    - ☐ Total Project Costs
      - ☐ Costs incurred to date, per GUST-92
      - ☐ Estimated costs to complete corrective action, per GUST-92
    - ☐ Invoices and Proofs-of-Payment for Costs Incurred to Date
- ☐ Proposed Schedule For Reimbursement
  - ☐ Lump Sum Payment Upon Completion Of Corrective Action

    OR
  - ☐ Interim Payments With Final Payment Upon Completion
- ☒ Not Applicable

II. SITE INVESTIGATION REPORT

The results of the Corrective Action Plan (CAP)–Part B investigation at the former underground storage tanks (USTs) 25 & 26, Facility ID #9-025008, Building 1343, at Hunter Army Airfield (HAAF), Georgia, are presented in the CAP–Part B Report (SAIC 2000). This report documents the investigation activities related to the chlorinated solvent plume that was discovered during the CAP–Part B investigation in 1999.

The USTs 25 & 26 site is located in the 2nd BN 3rd Aviation Brigade Motorpool (previously the 260th Quartermaster Motorpool) on Tubb Road, as illustrated in Figure 1. A general site map showing the location of the USTs, ancillary piping, and underground utilities is provided in Figure 2. The USTs 25 & 26 site is located within an average or higher groundwater pollution susceptibility area, is greater than 500 feet from a withdrawal point, and is less than 500 feet from a surface water body. Because a public water supply well exists within 2 miles of the site, as defined in Georgia Underground Storage Tank (GUST) Management Rule 391-5-15.09, the appropriate soil threshold levels (STLs) are those presented in Table A, Column 2 of GUST Rules 391-5-15. According to the operational information provided by the Fort Stewart Directorate of Public Works (DPW), UST 25 had a capacity of 25,000 gallons and was used for storing diesel fuel. UST 26 had a capacity of 6,000 gallons and was used for storing gasoline. Both USTs were located in the same tank pit and were constructed of fiberglass-coated steel, and the associated piping was constructed of steel with a protective coating. The refueling station construction was completed in 1986, but the station did not become operational until October 1989. The piping associated with the system was replaced with flex-piping in 1992 under a U.S. Army Corps of Engineers (USACE) project. The tanks and associated piping were abandoned in place in July 1998.

The horizontal and vertical extent of petroleum-related contamination in soil and groundwater was determined during the CAP–Part B investigation. In addition to the benzene, toluene, ethylbenzene, and xylenes (BTEX) contamination at the site, the CAP–Part B documented the presence of trichloroethene (TCE) in groundwater. The source and extent of the TCE contamination was not determined during the CAP–Part B investigation; however, Fort Stewart DPW was investigating the possibility that the source of this contamination may be due to the Purging Facility located approximately 1,000 feet west of the area. The groundwater Monitoring Only Plan proposed in the CAP–Part B Report recommended semiannual monitoring of the shallow BTEX contamination and deep TCE contamination. Additional investigative activities were recommended to determine the extent and source of the TCE plume prior to remediation, if required. Three deep wells were installed in February 2000. A nonintrusive investigation using geophysical instrumentation was conducted in September 2000. Ten vertical-profile borings and ten monitoring wells were installed in December 2000 and January 2001, respectively, to investigate the extent of the TCE plume. The monitoring wells were sampled in March 2001. The locations of the monitoring wells and vertical profiles installed as part of the CAP–Part B investigation and supplemental investigation activities are shown in Figures 3 and 4, respectively.

This addendum is being submitted to the Georgia Environmental Protection Division (GA EPD) Underground Storage Tank Management Program to document the results of the supplemental investigation (i.e., February 2000 through March 2001) of the chlorinated solvent plume discovered in 1999 during the CAP–Part B investigation. The supplemental investigation was performed by Science Applications International Corporation for the Fort Stewart DPW, Environmental Branch, through the USACE, Savannah District, in February 2000 through March 2001, under contract DACA21-95-D-0022, delivery order 0043.

II.A. HORIZONTAL AND VERTICAL EXTENT OF CONTAMINATION

The horizontal and vertical extent of petroleum-related contamination in soil and groundwater was delineated by activities performed during the previous investigations, CAP–Part A site investigation (SI), and CAP–Part B SI and were documented in the CAP–Part B Report (SAIC 2000).

The vertical extent of chlorinated-solvent-related contamination, primarily TCE, in groundwater was determined during the supplemental investigation activities that occurred in 2000 and 2001. However, the horizontal extent of the chlorinated-solvent-related contamination was not determined during the supplemental investigation activities. The results of the various supplemental investigation activities are described in the following sections.

II.A.1. Delineation of Soil Contamination

The delineation of petroleum-related soil contamination was discussed in the CAP–Part B Report (SAIC 2000). No additional soil sampling was conducted with regard to the chlorinated solvent groundwater plume observed during the CAP–Part B investigation.

II.A.2. Delineation of Groundwater Contamination

II.A.2.a. Benzene Contamination in Groundwater

BTEX and PAH compounds were detected in groundwater samples collected during the various investigations. This contamination was discussed in the CAP–Part B Report (SAIC 2000). Benzene was the only constituent to exceed its In-Stream Water Quality Standard (IWQS) of 71.28 µg/L. Based on the results of fate and transport modeling, an alternate concentration limit (ACL) of 340 µg/L was proposed for benzene in groundwater and was approved by GA EPD in correspondence dated August 21, 2000 (Logan 2000). The CAP–Part B Report recommended a monitoring only program for the benzene contamination in groundwater, which was approved by GA EPD. The semiannual monitoring only program was implemented in June 2000. The first annual monitoring only report is scheduled for submittal in July 2001.

II.A.2.b. TCE Contamination in Groundwater

In addition the petroleum-related compounds, TCE was tentatively identified in several groundwater samples during the first phase of CAP–Part B field activities in May 1999. As a result, the second phase of the CAP–Part B investigation in September 1999 was expanded to include analysis for volatile organic compounds (VOCs). However, the horizontal extent of the TCE contamination was not determined during the CAP–Part B investigation. The CAP–Part B Report recommended that additional investigation activities be conducted to determine the extent of TCE contamination in groundwater and that the three deep wells (i.e., AF-40, AF-41, and AF-42) installed in February 2000 be sampled as part of the semiannual monitoring only program.

II.A.2.b.1. CAP–Part B Groundwater Sampling – September 1999

The groundwater samples collected in May 1999 contained numerous tentatively identified compounds. TCE was one of the primary compounds tentatively identified in shallow wells AF-17, AF-18, AF-19, AF-23, AF-24, AF-25, AF-26, AF-27, AF-28, and AF-29, which are located downgradient of the former UST site along the drainage ditch. In addition, the groundwater samples from the two vertical-profile borings, AF-21 and AF-22, located closer to the UST, also contained TCE at several depth intervals. As a result of this tentative identification, monitoring wells AF-01 through AF-29 (except for borings AF-06,

AF-10, AF-21, and AF-23, which were not converted to monitoring wells) were resampled in September 1999. The groundwater samples were analyzed for the full suite of VOCs.

In September 1999, 57 groundwater samples were collected from three vertical-profile borings and 32 shallow monitoring wells and analyzed for VOCs to confirm the presence of TCE. The VOC analytical results from September 1999 were presented in the CAP–Part B Report and confirmed the presence of TCE and several other organic compounds in the wells listed above, except for AF-24. Analytical results are presented in Table 1 and in Figure 5 for the shallow surficial aquifer and in Figure 6 for the vertical-profile borings. The results of groundwater samples collected during the September 1999 sampling event are summarized below.

- 1,1-Dichloroethane was detected in one of the 32 shallow groundwater samples at a concentration of 3.4 μg/L. This constituent was not detected in the vertical-profile borings. There is no maximum contaminant level (MCL) or IWQS for this constituent.

- 1,1-Dichloroethene was detected in four of the 32 shallow groundwater samples and three of the 25 vertical-profile samples at concentrations ranging from 0.6J μg/L to 4.8 μg/L. The concentrations did not exceed the MCL of 7 μg/L; however, the concentration in one sample exceeded the IWQS of 3.2 μg/L.

- 1,2-Dichloroethene was detected in 19 of the 32 shallow groundwater samples and 11 of the 25 vertical-profile samples at concentrations ranging from 1.5J μg/L to 90.3 μg/L. There is no MCL or IWQS for this constituent.

- 2-Butanone was detected in one of the 32 shallow groundwater samples and three of the 25 vertical-profile samples at concentrations ranging from 0.93J μg/L to 5.9J μg/L. There is no MCL or IWQS for this constituent.

- 2-Hexanone was detected in one of the 32 shallow groundwater samples and two of the 25 vertical-profile samples at concentrations ranging from 14.2 μg/L to 40.2 μg/L. There is no MCL or IWQS for this constituent.

- Acetone was detected in one of the 32 shallow groundwater samples at a concentration of 11.1J μg/L. This constituent was not detected in the vertical-profile borings. There is no MCL or IWQS for this constituent.

- Benzene was detected in 21 of the 32 shallow groundwater samples and 11 of the 25 vertical-profile samples at concentrations ranging from 0.92J μg/L to 9,130 μg/L. Well AF-07 and vertical profile AF-30 were the locations at which the benzene concentrations exceeded the IWQS of 71.28 μg/L and the ACL of 340 μg/L.

- Carbon disulfide was detected in two of the 32 shallow groundwater samples and three of the 25 vertical-profile samples at concentrations ranging from 0.56J μg/L to 1.3J μg/L. There is no MCL or IWQS for this constituent.

- Ethylbenzene was detected in nine of the 32 shallow groundwater samples and eight of the 25 vertical-profile samples at concentrations ranging from 0.53J μg/L to 500J μg/L. None of the concentrations exceeded the IWQS of 28,718 μg/L.

- Methylene chloride was detected in eight of the 32 shallow groundwater samples and four of the 25 vertical-profile samples at concentrations ranging from 0.54J µg/L to 12.8J µg/L. There is no MCL or IWQS for this constituent.

- Toluene was detected in five of the 32 shallow groundwater samples and six of the 25 vertical-profile samples at concentrations ranging from 0.5J µg/L to 24.8 µg/L. None of the concentrations exceeded the IWQS of 200,000 µg/L.

- TCE was detected in 15 of the 32 shallow groundwater samples and 17 of the 25 vertical-profile samples at concentrations ranging from 0.56J µg/L to 596 µg/L. Twenty-two of the concentrations exceeded the MCL of 5 µg/L, and ten of the concentrations exceeded the IWQS of 80.7 µg/L.

- Vinyl chloride was detected in two of the 32 shallow groundwater samples and one of the 25 vertical-profile samples at concentrations ranging from 0.6J µg/L 1.8J µg/L. This constituent was not detected in the monitoring wells. The concentration did not exceed the MCL of 2 µg/L or the IWQS of 525 µg/L.

- Total xylenes were detected in seven of the 32 shallow groundwater samples and four of the 25 vertical-profile samples at concentrations ranging from 0.51J µg/L to 246 µg/L. None of the concentrations exceeded the MCL of 10,000 µg/L, and there is no IWQS for this constituent.

- Chloromethane and styrene were also detected in two samples and one sample, respectively, but at estimated concentrations below the reporting limit of 1 µg/L.

Benzene; 1-1,dichloroethene; and TCE were the only constituents to exceed their respective MCLs or IWQSs. The benzene contamination is related to the operation of the USTs and is being addressed in a monitoring only program. The source of the TCE and its degradation products (i.e., 1,1-dichloroethene) has not been determined; however, Fort Stewart DPW is researching the possibility that the Purging Facility, which is located approximately 1,000 feet west of the area, may be the source of the contamination.

During the September 1999 sampling event, the highest TCE concentrations (Figure 6) in the shallow monitoring wells were located in wells AF-25, AF-26, AF-27, and AF-37, which are located south of the site near the intersection of several drainage ditches or swales. In September 1999, there was no TCE contamination above the MCL in the shallow wells located in the motorpool of the USTs 25 & 26 site. The maximum TCE concentration in vertical profile AF-30, which is located within the motorpool, occurs at 26 to 30 feet below ground surface (BGS) and then continues to decrease with depth. As a result of these findings, additional vertical-profile borings were recommended to the north, east, and west of vertical profile AF-30 to determine the horizontal and vertical extent of TCE contamination. In addition, vertical-profile borings were recommended to the south and west of well AF-27 to determine if there was a source area in those directions.

II.A.2.b.2. Additional Deep Well Installation and Sampling – February 2000

As recommended in the CAP–Part B Report, three deep monitoring wells (i.e., AF-40, AF-41, and AF-42) were installed in January 2000 to monitor the TCE plume as part of the monitoring only program. Groundwater samples were collected from these three wells in February 2000. Analytical results are presented in Table 1 and Figure 7. The results of groundwater samples collected during the February 2000 sampling event are summarized below.

Analytical results from the well installation showed concentrations of chlorinated solvents in deep wells AF-40 and AF-41, which are screened from 28.5 feet to 33.0 feet BGS. No chlorinated constituents were detected in AF-42. 1,1-Dichloroethene was estimated at 0.94J µg/L in well AF-41. 1,2- Dichloroethene was detected at 15.4 µg/L in well AF-40 and 35.6 µg/L in well AF-41. TCE was detected at 53.3 µg/L in well AF-40 and 158 µg/L in well AF-41.

II.A.2.b.3. First Semiannual Sampling Event – June 2000

As recommended in the CAP–Part B Report, a monitoring only program was implemented at the site in June 2000 to monitor the benzene and TCE plumes. In June 2000, three groundwater samples were collected from three deep monitoring wells (AF-40, AF-41, and AF-42) and analyzed for VOCs to monitor the presence of TCE in the deep surficial aquifer in accordance with the recommendation in Section III.D.5 of the CAP–Part B Report (SAIC 2000). Analytical results are presented in Table 1 and in Figure 8. The results of groundwater samples collected during the June 2000 sampling event are summarized below.

Analytical results from the first semiannual sampling event showed concentrations of chlorinated solvents in deep wells AF-40 and AF-41. No chlorinated constituents were detected in AF-42. 1,1-Dichloroethene was detected at 1.6 µg/L in well AF-40 and 3 µg/L in well AF-41. 1,2-Dichloroethene was detected at 63.3 µg/L in well AF-40 and 110 µg/L in well AF-41. TCE was detected at 353 µg/L in well AF-40 and 636 µg/L in well AF-41. The TCE concentrations in AF-40 and AF-41 had increased since the February 2000 sampling event.

II.A.2.b.4. Supplemental Groundwater Sampling to Support Geophysical Survey – September 2000

In April 2000 and October/November 2000, Argonne National Laboratory conducted a geophysical survey in the wooded area southeast (i.e., east of the intersection of the drainage ditches and swales) of the USTs 25 & 26 site to better characterize the subsurface geology controlling the migration and entrapment of TCE. The location of the geophysical survey area is shown in Figure 9. The survey was conducted in this area due to the TCE concentrations observed in the shallow monitoring wells during the September 1999 investigation. The September 2000 sampling event was conducted to provide analytical data that correlated with conducting of the geophysical survey field activities. The report prepared by Argonne National Laboratory is provided in Attachment A, and the results are summarized in this section.

The geophysical survey identified two clay layers beneath the site. The upper clay layer is approximately 4.3 feet to 8.2 feet thick, and the top of the upper clay layer is located at depths ranging from 23.0 feet to 29.5 feet BGS. In general, the elevation of the top of the upper clay layer decreases toward the southeast and also becomes thinner to the southeast. The interval above the upper clay layer appears to be composed of sand and silt with some minor clay stringers. The top of the lower clay layer is located at depths ranging from 42 to 72 feet BGS. In general, the elevation of the top of the lower clay layer decreases toward the southeast.

During the September 2000 sampling event, 33 groundwater samples were collected for VOC analysis from 30 shallow and three deep monitoring wells. Analytical results are presented in Table 1 and Figure 10 for the shallow surficial aquifer and in Figure 11 for the deep surficial aquifer. The results of groundwater samples collected during the September 2000 sampling event are summarized below.

- 1,1-Dichloroethane was detected in one of the 30 shallow groundwater samples at a concentration of 2.8 µg/L. This constituent was not detected in the deep monitoring wells. There is no MCL or IWQS for this constituent.

- 1,1-Dichloroethene was detected in one of the 30 shallow groundwater samples at a concentration of 3.9 μg/L. This constituent was not detected in the deep monitoring wells. The concentration did not exceed the MCL of 7 μg/L; however, it did exceed the IWQS of 3.2 μg/L.

- 1,2-Dichloroethene was detected in 17 of the 30 shallow groundwater samples at concentrations ranging from 0.36J μg/L to 42.6 μg/L. This constituent was detected in two of the three deep groundwater samples at concentrations ranging from 1.7J μg/L to 14.6 μg/L. There is no MCL or IWQS for this constituent.

- Acetone was detected in 16 of the 30 shallow groundwater samples at concentrations ranging from 6.5 μg/L to 11.7 μg/L. This constituent was not detected in the deep monitoring wells. There is no MCL or IWQS for this constituent.

- Benzene was detected in 20 of the 30 shallow groundwater samples at concentrations ranging from 0.19J μg/L to 9,920 μg/L. This constituent was detected in one of the three deep groundwater samples at a concentration of 1.8 μg/L. Wells AF-07 and AF-29 were the locations at which the benzene concentrations exceeded the IWQS of 71.28 μg/L and the ACL of 340 μg/L.

- Ethylbenzene was detected in eight of the 30 shallow groundwater samples at concentrations ranging from 0.064J μg/L to 645 μg/L. This constituent was detected in one of the three deep groundwater samples at a concentration of 0.45J μg/L. None of the concentrations exceeded the IWQS of 28,718 μg/L.

- Toluene was detected in 13 of the 30 shallow groundwater samples at concentrations ranging from 0.29J μg/L to 39.2 μg/L. This constituent was not detected in the deep monitoring wells. None of the concentrations exceeded the IWQS of 200,000 μg/L.

- TCE was detected in 12 of the 30 shallow groundwater samples at concentrations ranging from 0.33J μg/L to 226 μg/L. This constituent was detected in two of the three deep groundwater samples at concentrations ranging from 1.2 μg/L to 42.9 μg/L. Ten of the concentrations exceeded the MCL of 5 μg/L, and five of the concentrations exceeded the IWQS of 80.7 μg/L.

- Vinyl chloride was detected in one of the 30 shallow groundwater samples at a concentration of 0.77J μg/L. This constituent was detected in one of the three deep groundwater samples at a concentration of 0.76J μg/L. None of the concentrations exceeded the MCL of 2 μg/L or the IWQS of 525 μg/L.

- Total xylenes were detected in four of the 30 shallow groundwater samples at concentrations ranging from 1.2J μg/L to 20.9 μg/L. This constituent was not detected in the deep monitoring wells. None of the concentrations exceeded the MCL of 10,000 μg/L, and there is no IWQS for this constituent.

Benzene; 1-1,dichloroethene; and TCE were the only constituents to exceed their respective MCLs or IWQSs. The benzene contamination is related to the operation of the USTs and is being addressed in a monitoring only program.

As shown in Figure 10, the highest TCE concentrations in the shallow monitoring wells are in wells AF-25, AF-26, AF-27, and AF-37, which are located south of the site near the intersection of several drainage ditches or swales. There was no TCE contamination during the September 2000 sampling event

in the shallow wells, which are screened across the water table, located in the motorpool of the USTs 25 & 26 site.

The analytical results from sampling of the deep monitoring wells have confirmed the results of the vertical-profile sampling conducted in September 1999. Deep monitoring well AF-42, which is located in the vicinity of the intersection of the drainage ditches or swales and adjacent to vertical profile AF-31, does not indicate the presence of TCE at a screened interval of 28.5 feet to 33.0 feet BGS. Deep monitoring well AF-40, which is located north of AF-42 in the motorpool and adjacent to vertical profile AF-30, indicates the presence of TCE at a concentration of 42.9 μg/L at a screened interval of 28.5 feet to 33.0 feet BGS. Deep monitoring well AF-41, which is located in the motorpool between AF-40 and AF-42, indicates the presence of TCE at a concentration of 1.2 μg/L at a screened interval of 28.5 feet to 33.0 feet BGS.

II.A.2.b.5. Vertical Profile Sampling – November/December 2000

In November and December 2000, ten vertical-profile borings were installed at the site to further delineate the vertical extent of TCE contamination in groundwater. Groundwater samples were collected at 5-foot intervals from the water table to 50 feet BGS. During the November/December 2000 vertical-profile sampling event, 89 groundwater samples were collected for VOC analysis from ten vertical-profile borings. Analytical results are presented in Table 1 and Figures 12a, 12b, and 12c. The results from groundwater samples collected during the November/December 2000 vertical-profile sampling event are summarized below.

- 1,1-Dichloroethane was detected in five of the 89 vertical-profile groundwater samples at concentrations ranging from 0.9J μg/L to 10.3 μg/L. There is no MCL or IWQS for this constituent.

- 1,1-Dichloroethene was detected in 19 of the 89 vertical-profile groundwater samples at concentrations ranging from 0.1J μg/L to 22.5 μg/L. Five of the concentrations exceeded the MCL of 7 μg/L, and six of the concentrations exceeded the IWQS of 3.2 μg/L.

- 1,2-Dichloroethane was detected in one of the 89 vertical-profile groundwater samples at a concentration of 0.51J μg/L. The concentration did not exceed the MCL of 5 μg/L or the IWQS of 98.6 μg/L.

- 1,2-Dichloroethene was detected in 51 of the 89 vertical-profile groundwater samples at concentrations ranging from 0.21J μg/L to 378 μg/L. There is no MCL or IWQS for this constituent.

- 1,2-Dichloropropane was detected in one of the 89 vertical-profile groundwater samples at a concentration of 0.3J μg/L. The concentration did not exceed the MCL of 5 μg/L, and there is no IWQS for this constituent.

- 2-Butanone was detected in six of the 89 vertical-profile groundwater samples at concentrations ranging from 1.2J μg/L to 2.4J μg/L. There is no MCL or IWQS for this constituent.

- 2-Hexanone was detected in one of the 89 vertical-profile groundwater samples at a concentration of 2.2J μg/L. There is no MCL or IWQS for this constituent.

- Acetone was detected in 18 of the 89 vertical-profile groundwater samples at concentrations ranging from 1.6J μg/L to 11 μg/L. There is no MCL or IWQS for this constituent.

- Benzene was detected in 24 of the 89 vertical-profile groundwater samples at concentrations ranging from 0.16J µg/L to 9.5 µg/L. None of the concentrations exceeded the IWQS of 71.28 µg/L or the ACL of 340 µg/L.

- Carbon disulfide was detected in six of the 89 vertical-profile groundwater samples at concentrations ranging from 0.41J µg/L to 0.98J µg/L. There is no MCL or IWQS for this constituent.

- Chloromethane was detected in one of the 89 vertical-profile groundwater samples at a concentration of 0.38J µg/L. There is no MCL or IWQS for this constituent.

- Ethylbenzene was detected in six of the 89 vertical-profile groundwater samples at concentrations ranging from 0.062J µg/L to 1.6 µg/L. None of the concentrations exceeded the MCL of 700 µg/L or the IWQS of 28,718 µg/L.
- Tetrachloroethene was detected in two of the 89 vertical-profile groundwater samples at concentrations of 0.58J µg/L and 0.69J µg/L. None of the concentrations exceeded the MCL of 5 µg/L or the IWQS of 8.85 µg/L.

- Toluene was detected in 13 of the 89 vertical-profile groundwater samples at concentrations ranging from 0.27J µg/L to 8.9 µg/L. None of the concentrations exceeded the MCL of 1,000 µg/L or the IWQS of 200,000 µg/L.

- TCE was detected in 54 of the 89 vertical-profile groundwater samples at concentrations ranging from 0.27J µg/L to 7,730 µg/L. Thirty-six of the concentrations exceeded the MCL of 5 µg/L, and 20 of the concentrations exceeded the IWQS of 80.7 µg/L.

- Vinyl chloride was detected in 3 of the 89 vertical-profile groundwater samples at concentrations ranging from 0.24J µg/L to 0.6J µg/L. None of the concentrations exceeded the MCL of 2 µg/L or the IWQS of 525 µg/L.

- Total xylenes were detected in six of the 89 vertical-profile groundwater samples at concentrations ranging from 0.32J µg/L to 7.3 µg/L. None of the concentrations exceeded the MCL of 10,000 µg/L, and there is no IWQS for this constituent.

Benzene; 1-1,dichloroethene; and TCE were the only constituents to exceed their respective MCLs or IWQSs. The benzene contamination is related to the operation of the USTs and is being addressed in a monitoring only program.

As shown in Figures 13 through 16, the TCE plume observed at the 10-to-20-foot, 20-to-30-foot, 30-to-40-foot, and 40-to-50-foot BGS intervals is located beneath the motorpool of the USTs 25 & 26 site. These figures also show that the area of the TCE plume decreases with depth and that the highest TCE concentrations occur at the 20-to-30-foot interval, which is just above the upper clay layer identified in the geophysical survey. Vertical profile boring AF-52 had the highest TCE concentrations. This boring is located near the southwest corner of Building 1345 and approximately 280 feet northeast of the intersection of the drainage ditches and swales at which the highest TCE contamination was observed in the shallow surficial aquifer.

II.A.2.b.6. Second Semiannual Sampling Event – January 2001

In January 2001, three groundwater samples were collected from three deep monitoring wells (AF-40, AF-41, and AF-42) and analyzed for VOCs to monitor the presence of TCE in the deep surficial aquifer

in accordance with the recommendation in Section III.D.5 of the CAP–Part B Report (SAIC 2000). Analytical results are presented in Table 1 and Figure 17. The results from groundwater samples collected during the January 2001 sampling event are summarized below.

Analytical results from the second semiannual sampling event showed concentrations of chlorinated solvents in deep wells AF-40 and AF-41. No chlorinated constituents were detected in AF-42. 1,1-Dichloroethene was estimated at 0.41J µg/L in well AF-40 and 0.82J µg/L in well AF-41. 1,2-Dichloroethene was detected at 26 µg/L in well AF-40 and 32.7 µg/L in well AF-41. TCE was detected at 108J µg/L in well AF-40 and 176 µg/L in well AF-41. Vinyl chloride was estimated at 0.67J µg/L in well AF-40. The TCE concentrations in AF-40 and AF-41 had decreased since the June 2000 sampling event.

II.A.2.b.7. Additional Well Installation and Sampling – February/March 2001

In February 2001, ten monitoring wells were installed at the site based on the review of the November/December 2000 vertical-profile data. The screened interval of each well was selected based on the results of the vertical-profile sampling.

During the March 2001 sampling event, ten groundwater samples were collected for VOC analysis from the ten new monitoring wells. Analytical results are presented in Table 1 and Figure 18 for the deep surficial aquifer. The analytical results for the shallow wells were incorporated into Figure 10. The results of groundwater samples collected during the March 2001 sampling event are summarized below.

- 1,1-Dichloroethene was detected in one of the ten groundwater samples at a concentration of 4.6 µg/L. The concentration did not exceed the MCL of 7 µg/L, but the concentration exceeded the IWQS of 3.2 µg/L.

- 1,2-Dichloroethene was detected in seven of the ten groundwater samples at concentrations ranging from 1.3J µg/L to 88.8 µg/L. There is no MCL or IWQS for this constituent.

- 2-Butanone was detected in four of the ten groundwater samples at concentrations ranging from 1.0J µg/L to 2.8J µg/L. There is no MCL or IWQS for this constituent.

- Acetone was detected in eight of the ten groundwater samples at concentrations ranging from 97.3 µg/L to 8,630J µg/L. There is no MCL or IWQS for this constituent.

- Benzene was detected in six of the ten groundwater samples at concentrations ranging from 0.15J µg/L to 0.67J µg/L. None of the concentrations exceeded the IWQS of 71.28 µg/L or the ACL of 340 µg/L.

- Chloroform was detected in seven of the ten groundwater samples at concentrations ranging from 0.39J µg/L to 4.7 µg/L. There is no MCL or IWQS for this constituent.

- Toluene was detected in three of the ten groundwater samples at concentrations ranging from 0.23J µg/L to 0.62J µg/L. None of the concentrations exceeded the MCL of 1,000 µg/L or the IWQS of 200,000 µg/L.

- TCE was detected in nine of the ten groundwater samples at concentrations ranging from 0.39J µg/L to 2,410J µg/L. Seven of the concentrations exceeded the MCL of 5 µg/L, and five of the concentrations exceeded the IWQS of 80.7 µg/L.

- Total xylenes were detected in one of the ten groundwater samples at a concentration of 0.25J µg/L. The concentration did not exceed the MCL of 10,000 µg/L, and there is no IWQS for this constituent.

TCE was the only constituent to exceed its respective MCL or IWQS. As shown in Figure 18, the results from the deep monitoring wells have confirmed the results of the vertical-profile sampling that was conducted in November/December 2000. There appear to be two areas within the plume in which the TCE concentrations are the highest (i.e., >500 µg/L).

II.A.2.b.8. Conclusions of the Horizontal Extent of TCE Groundwater Contamination

As shown in Figure 10, the TCE contamination in September 2000 in the shallow surficial aquifer (i.e., immediately below the soil/water interface) was highest in shallow wells AF-25, AF-26, AF-27, and AF-37, which are located south of the site near the intersection of several drainage ditches or swales. There was no TCE contamination in the shallow wells, which are screened across the water table, located in the motorpool of the USTs 25 & 26 site. However, the vertical-profile sampling indicates that the TCE concentrations increase with depth and that the majority of the deeper TCE contamination is located underneath the motorpool of the USTs 25 & 26 site.

At each of the depth intervals shown in Figures 13 through 16, the horizontal extent of the TCE plume appears to be greatest at 10 to 20 feet BGS, and the area decreases with each depth interval. In Figure 13 the area of the plume is approximately 230 feet wide by 560 feet long, running from southwest of the intersection of the drainage ditches and swales to the northeast toward Building 1345. However, the sample from vertical profile AF-52 contained the highest TCE concentration (1,780 µg/L) for this interval. The groundwater sample from the shallow monitoring well, AF-62, which was installed in the location of AF-52 and screened from 3.0 feet to 13.0 feet, had an estimated TCE concentration below the reporting limit, indicating that the TCE is not migrating vertically from the groundwater surface at this point. The other groundwater samples from this sample interval contained TCE concentrations that were at least an order of magnitude lower than that observed in AF-52.

The highest TCE concentrations occur at the 20-to-30-foot BGS interval. In Figure 14 the area of the plume is less oblong and is approximately 230 feet wide by 500 feet long and extends from the intersection of the drainage ditches and swales to the northeast toward Building 1345. However, the sample from vertical profile AF-52 contained the highest TCE concentration (7,730 µg/L) for this interval. The samples from AF-43 and AF-45 also contained elevated TCE concentrations of 2,600 µg/L and 1,510 µg/L, respectively. The other groundwater samples from this sample interval contained TCE concentrations that were at least an order of magnitude lower than those observed in these samples.

The TCE concentrations begin to decrease in the 30-to-40-foot BGS interval. In Figure 15 the area of the plume is approximately 200 feet wide by 400 feet long and extends from the northern side of the intersection of the drainage ditches and swales to the northeast toward Building 1345. The highest TCE concentrations were observed in AF-43, AF-45, and AF-52 at 2,030 µg/L; 1,490 µg/L; and 631 µg/L, respectively. The other groundwater samples from this sample interval contained TCE concentrations that were at least an order of magnitude lower than those observed in these samples.

The lowest TCE concentrations were observed in the 40-to-50-foot interval. In Figure 15 the area of the plume is approximately 140 feet wide by 320 feet long and extends from the motorpool fence line toward Building 1345. The highest TCE concentrations were observed in AF-43, AF-44, and AF-52 at 213 µg/L, 346 µg/L, and 516 µg/L, respectively. The other groundwater samples from this sample interval contained TCE concentrations that were at least an order of magnitude lower than those observed in these samples.

Vertical-profile borings AF-43, AF-44, AF-45, and AF-52 are located on the northern portion of the plume; however, the horizontal extent of TCE contamination was not determined through the installation of these borings. As a result, additional vertical-profile borings should be installed on the northeast, north, and northwest boundaries of the plume to determine the extent of TCE contamination.

II.A.2.b.9. Conclusions of the Vertical Extent of TCE Groundwater Contamination

During the various investigations from 1999 to 2001, groundwater samples were collected at 5-foot intervals from 12 vertical-profile borings and analyzed for VOCs. Figures 13 through 16 show that the size of the TCE plume decreases with depth and that the highest TCE concentrations occur at the 20-to-30-foot interval. This depth correlates with the upper clay layer that was identified in the geophysical survey (see Attachment A and Section II.A.2.b.4). TCE was also present in five of the vertical-profile borings at 40 feet to 50 feet BGS, but at concentrations lower than those observed in the 20-to-30-foot interval. No groundwater samples were collected below 50 feet BGS. The Hawthorn layer may correspond to a portion of the lower clay layer that was identified in the geophysical survey. Thus, the top of the Hawthorn layer is expected to be located approximately 50 feet to 70 feet BGS.

II.A.3. Delineation of Free Product Plume

No free product was identified at the USTs 25 & 26 site during the previous investigations, CAP–Part A SI, CAP–Part B SI, or supplemental investigations.

II.A.4. Delineation of Surface Water and Sediment Contamination

Results from the surface water and sediment samples collected during the CAP–Part B investigation were discussed in the CAP–Part B Report (SAIC 2000).

II.B. REGIONAL, LOCAL, AND SITE HYDROGEOLOGY

A discussion of the regional, local, and site hydrogeology was presented in the CAP–Part B Report (SAIC 2000) and is repeated in this document for convenience.

II.B.1. Documentation of Local Groundwater Conditions

II.B.1.a. Groundwater Usage

According to the Fort Stewart DPW, nine water supply wells are located within the confines of the HAAF area (Figures 19 and 20). These wells have the potential to provide up to 3,890 gallons per minute (gpm) of water to occupants of the HAAF installation. The Fort Stewart DPW was unable to provide documentation listing the companies responsible for well installation and drillers' logs showing as-built information and subsurface geologic data. Information concerning such documentation was requested from several water well drilling companies in the Chatham County area; however, data were procured with very limited success. The Fort Stewart DPW provided well locations, pump rates, treatments, casing depths, and total depths for eight of the nine wells located at HAAF. Because of the lack of data, documentation of subsurface geology based on HAAF drill logs remains extremely limited; therefore, other references containing deep-well information were used to document the subsurface geology and aquifer characteristics underlying HAAF and its vicinity.

Wells 1 and 2, both public water supply wells located in the cantonment area, constitute the main water supply system at HAAF (Figure 20). Well 1, located at Building 711 on the corner of Moore Road and Douglas Street, is a 12-inch-diameter well with a 100-horsepower turbine pump serving a 100,000-gallon elevated storage tank (Tank 1) through 10-inch lines. Water from Well 1 is injected with hydrofluosilic acid and chlorine gas solution at the well house. Well 2, located at Building 1205 on the corner of Neal Street and Strachan Road, is a 12-inch-diameter well with a 100-horsepower turbine pump serving a 200,000-gallon elevated tank (Tank 2) through 10-inch lines. Water from Well 2 is also injected with hydrofluosilic acid and chlorine gas solution at the well house. Wells 1 and 2 provide water to a 500,000-gallon elevated storage tank (Tank 3) located on Middleground Road behind Noncommissioned Officer family housing. This tank provides potable water to 694 service connections, which are used by an average of at least 5,000 individuals year-round.

Wells 3, 4A, and 7 are public supply wells located outside the cantonment area of HAAF. Well 3, located at Building 8455, is a 4.0-inch-diameter well with a 1.0-horsepower electric submersible pump serving a 1,000-gallon hydropneumatic storage tank through 1.5-inch galvanized steel lines. Water from Well 3 is treated with calcium hypochlorite solution and is consumed by approximately 25 people during daytime hours year-round. Well 4A, located at Building 8581 at the 117th Air National Guard Facility, is a 4.0-inch-diameter well. Pumpage is accomplished with a 0.75-horsepower turbine pump with 80-gpm capacity. Well 4A provides water for approximately 50 people per day year-round. Well 7 is located at Building 8703 on the Forest River, west of Rio Road. Well 7 is a 4.0-inch well with a 3.0-horsepower submersible pump serving a 5,000-gallon hydropneumatic tank through 2.0-inch galvanized steel lines. Well 7 serves approximately 500 people on a part-time basis. Sanitary protection for Wells 3, 4A, and 7 is provided by a pump motor block, concrete slab, sealed well head, and screened casing vent.

Based on the GA EPD criteria of serving potable water to fewer than 25 occupants per day and having fewer than 15 service connections, Wells 5, 8, and 9 are classified as non-public supply wells.

Well 10 is a non-potable water source, and the water is used for the cleaning of military equipment at a wash-rack facility. Additional information, including capacity, borehole depth, and casing depth, is not available.

The locations of supply wells found outside the boundary of HAAF are shown on Figure 19. These wells include 1, 42, 13, 25, 15, 27, 14, 23, 6, and 9. The City of Savannah Bureau of Water Operations was unable to provide drilling logs or as-built well information.

The USTs 25 & 26 site is located approximately 3,000 feet southeast (downgradient) of HAAF Well 2, which is located at Building 1205 on Strachan Drive; therefore, the USTs 25 & 26 site is classified as being greater than 500 feet from a withdrawal point. Well 2 is part of the main public water supply system at HAAF. This system supplies water to approximately 7,500 persons through 525 service connections.

II.B.1.b. Aquifer Description

The hydrogeology in the vicinity of HAAF is mostly influenced by two aquifer systems. These are referred to as the Principal (Floridan) Aquifer and the surficial aquifer (Miller 1990). The Principal Aquifer is the lowermost hydrologic unit and is regionally extensive from South Carolina to Georgia, Alabama, and most of Florida. Known elsewhere as the Floridan, this aquifer, approximately 800 feet in total thickness, is composed primarily of Tertiary-age limestone including the Bug Island Formation, the Ocala Group, and the Suwannee Limestone. Groundwater from the Floridan is used primarily for drinking water (Arora 1984). According to Miller (1990), one of the largest cones of depression produced in the Floridan Aquifer exists directly beneath Savannah, Georgia. According to 1980 estimates, more than

500 million gallons of water per day were withdrawn from the Floridan Aquifer for public and industrial use in southeast Georgia, more than any other region (Miller 1990).

The confining layer for the Floridan Aquifer is the phosphatic clay of the Hawthorn Group. There are minor occurrences of aquifer material within the Hawthorn Group; however, they have limited utilization (Miller 1990). The surficial aquifer overlies the Hawthorn confining unit.

The surficial aquifer consists of widely varying amounts of sand and clay, ranging from 55 feet to 150 feet in thickness, and is composed primarily of the Satilla and Cypresshead Formations in the Savannah vicinity (Arora 1984). This aquifer is primarily used for domestic lawn and agricultural irrigation. The top of the water table ranges from approximately 2 feet to 10 feet BGS. Groundwater in the surficial aquifer system is under unconfined, or water table, conditions. However, locally, thin clay beds create confined or semiconfined conditions.

Groundwater encountered at HAAF UST investigation sites is part of the surficial aquifer system. Based on the fact that all public and non-public water supply wells draw water from the Floridan Aquifer and that the Hawthorn confining unit separates the Floridan Aquifer from the surficial aquifer, it is concluded that there is no hydraulic interconnection between HAAF UST sites (and associated plumes) and water supply withdrawal points.

II.B.1.c. Surface Water

The water resources survey conducted during the CAP–Part A SI is presented in the CAP–Part B Report (SAIC 2000). Surface water bodies at HAAF include Hallstrom Lake, Lamar Canal, Buckhalter Canal, Springfield Canal, Pond 29 located northwest of Buildings 336 and 232, and an unnamed pond located along the southeastern boundary of the HAAF installation (Figure 19). Several unnamed drainage canals and ditches exist throughout HAAF. Most of these canals drain southwest into the Little Ogeechee River, which is part of the Lower Ogeechee watershed. The remaining drainage canals located on the east side of the HAAF installation flow east and eventually drain into the Vernon River, which is located southeast of the HAAF installation. Surface water bodies at HAAF and adjacent areas are not used as public water supplies. The ponds and lakes, as well as Lamar Canal, are perennial, whereas most of the drainage canals and ditches are intermittent. Most of the drainage canals are at least partially enclosed in culverts.

In the direction of groundwater flow, a drainage ditch is located approximately 75 feet southeast of the site. Based on the surface water features discussed, the USTs 25 & 26 site, Facility ID #9-025008, is classified as being located fewer than 500 feet from a surface water body.

There are numerous water and electrical underground utilities located southeast (downgradient) of the site. The depth of these lines is estimated to be approximately 2 feet to 3 feet BGS. In addition, there is a force main for the sanitary sewer that is located approximate 5 feet southeast of the UST 25 tank. The invert depth of this line is approximately 3.0 feet BGS. Three wells are located adjacent to the force main, and in March 2001, the depths to groundwater in these wells were 4.33 feet in AF-01, 4.43 feet in AF-07, and 4.50 feet in AF-20. The invert depth of the force main is located approximately 1.5 feet above the water table; therefore, the force main is not considered a potential receptor.

II.B.2. Stratigraphic Boring Logs

The local stratigraphy of HAAF and its vicinity is presented in Section II.B.2.a, and the site stratigraphy from the CAP–Part A and CAP–Part B SIs is presented in Section II.B.2.b.

II.B.2.a. Local Stratigraphy

HAAF is located within the Barrier Island Sequence District of the Coastal Plain Physiographic Province of the Southeast United States (Clark and Zisa 1976). The Barrier Island Sequence District in Chatham and Bryan counties is characterized by the existence of several marine terraces (step-like topographic surfaces that decrease in elevation toward the coast). These marine terraces, and their associated deposits, are the results of sea level fluctuations that occurred during the Pleistocene epoch. The surficial (Quaternary) deposits in Chatham and Bryan counties, in decreasing elevation and age, are part of the Okefenokee, Wicomico, Penholoway, Pamlico, and Silver Bluff terrace complexes.

HAAF, as well as most of Chatham County, is underlain by the Pleistocene Pamlico Terrace. The Pleistocene Satilla Formation (formerly known as the Pamlico Formation) consists of deposits of the Pamlico Terrace complex and other terrace complexes in the region. The Satilla Formation is a lithologically heterogeneous unit that consists of variably bedded to non-bedded sand and variably bedded silty to sandy clay. During the Pleistocene, these sand and clay deposits were formed offshore and in inner continental shelf, barrier island, and marsh/lagoonal-type environments. According to the *Geologic Map of Georgia* (GA EPD 1976), clay beds of marsh origin, which were deposited on the northwestern side of the former Pamlico Barrier Island complex, exist in the western quarter of HAAF. Very fine- to coarse-grained sand deposits of barrier island origin are more common throughout the remaining areas of HAAF.

II.B.2.b. Site Stratigraphy

As determined from soil borings drilled during the CAP–Part B SI, the lithologies present within 15 feet of the surface at the USTs 25 & 26 site appear to correlate with the regional stratigraphic section. CAP–Part B soil boring logs are provided in Appendix IV. The lithology underlying the study area consists of interbedded layers of sand with varying amounts of silt and clay.

II.B.3. Stratigraphic Cross Sections

Stratigraphic cross sections have been developed and were presented in the CAP–Part B Report (SAIC 2000).

II.B.4. Geotechnical Analysis

Soil samples were collected for geotechnical analysis during the CAP–Part B investigation, and the results are presented in the CAP–Part B Report (SAIC 2000).

II.B.5. Direction of Groundwater Flow

II.B.5.a. Well Construction Details

During the supplemental investigation activities in 2000 and 2001, the monitoring well casing consisted of 2-inch-inside-diameter, Schedule 40, flush-threaded polyvinyl chloride (PVC) risers and screens in 5- and 10-foot sections. The well screen slot size was 0.010 inch. Table 2 summarizes construction details for monitoring wells installed at the site during the supplemental investigations in 2000 and 2001. Well construction diagrams are presented in Appendix VII. The wells were screened either across or below the water table, depending on the results of the vertical-profile sampling. Following installation of the well casing, filter pack sand was poured while the augers were gradually removed to ensure a complete and even distribution of the filter pack. The filter pack extended to a measured level at least 0.5 foot above the top of the well screen.

Well seals were composed of 3/8-inch bentonite pellets and allowed to hydrate before filling the annular space above the seal. The total volume of potable water used to hydrate the pellets averaged 2 gallons per well. The well seal extended to a measured level of at least 0.5 feet above the top of the filter pack.

Above the well seal, the remaining annular space was completed with a 1.0-foot-long, flush-mount, sheet-steel protective casing that was grouted in place with a 14-inch-diameter by 4-inch-thick, high-strength concrete pad. Well casings were capped with expandable locking caps. Protective casings were covered with bolted, cast iron manhole covers. Inscribed monitoring well identification plates were permanently affixed to the inside of each manhole cover.

II.B.5.b. Potentiometric Mapping

Water level measurements were collected from existing monitoring wells during the CAP–Part A, CAP–Part B, and various supplemental investigations. Data obtained from these measurements are presented in Table 3. During the CAP–Part A investigation in November 1998, groundwater flowed to the south-southeast with a gradient of 0.020 foot/foot. During the CAP–Part B investigation in December 1999, groundwater flowed to the south-southeast with a gradient of 0.018 foot/foot. The groundwater flow direction during the two semiannual sampling events under the Monitoring Only Plan was similar to the flows observed during the CAP–Part A and CAP–Part B investigations. In March 2001 the groundwater flow directions for the shallow and deep surficial portions of the aquifer (Figures 21 and 22) were to the south-southeast with gradients of 0.025 foot/foot and 0.0125 foot/foot, respectively.

II.B.5.c. Equipotential Flow Net

Equipotential flow nets based on March 2001 water level measurements and the contoured potentiometric surfaces are presented in Figures 21 and 22 for the shallow and deep surficial portions of the aquifer.

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III. REMEDIAL ACTION PLAN

III.A. CORRECTIVE ACTION COMPLETED OR IN PROGRESS

III.A.1. Recovery/Removal of Free Product

No evidence of free product has been identified at the USTs 25 & 26 site; therefore, no recovery/removal of free product has been performed.

III.A.2. Remediation/Treatment of Contaminated Backfill Material and Native Soil

During UST closure activities in 1998, the tanks were closed in-place with a concrete slurry. Soil was not excavated or remediated during in-place closure activities. No further excavation of potentially contaminated backfill or native soil has occurred at the USTs 25 & 26 site.

III.B. OBJECTIVES OF CORRECTIVE ACTION

III.B.1. Remove Free Product that Exceeds One-Eighth Inch

The previous investigations, CAP–Part A SI, and CAP–Part B SI determined that there is no evidence of free product at the USTs 25 & 26 site; therefore, no recovery/removal of free product has been performed, nor was it required based on known site conditions.

III.B.2. Remediate Groundwater Contamination

The CAP–Part B Report (SAIC 2000) documented benzene contamination in groundwater that exceeded the IWQS of 71.28 µg/L and the ACL of 340 µg/L. As a result, a Monitoring Only Plan was recommended in the CAP–Part B Report that consisted of semiannual monitoring of four shallow wells (i.e., AF-02, AF-05, AF-07, and AF-12) for BTEX. The monitoring only program that was approved in correspondence dated August 14, 2000 (Logan 2000) was initiated in June 2000, and the results are being summarized in annual monitoring only reports. The first annual monitoring only report is scheduled to be submitted to GA EPD in July 2001.

In addition to the BTEX contamination at the site, the CAP–Part B documented the presence of TCE in groundwater. Additional investigation activities have been conducted since the CAP–Part B investigation in 1999 and are documented in this report. The source of the TCE contamination still has not been identified. The vertical extent of the contamination was determined in the supplemental sampling activities in 2000; however, the horizontal extent of TCE has not been determined. Additional investigative activities are necessary to determine the horizontal extent and source of the TCE plume prior to remediation. Additional vertical-profile borings and deep wells are recommended in the motorpool and also to confirm the results of the geophysical area in the wooded area (Figure 23). Additional geophysical survey activities within the motorpool may prove useful in interpreting the contaminant data underlying the motorpool.

III.B.3. Remediate Soil Contamination

The CAP–Part B Report (SAIC 2000) recommended that the soil did not need to be remediated because the benzene concentrations in soil during the CAP–Part A and CAP–Part B investigations were below the proposed alternate threshold level (ATL) of 0.159 mg/kg for benzene. The CAP–Part B Report recommended

confirmatory soil sampling in the vicinity of closure sample HAAF-260-PIPE-D-2-S because this was the only location in which benzene in soil exceeded the ATL. The CAP–Part B Report was approved in correspondence dated August 14, 2000 (Logan 2000).

III.B.4. Provide Risk-Based Corrective Action

A risk-based approach was used in the CAP–Part B Report (SAIC 2000) to identify chemicals of potential concern (COPCs) for soil and groundwater and to develop ATLs and ACLs for various constituents.

In summary, benzene was identified as a COPC for soil and benzene, benzo(*a*)pyrene, and naphthalene were identified as COPCs for groundwater. An ATL for benzene of 0.159 mg/kg was proposed in the CAP–Part B Report (SAIC 2000) and approved by GA EPD in correspondence dated August 14, 2000 (Logan 2000). One soil sample collected during the in-place closure exceeded this ATL for benzene. ACLs for benzene, benzo(*a*)pyrene, and naphthalene of 340 µg/L; 936 µg/L; and 23,400 µg/L, respectively, were proposed in the CAP–Part B Report. Benzene was the only compound to exceed its respective ACL during the CAP–Part B investigation.

The fate and transport modeling results are provided in the CAP–Part B Report (SAIC 2000). The ditch located 75 feet southeast (downgradient) of the site is the nearest possible location at which a receptor might encounter migrating groundwater contamination due to a possible hydraulic connection between the groundwater and the surface water. Modeling of leaching to groundwater by percolating rainwater was performed using the Seasonal Soil Compartment Model to determine the predicted maximum concentration in the leachate at the water table interface. The predicted leachate concentration of 7,130 µg/L was below the maximum groundwater concentration of 9,940 µg/L at the source. The Analytical Transient 1-, 2-, 3-Dimensional Model was calibrated to the maximum observed concentration of benzene (i.e., 9,940 µg/L) assuming a steady-state (continuous) concentration at the source.

Based on modeling results, the estimated dilution attenuation factor (DAF) for benzene at the drainage ditch is 4.8. The estimated DAF for naphthalene at the drainage ditch is 3,600. The modeling results indicated that benzene should be reaching the ditch at a concentration of 2,080 µg/L, which is above the state IWQS of 71.28 µg/L, thereby predicting that the surface water is impacted by the current site conditions. However, actual groundwater results indicated that groundwater contamination in excess of the IWQS does not reach the drainage ditch, and surface water and sediment samples from the drainage ditch indicate that they are not being impacted by the site. Therefore, the surface water body adjacent to the USTs 25 & 26 site, Facility ID #9-025008, is not impacted by former UST operations.

Considering the site characteristics, natural attenuation was recommended as the corrective action for the benzene plume. Groundwater concentrations during the CAP–Part B investigation exceeded the proposed ACL of 340 µg/L in one monitoring well; therefore, a Monitoring Only Plan was recommended and implemented beginning in June 2000. The results of the first two semiannual sampling events will be summarized in the First Annual Monitoring Only Report, which will be submitted to GA EPD in July 2001.

III.C. DESIGN AND OPERATION OF CORRECTIVE ACTION SYSTEMS

For the benzene plume, the CAP–Part B Report (SAIC 2000) recommended a Monitoring Only Plan that consisted of semiannual monitoring of wells AF-02, AF-05, AF-07, and AF-12, which would be sampled for BTEX. In addition, it was recommended that groundwater samples be collected from deep wells AF-40, AF-41, and AF-42 and analyzed for VOCs.

The horizontal extent of the TCE plume has not been fully determined; therefore, it is not appropriate to recommend a corrective action at this point. Four additional vertical-profile borings should be installed on the northwestern, northern, and northeastern edges of the TCE plume to determine the extent of contamination in those directions. These borings should be converted to deep monitoring wells based on the results of the vertical-profile sampling. In addition, a vertical-profile boring should be installed in the vicinity of AF-34, located southeast of the site, to confirm the conclusions of the geophysical survey in the wooded area. The geophysical survey concluded that the two clay layers show a decrease in elevation toward the southwest and that if the TCE pools on top of either unit, then the likely migration direction would be to the southeast toward well AF-34. It is also recommended that the geophysical survey be extended to cover the area within the motorpool of the USTs 25 & 26 site where TCE is present at greater depths.

III.D. IMPLEMENTATION

III.D.1. Milestone Schedule

A milestone schedule for the Monitoring Only Plan was provided in the CAP–Part B Report (SAIC 2000). Semiannual sampling events are conducted in January and June/July of each year, with the annual monitoring only report being submitted in July of each year.

A Gantt chart showing milestone activities and the anticipated duration for the proposed additional investigation activities for the TCE plume will be submitted upon approval of this addendum report.

III.D.2. Progress Reporting

Annual monitoring reports will be submitted to GA EPD in July of each year that will summarize all previous annual sampling events.

III.D.3. Certificate of Completion Report

Petition for permanent closure will be submitted with the final monitoring only report. GA EPD will provide final approval for decommissioning of the monitoring wells, which will be requested in the final monitoring only report. Decommissioning of monitoring wells will be completed in accordance with the USACE design manual for monitoring wells. Decommissioning will comply with all applicable state and federal standards.

The following certification will be submitted to EPD within 30 days of submittal of the final progress report:

> I hereby certify that the Corrective Action Plan–Part B, dated _____, 20__, for Hunter Army Airfield, USTs 25 & 26 site, Facility ID 9-025008, including any and all certified amendments thereto, has been implemented in accordance with the schedules, specifications, sampling programs, and conditions contained therein, and that the plan's stated objectives have been met.
>
> _____
> Signature (Owner/Operator)

III.D.4. Inspection Schedule and Preventative Maintenance Program

During each sampling event, wells will be visually inspected for changes or damage. Any notable observations will be recorded in the subsequent monitoring only report. Any required repairs to ensure that the monitoring wells remain in conformance with GA EPD and U.S. Environmental Protection Agency (EPA) performance standards will be made as needed.

III.D.5. Periodic Monitoring

As approved in the CAP–Part B Report (SAIC 2000), groundwater samples from AF-02, AF-05, AF-07, and AF-12 will continue to be collected semiannually and analyzed for BTEX. In addition, groundwater samples will be collected from deep wells AF-40, AF-41, and AF-42 semiannually and analyzed for VOCs. Benzo(*a*)pyrene and naphthalene were the only polynuclear aromatic hydrocarbon (PAH) compounds detected in the groundwater at the site, and concentrations were well below the proposed ACLs. Thus, it is recommended that PAH analysis not be performed during future semiannual sampling events. Monitoring will continue at the site until two consecutive years of sampling in the monitoring wells indicate that benzene concentrations in the four shallow wells are below the ACL of 340 µg/L. Once the benzene levels have decreased, continued monitoring of TCE will be addressed under a future document after the extent of that contamination has been determined. The First Annual Monitoring Only Report is scheduled to be submitted to GA EPD in July 2001.

During each sampling event, water levels will be measured in all monitoring wells. Specific conductivity, pH, and temperature analyses will be completed on each sample from the monitoring wells at which analytical samples are collected. The samples will be shipped to an approved laboratory for BTEX analysis using EPA Method 8021B/8260B.

III.D.6. Effectiveness of Corrective Action

The Monitoring Only Plan will be discontinued once the objectives of the corrective action have been achieved—that is, to reduce the benzene concentrations in groundwater to below the ACL of 340 µg/L. Once the benzene levels have decreased and the Monitoring Only Plan for benzene is discontinued, continued monitoring of TCE will be addressed, if required, after the extent of the TCE contamination has been determined.

III.D.7. Confirmatory Soil Sampling Plan

No excavation of soil is planned; therefore, confirmatory sampling associated with excavation of soil will not be completed. However, one soil sample collected during the in-place closure contained a benzene concentration above the benzene ATL of 0.159 mg/kg. Once the benzene ACL in groundwater has been achieved, one confirmatory soil sample will be collected from a location adjacent to sample location HAAF-260-PIPE-D-2-S and analyzed for BTEX and PAHs. This information will supercede the data currently being used in the site ranking form.

III.D.8. Stockpiled Bulk Soil Sampling

No stockpiled soil will be generated with this corrective action; therefore, no soil sampling will be conducted.

III.D.9. Monitoring Only Termination Conditions

Concentrations of benzene in groundwater must be at or below the ACL, and benzene in soil must be at or below the ATL prior to termination of the monitoring only program. Once the benzene ACL and ATL

have been achieved, monitoring only for the benzene plume may be terminated regardless of the site ranking score.

III.D.10. Post-Completion Site Restoration Activities

After termination has been granted, equipment and debris related to the benzene monitoring program will be removed from the site.

III.E. PUBLIC NOTIFICATION

The USTs 25 & 26 site is located entirely within the confines of HAAF, which is part of the Fort Stewart Military Reservation, a federal facility. The U.S. Government owns all of the property contiguous to the site. The Fort Stewart DPW has complied with the public notice requirements defined by GA EPD guidance by publishing an announcement in the *Savannah Morning News* on April 1 and 8, 2001. A copy of the newspaper announcement used for public notification is presented in Appendix XI of this report.

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IV. CLAIM FOR REIMBURSEMENT

HAAF is a federally owned facility and has funded the investigation for the former USTs 25 & 26 site, Facility ID #9-025008, using Department of Defense Environmental Restoration Funds. Application for Georgia Underground Storage Tank Trust Fund reimbursement is not being pursued at this time.

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V. REFERENCES

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APPENDIX I

REPORT FIGURES

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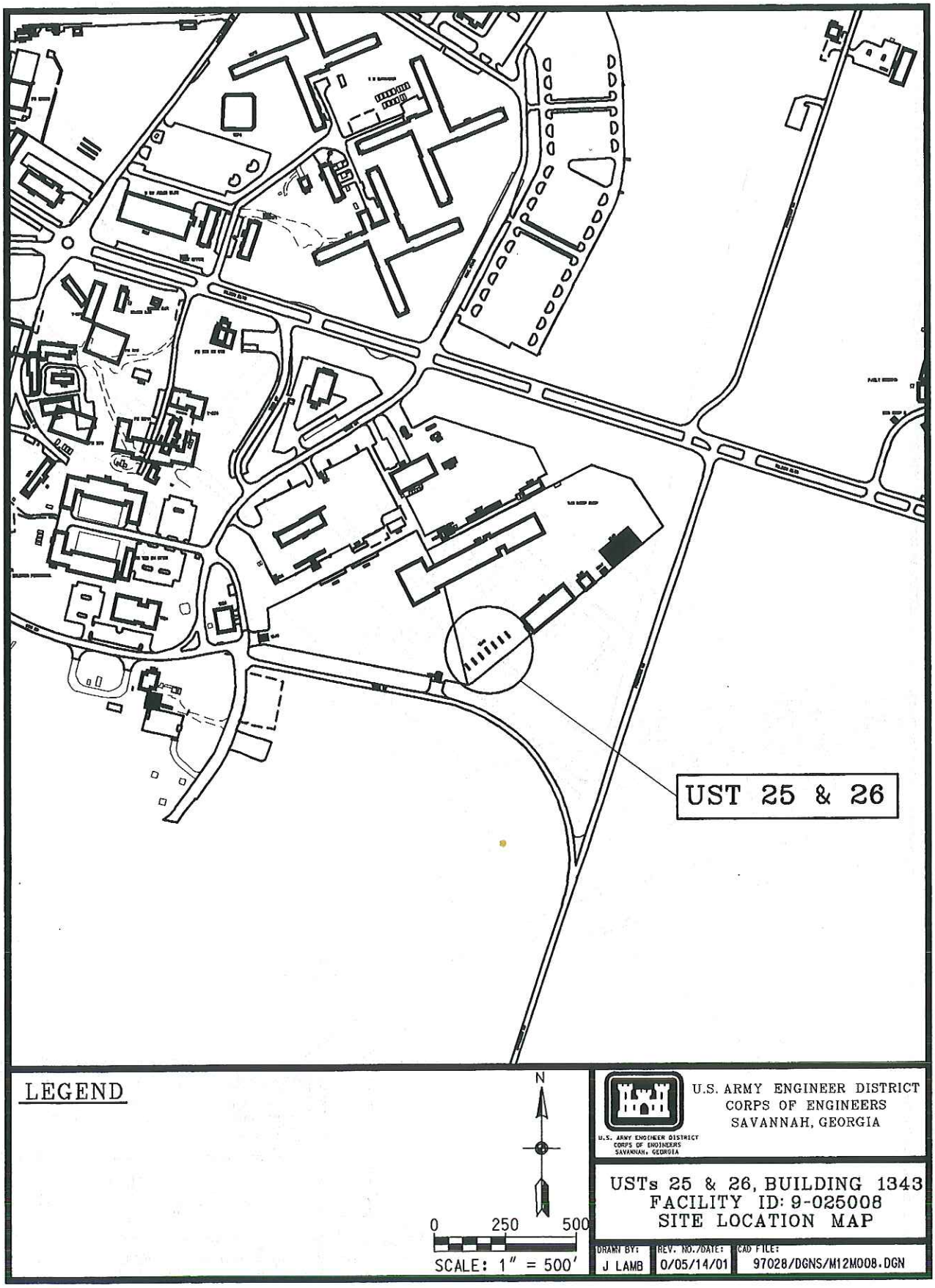


Figure 1. Location Map for the USTs 25 & 26 Site, Facility ID #9-025008

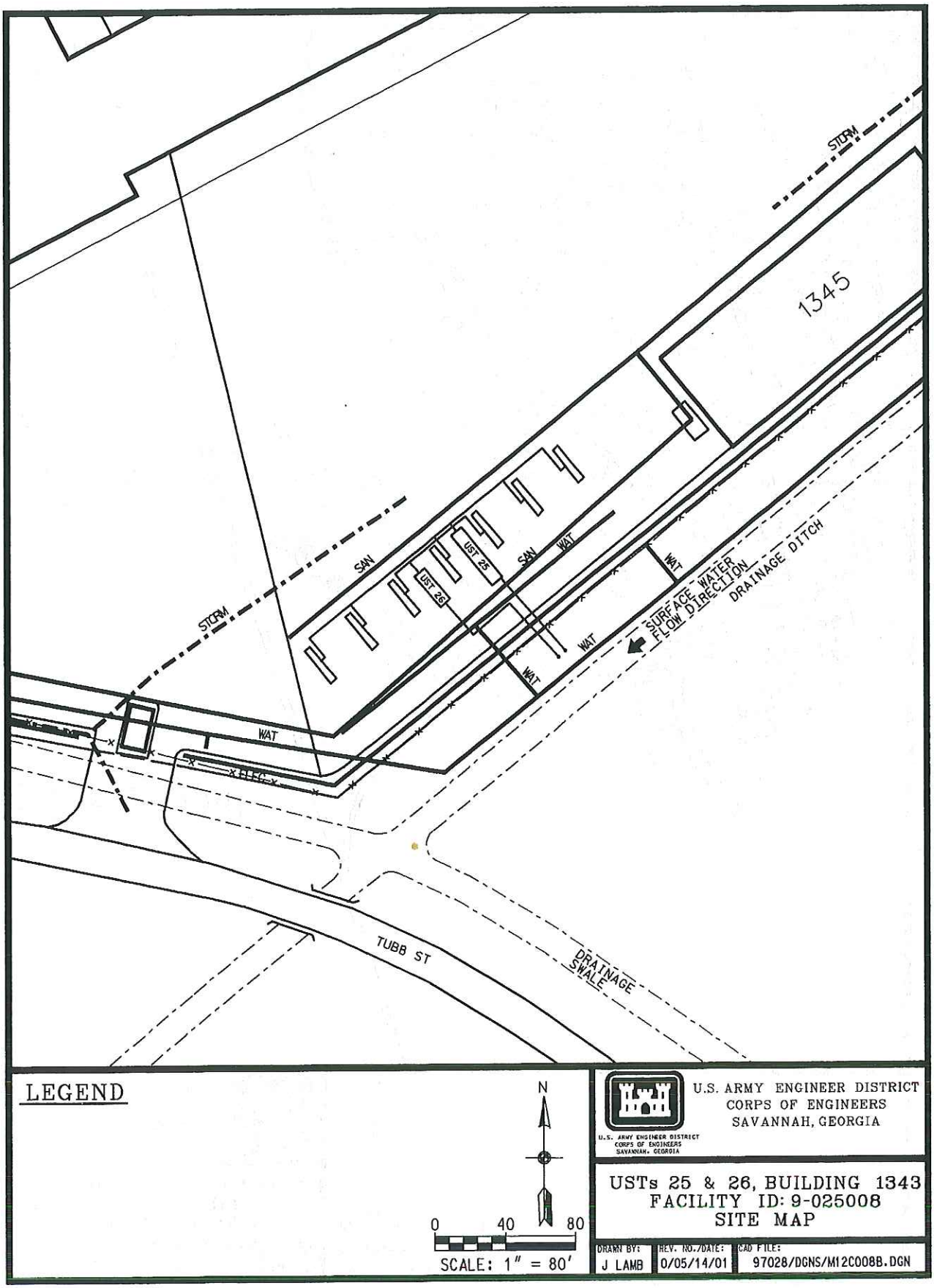


Figure 2. Site Map of the USTs 25 & 26 Site, Facility ID #9-025008

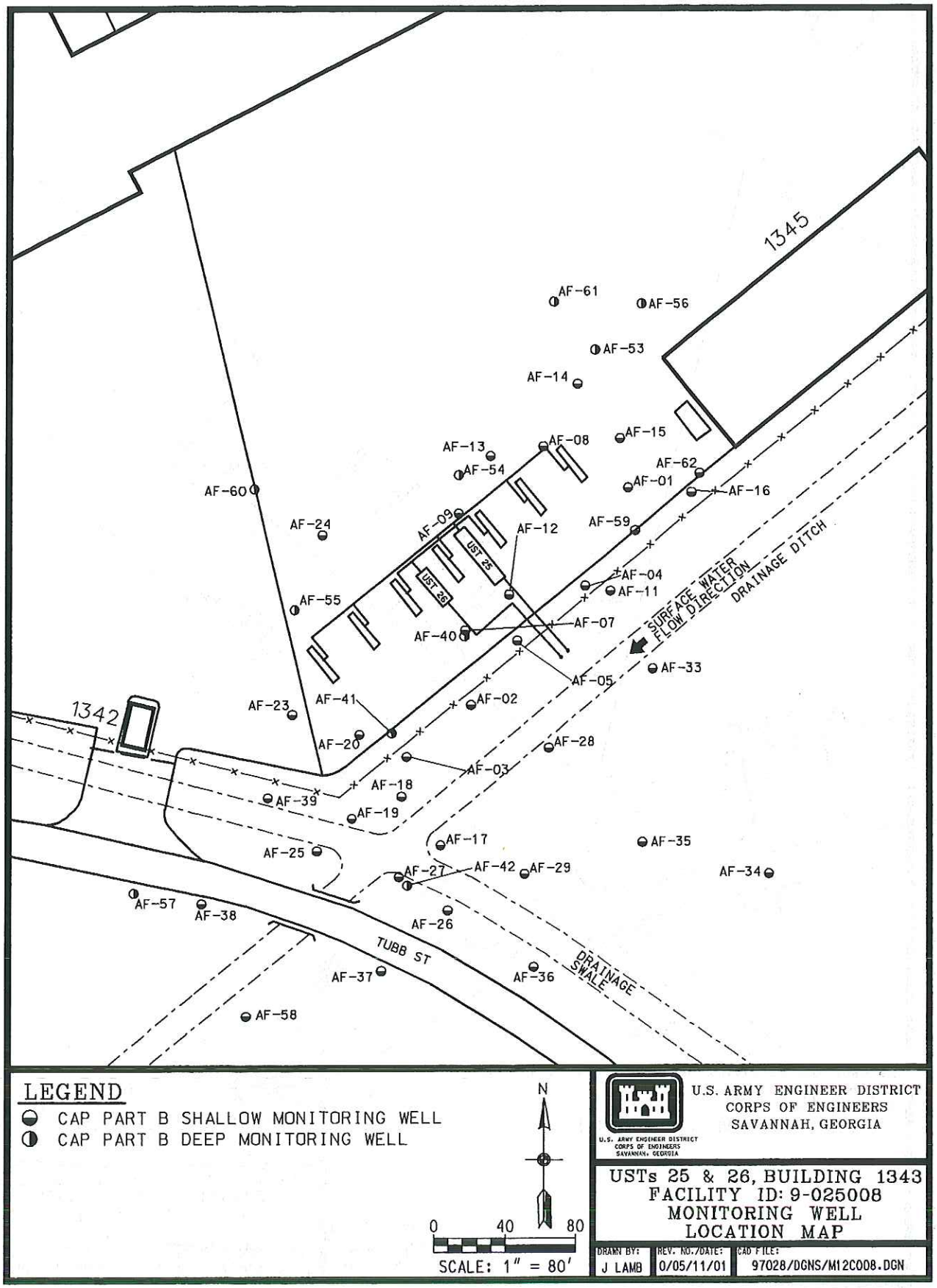


Figure 3. Monitoring Well Location Map of the USTs 25 & 26 Site, Facility ID #9-025008

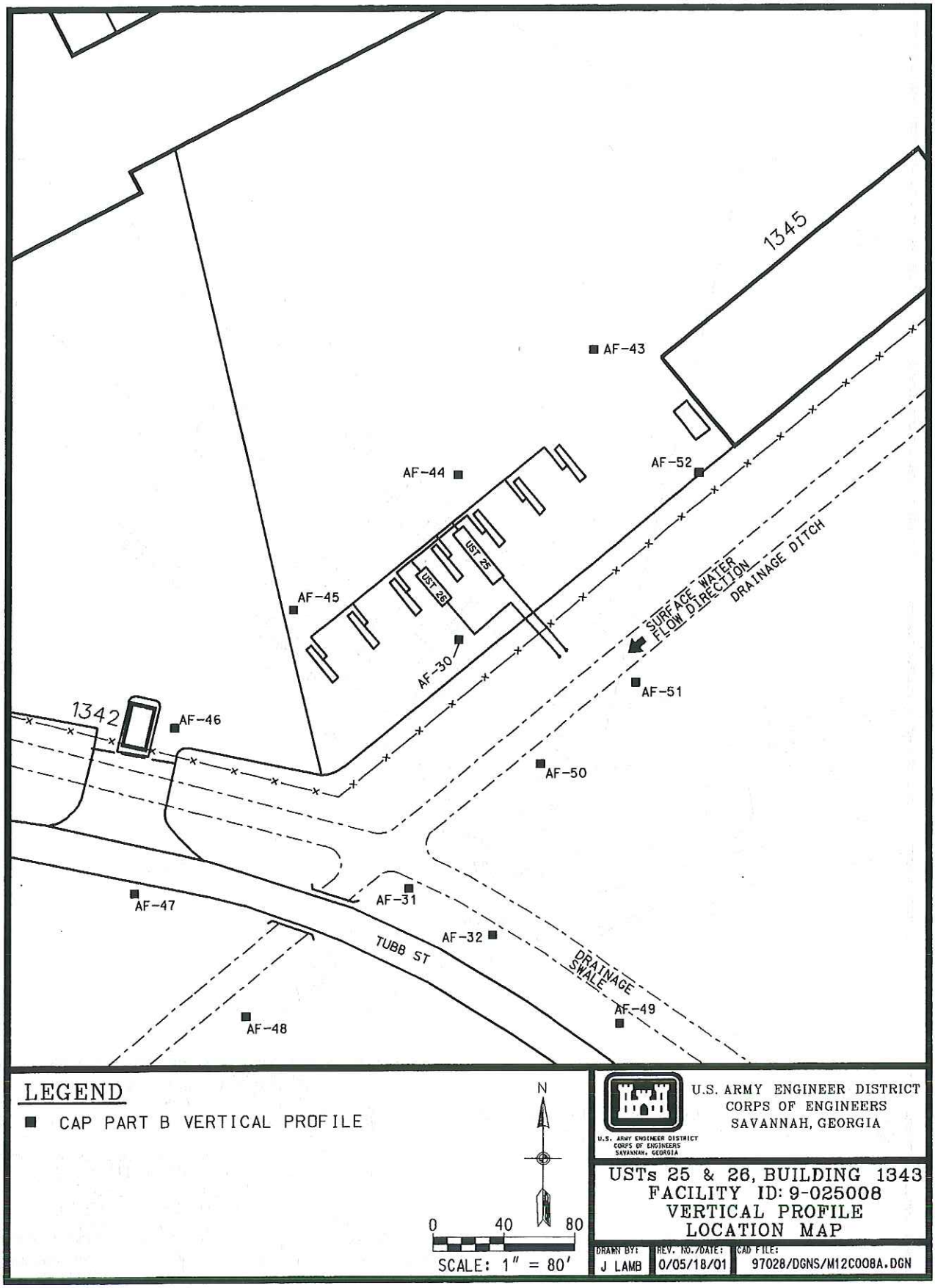


Figure 4. Vertical Profile Location Map of the USTs 25 & 26 Site, Facility ID #9-025008

AF-01

AF0122	2.5-12.5 FT (ug/L)
Methylene Chloride	1.2J

AF-02

AF0222	2.0-12.0 FT (ug/L)
Acetone	11.1J
Benzene	8.4
Methylene Chloride	0.54J
Toluene	0.65J

AF-03

AF0322	2.0-12.0 FT (ug/L)
Benzene	2.2
Ethylbenzene	1.6J
Xylenes, Total	0.96J

AF-04

AF0422	2.0-12.0 FT (ug/L)
No Detects	

AF-05

AF0522	2.0-12.0 FT (ug/L)
Benzene	11.8
Ethylbenzene	9.5
Toluene	3
Xylenes, Total	46.5

AF-07

AF0722	2.5-12.5 FT (ug/L)
2-Hexanone	40.2
Benzene	9130
Ethylbenzene	493
Toluene	24.8
Xylenes, Total	246

AF-08

AF0822	2.5-12.5 FT (ug/L)
Carbon Disulfide	1.1J

AF-09

AF0922	2.0-12.0 FT (ug/L)
1,2-Dichloroethene	3.9
Benzene	11.8
Ethylbenzene	27.7
Xylenes, Total	1.4J

AF-11

AF1122	1.0-11.0 FT (ug/L)
No Detects	

AF-12

AF1222	2.5-12.5 FT (ug/L)
Benzene	23.4
Ethylbenzene	54.8
Methylene Chloride	2J
Xylenes, Total	8.5J

AF-13

AF1322	2.5-12.5 FT (ug/L)
1,2-Dichloroethene	1.5J

AF-14

AF1422	1.4-11.4 FT (ug/L)
Carbon Disulfide	2J

AF-15

AF1522	1.5-11.5 FT (ug/L)
No Detects	

AF-16

AF1622	1.5-11.5 FT (ug/L)
No Detects	

AF-17

AF1722	2.0-12.0 FT (ug/L)
1,2-Dichloroethene	19.9
Benzene	14
Trichloroethene	112

AF-18

AF1822	1.5-11.5 FT (ug/L)
1,2-Dichloroethene	13.2
Benzene	10.3
Trichloroethene	1.6J

AF-19

AF1922	1.5-11.5 FT (ug/L)
1,2-Dichloroethene	8.3
Benzene	3.5
Trichloroethene	2.6

AF-20

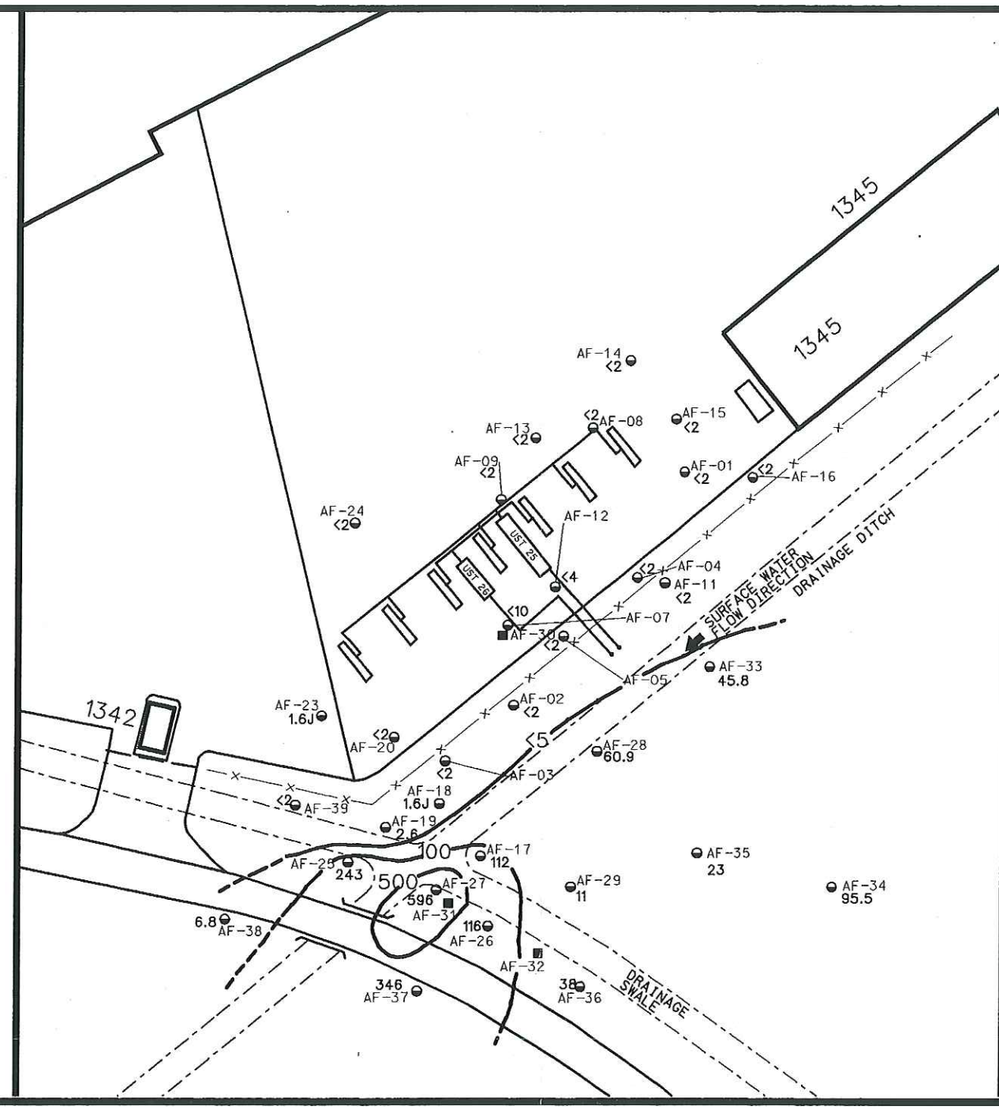
AF2022	3.0-13.0 FT (ug/L)
1,2-Dichloroethene	1.7J
Benzene	2.1

AF-23

AF2322	3.0-13.0 FT (ug/L)
1,2-Dichloroethene	5.3
2-Butanone	5.9J
Benzene	1.1J
Trichloroethene	1.6J

AF-24

AF2422	2.0-12.0 FT (ug/L)
No Detects	



AF-25

AF2522	0.5-10.5 FT (ug/L)
1,1-Dichloroethene	0.66J
1,2-Dichloroethene	40.2
Benzene	4.8
Ethylbenzene	0.59J
Trichloroethene	243
Vinyl Chloride	0.6J

AF-26

AF2622	2.0-12.0 FT (ug/L)
1,2-Dichloroethene	27.9
Benzene	16.6
Methylene Chloride	1.5J
Trichloroethene	116

AF-27

AF2722	1.0-11.0 FT (ug/L)
1,2-Dichloroethene	49.3
Benzene	5.1J
Methylene Chloride	12.8J
Trichloroethene	596

AF-28

AF2822	2.0-12.0 FT (ug/L)
1,1-Dichloroethene	0.67J
1,2-Dichloroethene	41.9
Benzene	3.9
Trichloroethene	60.9

AF-29

AF2922	2.0-12.0 FT (ug/L)
1,2-Dichloroethene	9.5
Benzene	53.6
Methylene Chloride	1.2J
Trichloroethene	11
Vinyl Chloride	1.8J

AF-33

AF3312	2.3-11.8 FT (ug/L)
1,2-Dichloroethene	6.4
Methylene Chloride	2.1
Trichloroethene	45.8

AF-34

AF3412	1.4-10.9 FT (ug/L)
1,1-Dichloroethane	3.4
1,1-Dichloroethene	4.8
1,2-Dichloroethene	10.8
Methylene Chloride	3.6
Trichloroethene	95.5

AF-35

AF3512	12.-10.7 FT (ug/L)
1,2-Dichloroethene	8.8
Benzene	2.1
Trichloroethene	23

AF-36

AF3612	1.4-10.9 FT (ug/L)
1,2-Dichloroethene	17.3
Benzene	2.4
Methylene Chloride	2.6
Trichloroethene	38

AF-37

AF3722	4.4-14.3 FT (ug/L)
1,1-Dichloroethene	0.6J
1,2-Dichloroethene	26.4
Benzene	4.2
Ethylbenzene	0.63J
Toluene	0.69J
Trichloroethene	346
Xylenes, Total	3.4J

AF-38

AF3812	4.1-14.0 FT (ug/L)
1,2-Dichloroethene	3.8
Benzene	2
Ethylbenzene	1.6J
Toluene	2
Trichloroethene	6.8
Xylenes, Total	9.4

AF-39

AF3912	4.4-14.3 FT (ug/L)
1,2-Dichloroethene	4.3
Benzene	0.92J

LEGEND

- CAP PART B SHALLOW MONITORING WELL
- CAP PART B VERTICAL PROFILE
- <5 TCE CONCENTRATION CONTOUR

NOTES
CONCENTRATIONS IN ug/L

SEE SITE LOCATION PLAN FOR LOCATION OF UTILITIES

N

0 40 80
SCALE: 1" = 80'

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

USTs 25 & 26, BUILDING 1343
FACILITY ID #9-025008
VOC GROUNDWATER QUALITY MAP FOR
THE SHALLOW SURFICIAL AQUIFER
(SEPT 1999)

DRAWN BY:	REV. NO./DATE:	CAD FILE:
J. LAMB	0/05/14/01	97028/DGNS/M12C008C.DGN

Figure 5. VOC Groundwater Quality Map for the Shallow Surficial Aquifer (September 1999) at the USTs 25 & 26 Site, Facility ID #9-025008

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AF-30

AF3012 11.0-15.0 FT (ug/L)	
1,2-Dichloroethene	3.3
2-Hexanone	14.2
Benzene	7670J
Ethylbenzene	500J
Methylene Chloride	2.2
Styrene	0.52J
Toluene	19
Trichloroethene	1.7J
Xylenes, Total	72.7

AF3022 16.0-20.0 FT (ug/L)	
1,2-Dichloroethene	24
2-Hexanone	15.5
Benzene	2290
Ethylbenzene	168
Toluene	5.5
Trichloroethene	21.3
Vinyl Chloride	0.88J
Xylenes, Total	9.6

AF3032 21.0-25.0 FT (ug/L)	
1,1-Dichloroethene	0.74J
1,2-Dichloroethene	33
Benzene	37.9
Ethylbenzene	2.7
Methylene Chloride	0.95J
Toluene	0.55J
Trichloroethene	75.9
Xylenes, Total	1.8J

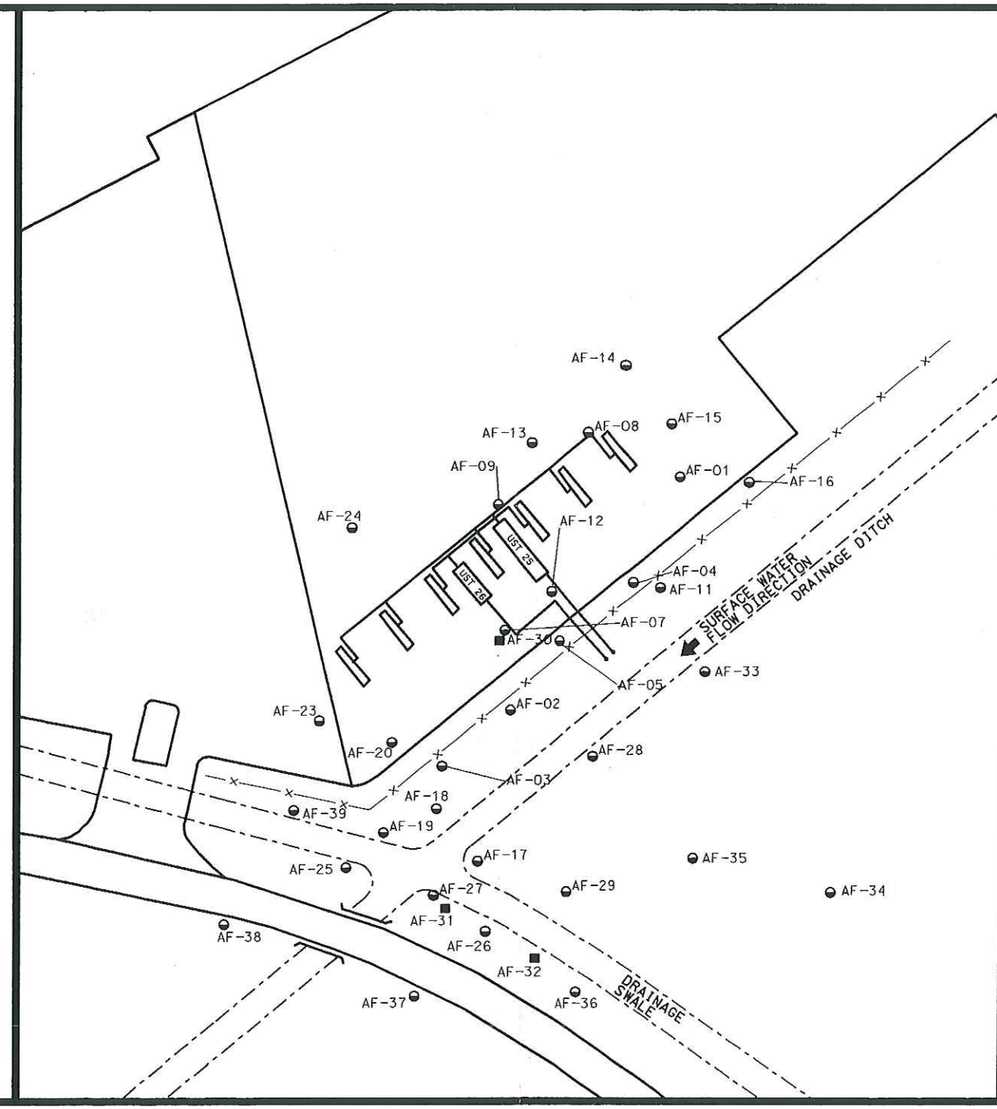
AF3042 26.0-30.0 FT (ug/L)	
1,1-Dichloroethene	2.2
1,2-Dichloroethene	90.3
Benzene	16.2
Carbon Disulfide	1.1J
Ethylbenzene	1.3J
Trichloroethene	262

AF3052 31.0-35.0 FT (ug/L)	
1,1-Dichloroethene	0.62J
1,2-Dichloroethene	24.3
Benzene	11
Ethylbenzene	0.53J
Trichloroethene	116
Xylenes, Total	0.51J

AF3062 36.0-40.0 FT (ug/L)	
1,2-Dichloroethene	11.3
Benzene	6.4
Ethylbenzene	0.67J
Trichloroethene	66.5
Xylenes, Total	0.67J

AF3072 41.0-45.0 FT (ug/L)	
1,2-Dichloroethene	8.7
Benzene	5.5
Ethylbenzene	5.5
Toluene	0.78J
Trichloroethene	66.2
Xylenes, Total	9.3

AF3082 46.0-50.0 FT (ug/L)	
Benzene	6.8
Carbon Disulfide	1.3J
Ethylbenzene	1.8J
Toluene	0.5J
Trichloroethene	0.91J
Xylenes, Total	2.9J



AF-31

AF3112 6.0-10.0 FT (ug/L)	
1,2-Dichloroethene	17.9
Benzene	11.1
Trichloroethene	168

AF3122 11.0-15.0 FT (ug/L)	
1,2-Dichloroethene	10.7
Benzene	0.99J
Trichloroethene	110

AF3132 16.0-20.0 FT (ug/L)	
Chloromethane	0.68J
Trichloroethene	2.6

AF3142 21.0-25.0 FT (ug/L)	
1,2-Dichloroethene	16.4
Methylene Chloride	3
Trichloroethene	43.7

AF3152 26.0-30.0 FT (ug/L)	
Chloromethane	0.73J
Trichloroethene	1.3J

AF3162 31.0-35.0 FT (ug/L)	
2-Butanone	1.9J
Trichloroethene	1J

AF3172 36.0-40.0 FT (ug/L)	
2-Butanone	1.3J
Trichloroethene	0.76J

AF3182 41.0-45.0 FT (ug/L)
No Detects

AF3192 46.0-50.0 FT (ug/L)	
Trichloroethene	0.56J

AF-32

AF3212 11.0-15.0 FT (ug/L)	
1,2-Dichloroethene	6.4
Benzene	2.1
Trichloroethene	26.3

AF3222 16.0-20.0 FT (ug/L)	
2-Butanone	0.93J
Toluene	0.52J

AF3232 16.0-20.0 FT (ug/L)	
Methylene Chloride	2.9

AF3242 21.0-25.0 FT (ug/L)
No Detects

AF3252 26.0-30.0 FT (ug/L)
No Detects

AF3262 2.0-12.0 FT (ug/L)	
Carbon Disulfide	0.56J

AF3272 36.0-40.0 FT (ug/L)
No Detects

AF3282 41.0-45.0 FT (ug/L)
No Detects

LEGEND

- CAP PART B SHALLOW MONITORING WELL
- CAP PART B VERTICAL PROFILE

NOTES
CONCENTRATIONS IN ug/L

SEE SITE LOCATION PLAN FOR LOCATION OF UTILITIES

N

0 40 80
SCALE: 1" = 80'

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

USTs 25 & 26, BUILDING 1343
FACILITY ID #9-025008
VOC GROUNDWATER QUALITY MAP
FOR THE VERTICAL PROFILE BORINGS
(SEPT 1999)

DRAWN BY:	REV. NO./DATE:	CAD FILE:
J. LAMB	0/05/14/01	97028/DGNS/M12C008D.DGN

Figure 6. VOC Groundwater Quality Map for the Vertical Profile Borings (September 1999) at the USTs 25 & 26 Site, Facility ID #9-025008

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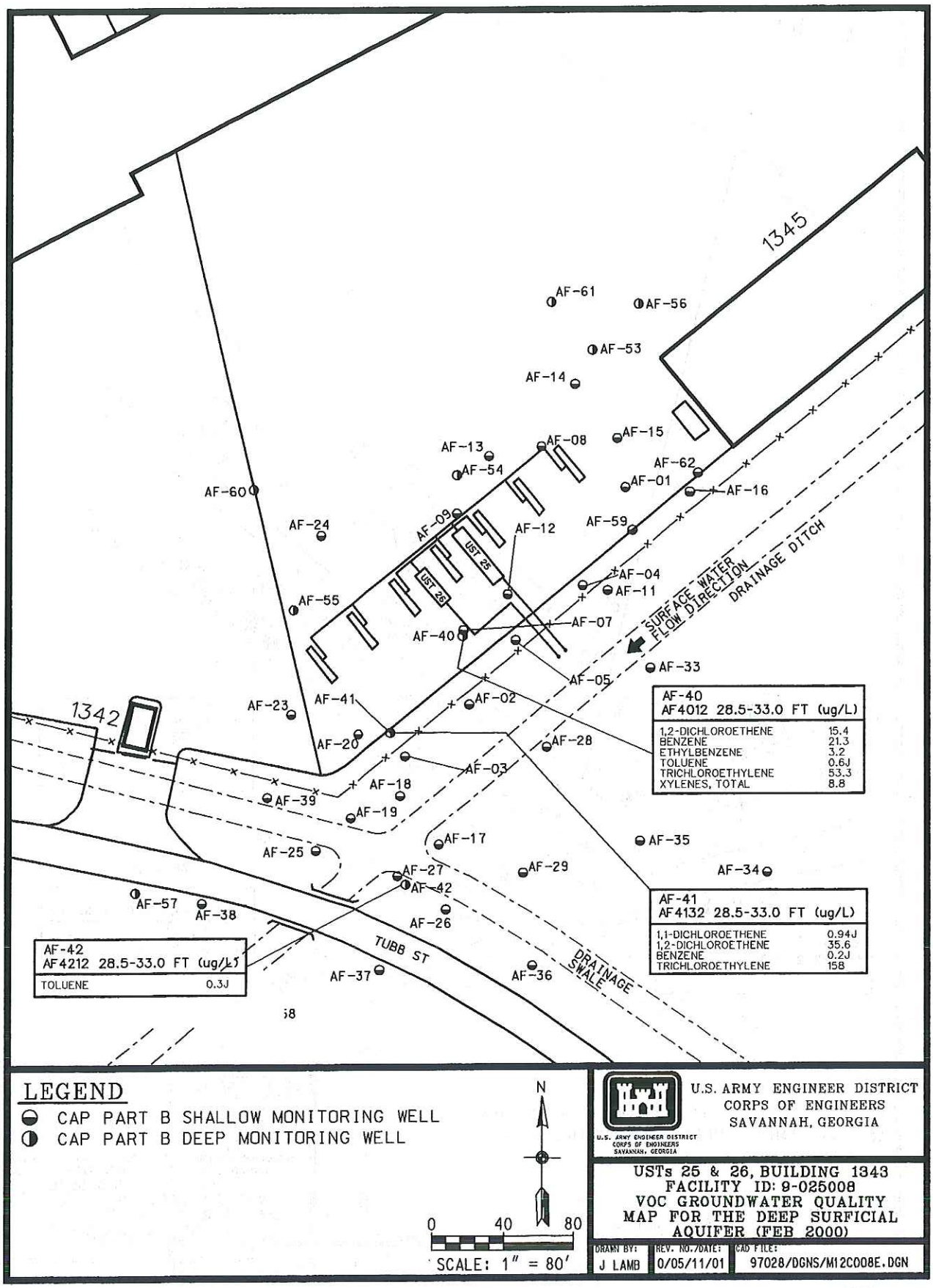

Figure 7. VOC Groundwater Quality Map for the Deep Surficial Aquifer (February 2000) at the USTs 25 & 26 Site, Facility ID #9-025008

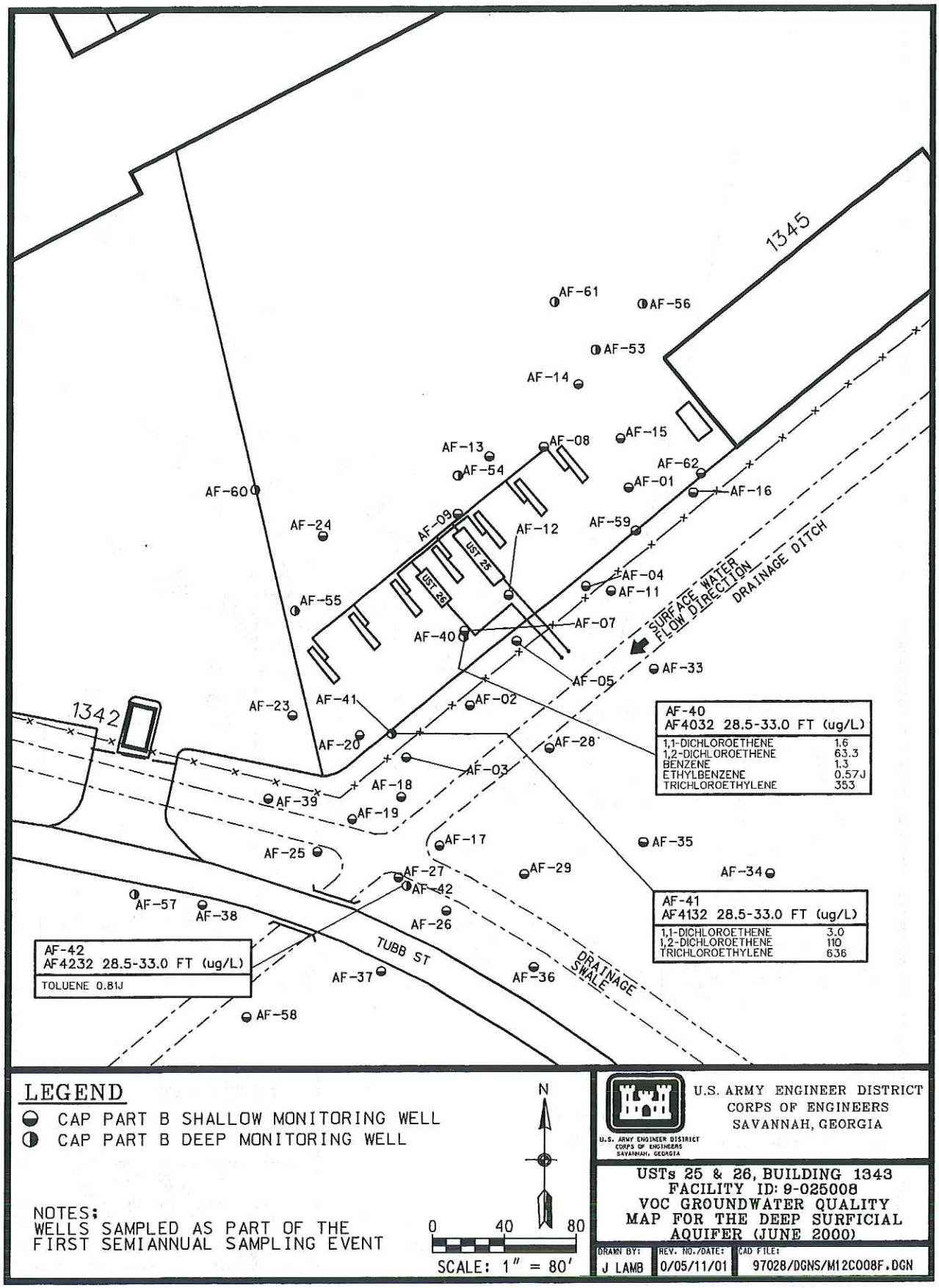

Figure 8. VOC Groundwater Quality Map for the Deep Surficial Aquifer (June 2000) at the USTs 25 & 26 Site, Facility ID #9-025008

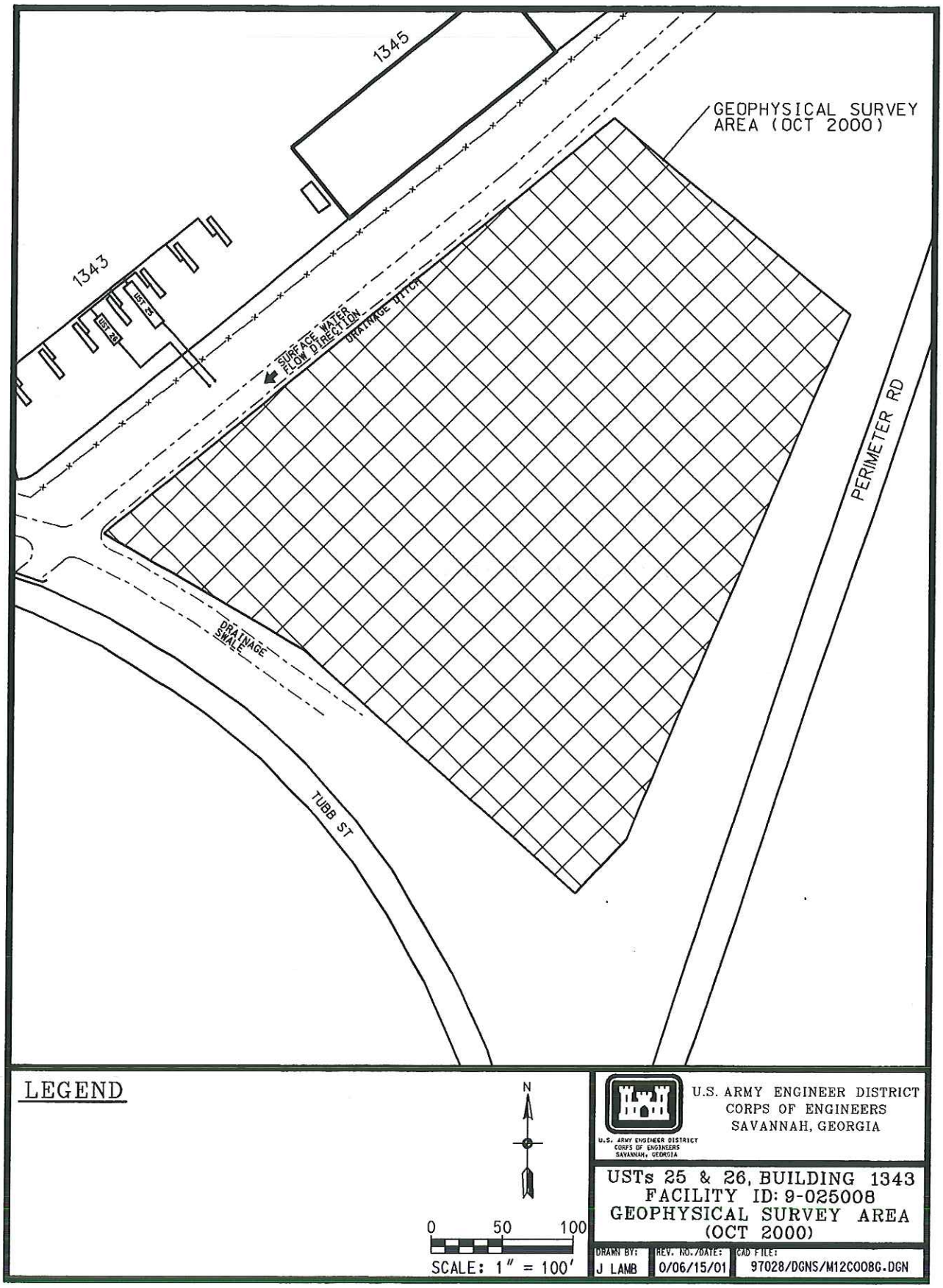

Figure 9. Location of the Geophysical Suvey Area at the USTs 25 & 26 Site, Facility ID #9-025008

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AF-01		
AF0142	2.5-12.5 FT	(ug/L)
Acetone	6.7	

AF-02		
AF0242	2.5-12.5 FT	(ug/L)
Acetone	8	
Benzene	0.82	J

AF-03		
AF0342	2.5-12.5 FT	(ug/L)
Acetone	18	

AF-04		
AF0442	2.5-12.5 FT	(ug/L)
Acetone	9.1	

AF-05		
AF0542	2.5-12.5 FT	(ug/L)
Acetone	11.7	
Benzene	4.7	
Ethylbenzene	4.7	
Toluene	0.82	J
Xylenes, Total	20.9	

AF-07		
AF0742	2.5-12.5 FT	(ug/L)
1,1-Dichloroethane	<100	
1,1-Dichloroethene	<100	
1,2-Dichloroethene	<200	
Acetone	<500	
Benzene	9920	
Ethylbenzene	645	
Toluene	39.2	J
Trichloroethene	<100	
Vinyl Chloride	<100	
Xylenes, Total	<300	

AF-08		
AF0842	2.5-12.5 FT	(ug/L)
Acetone	6.8	
Benzene	0.2	J

AF-09		
AF0942	2.5-12.5 FT	(ug/L)
1,2-Dichloroethene	3.4	
Acetone	7.4	
Benzene	7	
Ethylbenzene	16.7	
Toluene	0.36	J

AF-11		
AF1142	2.5-12.5 FT	(ug/L)
No Detects		

AF-12		
AF1242	2.5-12.5 FT	(ug/L)
Acetone	8.2	
Benzene	33.2	
Ethylbenzene	94.1	
Toluene	0.29	J
Xylenes, Total	3.2	

AF-13		
AF1342	2.5-12.5 FT	(ug/L)
1,2-Dichloroethene	1.2	J
Acetone	7.2	
Ethylbenzene	0.17	J
Xylenes, Total	1.2	J

AF-14		
AF1442	2.5-12.5 FT	(ug/L)
Acetone	8.3	
Ethylbenzene	0.064	J

AF-15		
AF1542	2.5-12.5 FT	(ug/L)
Acetone	8.2	
Benzene	0.19	J

AF-16		
AF1642	2.5-12.5 FT	(ug/L)
Acetone	6.5	

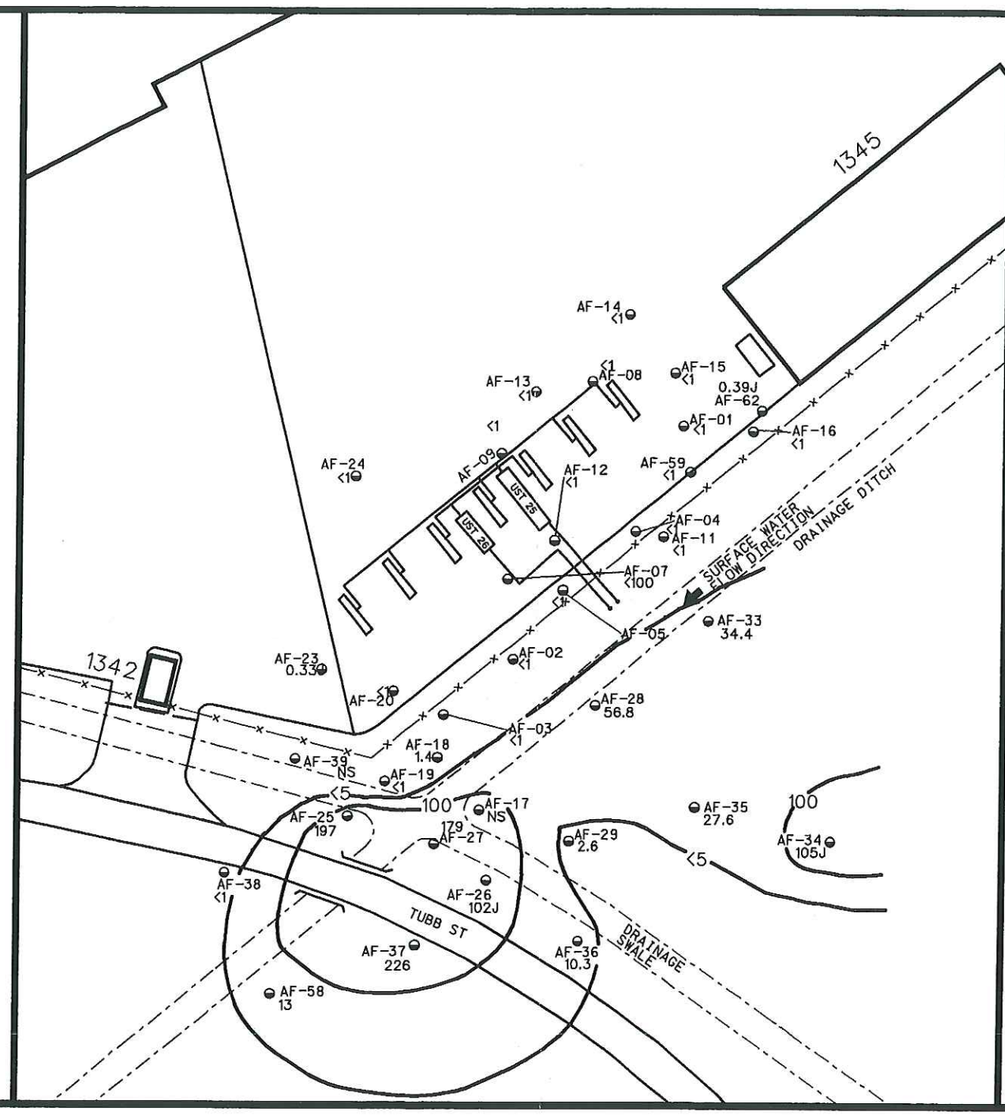
AF-17		
	2.0-12.0 FT	(ug/L)
WELL DESTROYED NO SAMPLED COLLECTED		

AF-18		
AF1842	2.5-12.5 FT	(ug/L)
1,2-Dichloroethene	5.6	
Acetone	11.2	
Benzene	5.8	
Ethylbenzene	0.11	J
Toluene	0.7	J
Trichloroethene	1.4	

AF-19		
AF1942	2.5-12.5 FT	(ug/L)
1,2-Dichloroethene	0.36	J
Acetone	7.4	
Benzene	0.24	J
Toluene	0.99	J

AF-20		
AF2042	2.5-12.5 FT	(ug/L)
1,2-Dichloroethene	2.3	
Acetone	7.7	
Benzene	0.55	J

AF-23		
AF2342	2.5-12.5 FT	(ug/L)
1,2-Dichloroethene	8.5	
Acetone	6.6	
Benzene	1.6	
Trichloroethene	0.33	J



AF-24		
AF2442	2.5-12.5 FT	(ug/L)
No Detects		

AF-25		
AF2542	2.5-12.5 FT	(ug/L)
1,2-Dichloroethene	34	
Benzene	1.6	
Trichloroethene	197	

AF-26		
AF2642	2.5-12.5 FT	(ug/L)
1,2-Dichloroethene	21.8	
Benzene	11.2	
Toluene	1.9	
Trichloroethene	102	J

AF-27		
AF2742	2.5-12.5 FT	(ug/L)
1,2-Dichloroethene	30.7	
Benzene	1.9	
Trichloroethene	179	

AF-28		
AF2842	2.5-12.5 FT	(ug/L)
1,2-Dichloroethene	42.6	
Benzene	8.6	
Toluene	1.2	
Trichloroethene	56.8	

AF-29		
AF2942	2.5-12.5 FT	(ug/L)
1,2-Dichloroethene	2.4	
Benzene	351	
Ethylbenzene	54.1	
Toluene	2.8	
Trichloroethene	2.6	
Vinyl Chloride	0.77	J
Xylenes, Total	5.1	

AF-33		
AF3342	2.5-12.5 FT	(ug/L)
1,2-Dichloroethene	8.1	
Trichloroethene	34.4	

AF-34		
AF3442	2.5-12.5 FT	(ug/L)
1,1-Dichloroethane	2.8	
1,1-Dichloroethene	3.9	
1,2-Dichloroethene	13	
Toluene	0.47	J
Trichloroethene	105	J

AF-35		
AF3542	2.5-12.5 FT	(ug/L)
1,2-Dichloroethene	9.6	
Benzene	0.38	J
Trichloroethene	27.6	

AF-36		
AF3642	2.5-12.5 FT	(ug/L)
1,2-Dichloroethene	3.3	
Benzene	0.83	J
Toluene	0.78	J
Trichloroethene	10.3	

AF-37		
AF3742	2.5-12.5 FT	(ug/L)
1,2-Dichloroethene	17.2	
Benzene	2.7	
Toluene	1.9	
Trichloroethene	226	

AF-38		
AF3842	2.5-12.5 FT	(ug/L)
1,2-Dichloroethene	0.39	J
Benzene	0.19	J
Toluene	1.4	

AF-39		
	4.4-14.3 FT	(ug/L)
NO SAMPLED COLLECTED		

MARCH 2001 SAMPLING

AF-58		
AF5812	2.7-12.7 FT	(ug/L)
1,2-Dichloroethene	8	
2-Butanone	2.8J	
Acetone	1360J	
Benzene	0.16J	
Chloroform	1.1	
Toluene	0.62J	
Trichloroethene	13	
Xylenes, Total	0.25J	

AF-59		
AF5912	2.3-12.3 FT	(ug/L)
2-Butanone	1J	
Acetone	2250J	
Benzene	0.67J	
Chloroform	0.66J	

AF-62		
AF6212	3.0-013.0 FT	(ug/L)
2-Butanone	1.9J	
Acetone	8630J	
Benzene	0.15J	
Toluene	0.23J	
Trichloroethene	0.39J	

LEGEND

- CAP PART B SHALLOW MONITORING WELL
- <5 TCE CONCENTRATION CONTOUR
- NS NOT SAMPLED

NOTES
CONCENTRATIONS IN ug/L

SEE SITE LOCATION PLAN FOR LOCATION OF UTILITIES

WELLS AF-58, AF-59, AF-62 WERE SAMPLED IN MARCH 2001. ALL OTHER SHALLOW WELLS WERE SAMPLED IN SEPTEMBER 2000

N

0 40 80
SCALE: 1" = 80'

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USTs 25 & 26, BUILDING 1343
FACILITY ID #9-025008
VOC GROUNDWATER QUALITY MAP FOR
THE SHALLOW SURFICIAL AQUIFER
(SEPT 2000 AND MARCH 2001)

DRAWN BY:	REV. NO./DATE:	CAD FILE:
J. LAMB	0/05/14/01	97028/DGNS/M12C008H.DGN

Figure 10. VOC Groundwater Quality Map for the Shallow Surficial Aquifer (September 2000) at the USTs 25 & 26 Site, Facility ID #9-025008

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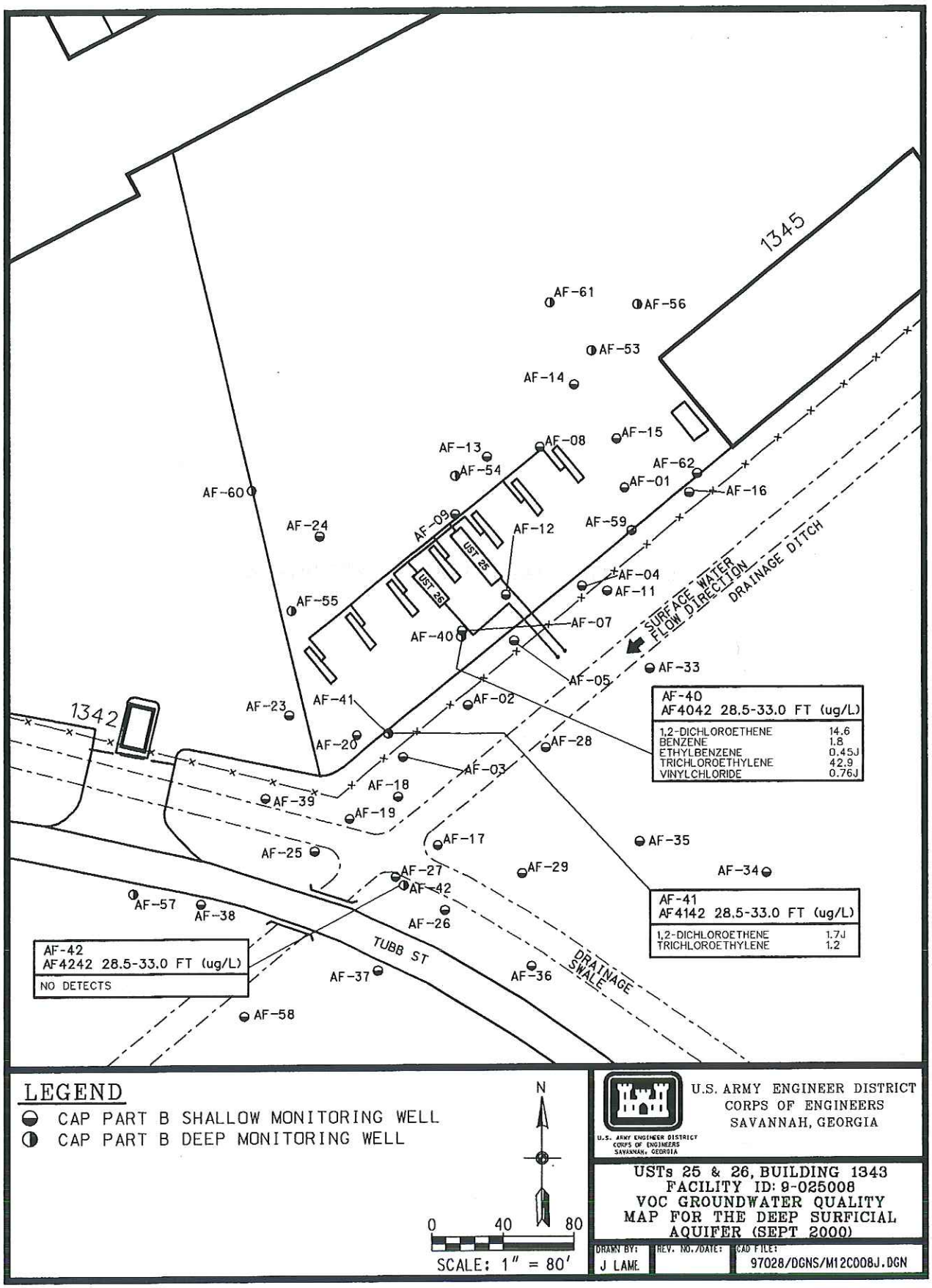

Figure 11. VOC Groundwater Quality Map for the Deep Surficial Aquifer (September 2000) at the USTs 25 & 26 Site, Facility ID #9-025008

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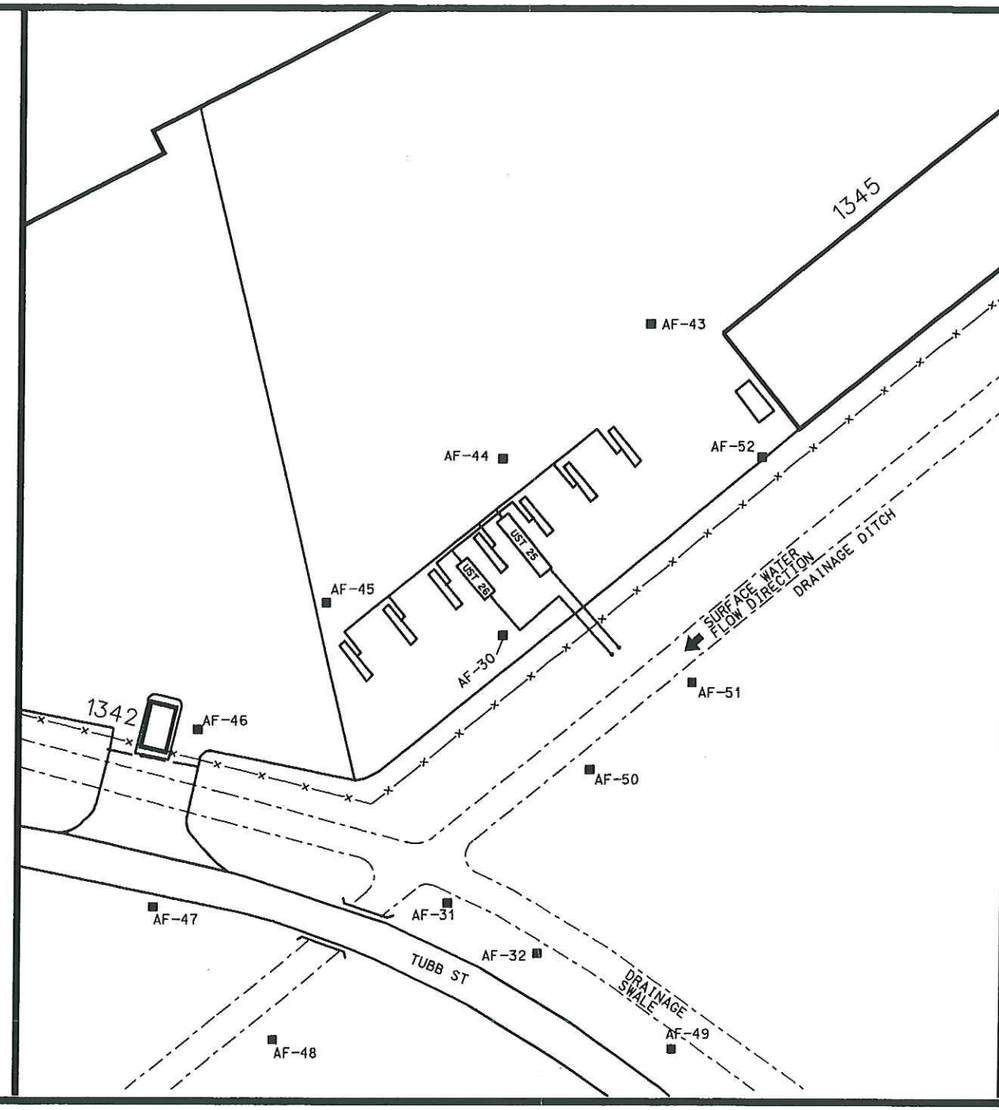
AF-43		
AF4312	4.0-9.0 FT	(ug/L)
Acetone	11	
AF4322	9.0-14.0 FT	(ug/L)
1,2-Dichloroethene	0.46 J	
2-Butanone	1.2 J	
Acetone	3.6 J	
Trichloroethene	1.2	
AF4332	14.0-19.0 ft	(ug/L)
1,1-Dichloroethene	0.51 J	
1,2-Dichloroethene	5.3	
Acetone	1.6 J	
Trichloroethene	304	
AF4342	19.0-24.0 FT	(ug/L)
1,1-Dichloroethene	2.3	
1,2-Dichloroethene	20.2	
Acetone	1.8 J	
Benzene	0.68 J	
Trichloroethene	2600	
AF4352	24.0-29.0 FT	(ug/L)
1,1-Dichloroethene	5.4	
1,2-Dichloroethene	103	
Acetone	2 J	
Toluene	0.27 J	
Trichloroethene	2140	
AF4362	29.0-34.0 FT	(ug/L)
1,1-Dichloroethane	1.3	
1,1-Dichloroethene	12.8	
1,2-Dichloroethene	116	
Acetone	1.8 J	
Trichloroethene	2030	
AF4372	34.0-39.0 FT	(ug/L)
1,1-Dichloroethane	0.9 J	
1,1-Dichloroethene	7.2	
1,2-Dichloroethene	68.2	
Acetone	2.9 J	
Trichloroethene	883	
AF4382	39.0-44.0 FT	(ug/L)
1,1-Dichloroethene	0.1 J	
1,2-Dichloroethene	9.8	
Acetone	2 J	
Trichloroethene	213 J	
AF4392	44.0-49.0 FT	(ug/L)
1,2-Dichloroethene	5.4	
Ethylbenzene	0.062 J	
Toluene	0.45 J	
Trichloroethene	71.2	
Xylenes, Total	0.32 J	

AF-44		
AF4412	4.0-9.0 FT	(ug/L)
1,2-Dichloroethene	7	
Trichloroethene	14.3	
AF4422	9.0-14.0 FT	(ug/L)
1,2-Dichloroethene	2.8	
Ethylbenzene	0.072 J	
Toluene	0.29 J	
Trichloroethene	80.1	
Xylenes, Total	0.46 J	
AF4432	14.0-19.0 ft	(ug/L)
Trichloroethene	13	
AF4442	19.0-24.0 FT	(ug/L)
1,2-Dichloroethene	5.6	
Toluene	0.31 J	
Trichloroethene	54.9	
AF4452	24.0-29.0 FT	(ug/L)
1,2-Dichloroethene	7	
Toluene	0.30 J	
Trichloroethene	33.5	
AF4462	29.0-34.0 FT	(ug/L)
1,2-Dichloroethene	1.1 J	
Toluene	0.38 J	
Trichloroethene	0.83 J	
AF4472	34.0-39.0 FT	(ug/L)
1,1-Dichloroethene	3.2	
1,2-Dichloroethene	104	
Acetone	1.8 J	
Benzene	0.16 J	
Trichloroethene	790	
AF4482	39.0-44.0 FT	(ug/L)
1,1-Dichloroethene	0.84 J	
1,2-Dichloroethene	38.6	
2-Butanone	2.4 J	
Acetone	4.3 J	
Benzene	0.31 J	
Ethylbenzene	0.11 J	
Toluene	0.48 J	
Trichloroethene	346	
AF4492	44.0-49.0 FT	(ug/L)
1,2-Dichloroethene	9.2	
2-Butanone	1.4 J	
2-Hexanone	2.2 J	
Acetone	4.5 J	
Trichloroethene	60.8	



AF-45		
AF4512	4.0-9.0 FT	(ug/L)
1,2-Dichloroethene	10.3	
Benzene	1.8	
Carbon Disulfide	0.41 J	
Toluene	0.39 J	
Trichloroethene	1.9	
AF4522	9.0-14.0 FT	(ug/L)
1,1-Dichloroethene	0.17 J	
1,2-Dichloroethene	7.6	
Benzene	4.2	
Carbon Disulfide	0.59 J	
Trichloroethene	47.2	
AF4532	14.0-19.0 ft	(ug/L)
1,2-Dichloroethene	1.5	
Benzene	0.99 J	
Trichloroethene	18.3	
AF4542	19.0-24.0 FT	(ug/L)
1,1-Dichloroethene	0.63 J	
1,2-Dichloroethene	67.5	
Benzene	0.33 J	
Trichloroethene	428	
AF4552	24.0-29.0 FT	(ug/L)
1,1-Dichloroethene	3.8	
1,2-Dichloroethene	279	
Benzene	0.24 J	
Trichloroethene	1510	
Vinyl Chloride	0.27 J	
AF4562	29.0-34.0 FT	(ug/L)
1,1-Dichloroethene	4.7	
1,2-Dichloroethene	206	
Benzene	0.19 J	
Trichloroethene	1490	
Vinyl Chloride	0.24 J	
AF4572	34.0-39.0 FT	(ug/L)
1,2-Dichloroethene	15.2	
Toluene	0.66 J	
Trichloroethene	181	
AF4582	39.0-44.0 FT	(ug/L)
1,2-Dichloroethene	5.9	
Trichloroethene	48.4	
AF4592	44.0-49.0 FT	(ug/L)
Toluene	0.59 J	

AF-46		
AF4612	6.0-10.0 FT	(ug/L)
1,2-Dichloroethene	0.73 J	
Benzene	0.22 J	
AF4622	11.0-15.0 FT	(ug/L)
1,2-Dichloroethene	1.4 J	
Benzene	0.65 J	
Carbon Disulfide	0.84 J	
Trichloroethene	3.9	
AF4632	16.0-20.0 FT	(ug/L)
Benzene	0.30 J	
Trichloroethene	2.6	
AF4642	21.0-25.0 FT	(ug/L)
1,2-Dichloroethene	1.4 J	
Benzene	0.63 J	
Trichloroethene	4.6	
AF4652	26.0-30.0 FT	(ug/L)
1,2-Dichloroethene	2.3	
Benzene	0.16 J	
Trichloroethene	1.2	
AF4662	31.0-35.0 FT	(ug/L)
1,2-Dichloroethene	0.46 J	
AF4672	36.0-40.0 FT	(ug/L)
NO DETECTS		
AF4682	41.0-45.0 FT	(ug/L)
Trichloroethene	0.61 J	
AF4692	46.0-50.0 FT	(ug/L)
NO DETECTS		

LEGEND

■ CAP PART B VERTICAL PROFILE

NOTES
CONCENTRATIONS IN ug/L

SEE SITE LOCATION PLAN FOR LOCATION OF UTILITIES

N

0 40 80

SCALE: 1" = 80'

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USTs 25 & 26, BUILDING 1343
FACILITY ID #9-025008
VOC GROUNDWATER QUALITY MAP FOR THE VERTICAL PROFILE BORINGS (DEC 2000)

DRAWN BY:	REV. NO./DATE:	CAD FILE:
J. LAMB	0/05/14/01	97028/DGNS/M12C008K.DGN

Figure 12a. VOC Groundwater Quality Map for the Vertical Profile Borings (December 2000) at the USTs 25 & 26 Site, Facility ID #9-025008

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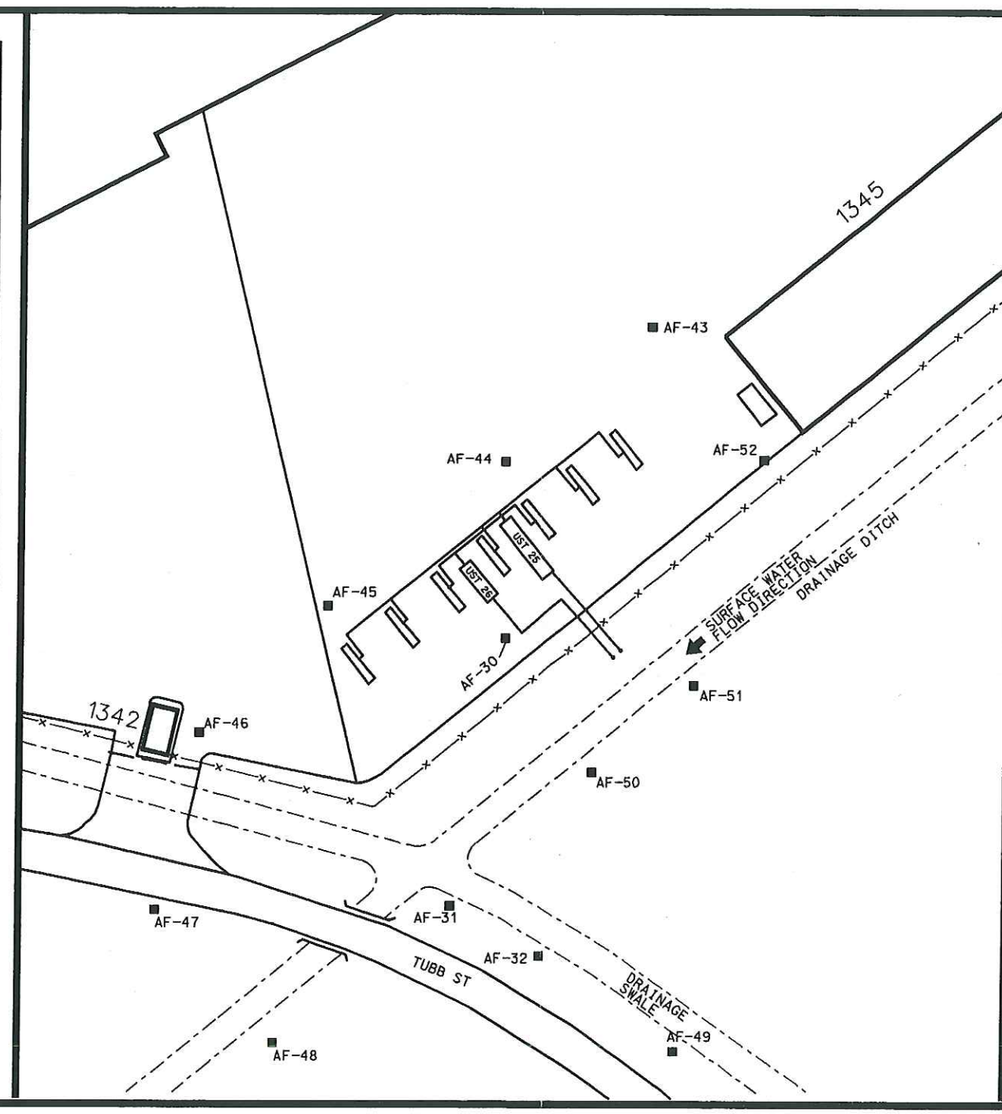
AF-47	
AF4722	11.0-15.0 FT (ug/L)
1,2-Dichloroethene	0.84 J
1,2-Dichloropropane	0.3 J
Benzene	1.2
Trichloroethene	3
AF4732	16.0-20.0 FT (ug/L)
1,2-Dichloroethane	0.51 J
Benzene	0.21 J
Trichloroethene	0.27 J
AF4742	21.0-25.0 FT (ug/L)
NO DETECTS	
AF4752	26.0-30.0 FT (ug/L)
NO DETECTS	
AF4762	31.0-35.0 FT (ug/L)
NO DETECTS	
AF4772	36.0-40.0 FT (ug/L)
NO DETECTS	
AF4782	41.0-45.0 FT (ug/L)
NO DETECTS	
AF4792	46.0-50.0 FT (ug/L)
NO DETECTS	

AF-48	
AF4812	5.0-10.0 FT (ug/L)
1,2-Dichloroethene	6.7
Acetone	2.4 J
Benzene	0.88 J
Ethylbenzene	1.6
Toluene	8.9
Trichloroethene	5.9
Xylenes, Total	7.3
AF4822	10.0-15.0 FT (ug/L)
1,2-Dichloroethene	9.6
Benzene	0.63 J
Ethylbenzene	0.14 J
Trichloroethene	155
Xylenes, Total	0.42 J
AF4832	15.0-20.0 FT (ug/L)
Xylenes, Total	0.4 J
AF4842	20.0-25.0 FT (ug/L)
NO DETECTS	
AF4852	25.0-30.0 FT (ug/L)
NO DETECTS	
AF4862	30.0-35.0 FT (ug/L)
NO DETECTS	
AF4872	35.0-40.0 FT (ug/L)
NO DETECTS	
AF4882	40.0-45.0 FT (ug/L)
NO DETECTS	
AF4892	45.0-50.0 FT (ug/L)
NO DETECTS	



AF-49	
AF4912	6.0-10.0 FT (ug/L)
1,2-Dichloroethene	1.4 J
2-Butanone	2.4 J
Carbon Disulfide	0.63 J
Trichloroethene	0.48 J
AF4922	11.0-15.0 FT (ug/L)
1,2-Dichloroethene	1.9 J
Benzene	0.21 J
Carbon Disulfide	0.98 J
Trichloroethene	0.78 J
AF4932	16.0-20.0 FT (ug/L)
Carbon Disulfide	0.66 J
AF4942	21.0-25.0 FT (ug/L)
NO DETECTS	
AF4952	26.0-30.0 FT (ug/L)
NO DETECTS	
AF4962	31.0-35.0 FT (ug/L)
NO DETECTS	
AF4972	36.0-40.0 FT (ug/L)
Chloromethane	0.38 J
AF4982	41.0-45.0 FT (ug/L)
Acetone	2 J
Tetrachloroethene	0.58 J
Toluene	3.9
AF4992	46.0-50.0 FT (ug/L)
Acetone	2.6 J
Tetrachloroethene	0.69 J
Toluene	3.7

AF-50	
AF5012	4.0-9.0 FT (ug/L)
1,2-Dichloroethene	4
Acetone	1.8 J
Benzene	9.5
Trichloroethene	6.5
AF5022	9.0-14.0 FT (ug/L)
1,2-Dichloroethene	4.4
Acetone	2 J
Benzene	0.86 J
Trichloroethene	13.4
AF5032	14.0-19.0 ft (ug/L)
1,2-Dichloroethene	0.21 J
AF5042	19.0-24.0 FT (ug/L)
2-Butanone	1.6 J
AF5052	24.0-29.0 FT (ug/L)
NO DETECTS	
AF5062	29.0-34.0 FT (ug/L)
NO DETECTS	
AF5072	34.0-39.0 FT (ug/L)
NO DETECTS	
AF5082	39.0-44.0 FT (ug/L)
NO DETECTS	
AF5092	44.0-49.0 FT (ug/L)
NO DETECTS	

LEGEND

■ CAP PART B VERTICAL PROFILE

NOTES
CONCENTRATIONS IN ug/L

SEE SITE LOCATION PLAN FOR LOCATION OF UTILITIES

N

0 40 80
SCALE: 1" = 80'

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USTs 25 & 26, BUILDING 1343
FACILITY ID #9-025008
VOC GROUNDWATER QUALITY MAP FOR THE VERTICAL PROFILE BORINGS (DEC 2000)

DRAWN BY:	REV. NO./DATE:	CAD FILE:
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Figure 12b. VOC Groundwater Quality Map for the Vertical Profile Borings (December 2000) at the USTs 25 & 26 Site, Facility ID #9-025008

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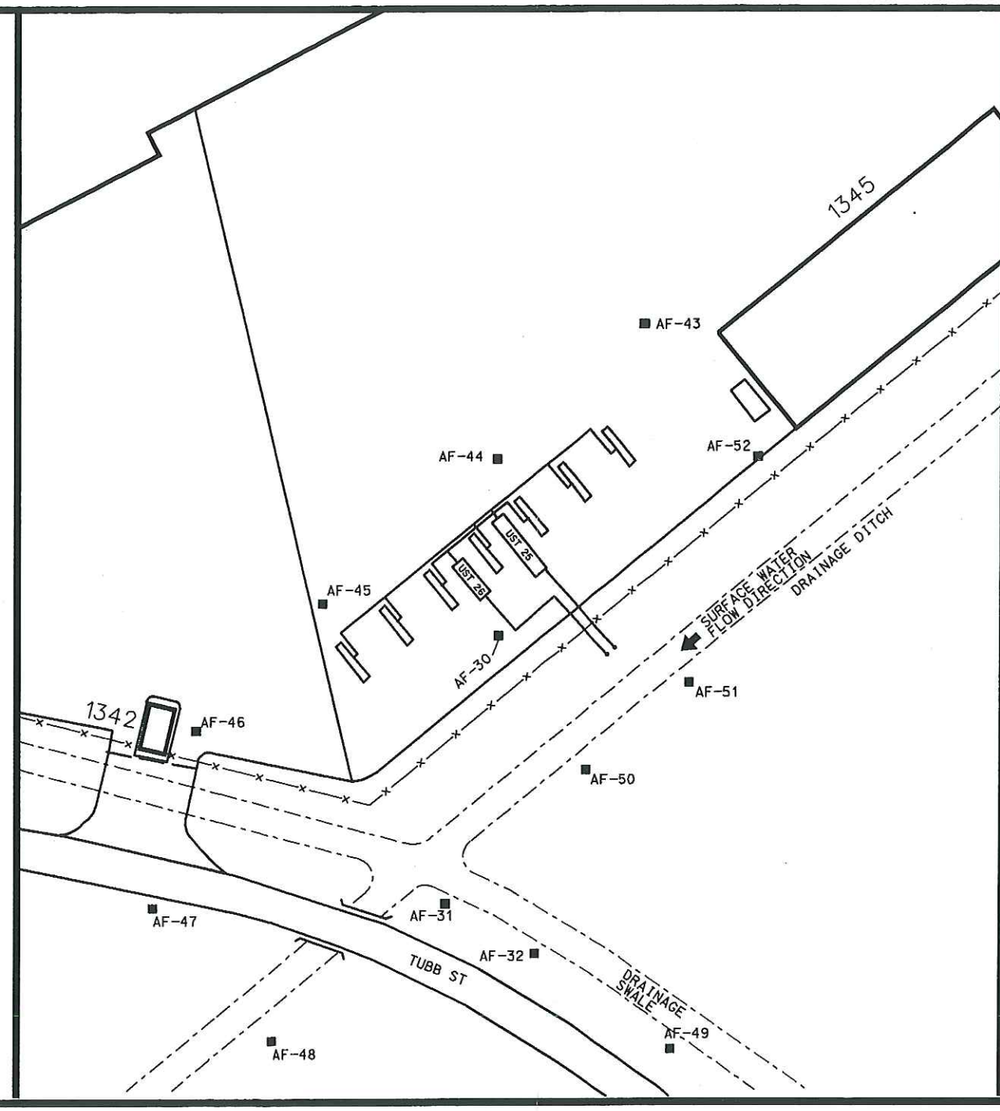
AF-51		
AF5112	5.0-10.0 FT	(ug/L)
1,2-Dichloroethene	3.4	
Benzene	1.3	
Toluene	0.27	J
Trichloroethene	25.6	
AF5122	10.0-15.0 FT	(ug/L)
1,1-Dichloroethene	0.64	J
1,2-Dichloroethene	5.1	
Benzene	0.86	J
Trichloroethene	37.3	
AF5132	15.0-20.0 FT	(ug/L)
1,1-Dichloroethane	10.3	
1,1-Dichloroethene	22.5	
1,2-Dichloroethene	65.4	
Trichloroethene	604	
Vinyl Chloride	0.60	J
AF5142	20.0-25.0 FT	(ug/L)
1,1-Dichloroethane	2.1	
1,1-Dichloroethene	1.9	
1,2-Dichloroethene	4	
Trichloroethene	10.9	
AF5152	25.0-30.0 FT	(ug/L)
1,1-Dichloroethane	0.76	J
1,1-Dichloroethene	2.3	
1,2-Dichloroethene	11.9	
Trichloroethene	90.3	
AF5162	30.0-35.0 FT	(ug/L)
1,2-Dichloroethene	0.51	J
Trichloroethene	0.38	J
AF5172	35.0-40.0 FT	(ug/L)
Ethylbenzene	0.16	J
Xylenes, Total	0.45	J
AF5182	40.0-45.0 FT	(ug/L)
1,2-Dichloroethene	0.97	J
Trichloroethene	2.4	
AF5192	45.0-50.0 FT	(ug/L)
NO DETECTS		



AF-52		
AF5212	4.0-9.0 FT	(ug/L)
2-Butanone	1.2	J
Acetone	8.5	
Benzene	0.18	J
AF5222	9.0-14.0 FT	(ug/L)
Acetone	1.8	J
Trichloroethene	0.33	J
AF5232	14.0-19.0 FT	(ug/L)
1,2-Dichloroethene	34.5	J
Trichloroethene	1780	
AF5242	19.0-24.0 FT	(ug/L)
1,1-Dichloroethene	16.3	J
1,2-Dichloroethene	378	
Trichloroethene	7730	
AF5252	24.0-29.0 FT	(ug/L)
1,1-Dichloroethene	15	J
1,2-Dichloroethene	174	
Trichloroethene	2120	
AF5262	29.0-34.0 FT	(ug/L)
1,1-Dichloroethene	0.61	J
1,2-Dichloroethene	6	
Trichloroethene	34.1	
AF5272	34.0-39.0 FT	(ug/L)
1,2-Dichloroethene	65.2	
Trichloroethene	631	
AF5282	39.0-44.0 FT	(ug/L)
1,2-Dichloroethene	42.7	
Trichloroethene	516	
AF5292	44.0-49.0 FT	(ug/L)
1,2-Dichloroethene	0.31	J
Trichloroethene	2.8	

LEGEND

■ CAP PART B VERTICAL PROFILE

NOTES
CONCENTRATIONS IN ug/L

SEE SITE LOCATION PLAN FOR LOCATION OF UTILITIES

N

0 40 80
SCALE: 1" = 80'

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USTs 25 & 26, BUILDING 1343
FACILITY ID #9-025008
VOC GROUNDWATER QUALITY MAP FOR THE VERTICAL PROFILE BORINGS (DEC 2000)

DRAWN BY:	REV. NO./DATE:	CAD FILE:
J. LAMB	0/05/14/01	97028/DGNS/M12C008KB.DGN

Figure 12c. VOC Groundwater Quality Map for the Vertical Profile Borings at the USTs 25 & 26 Site, Facility ID #9-025008

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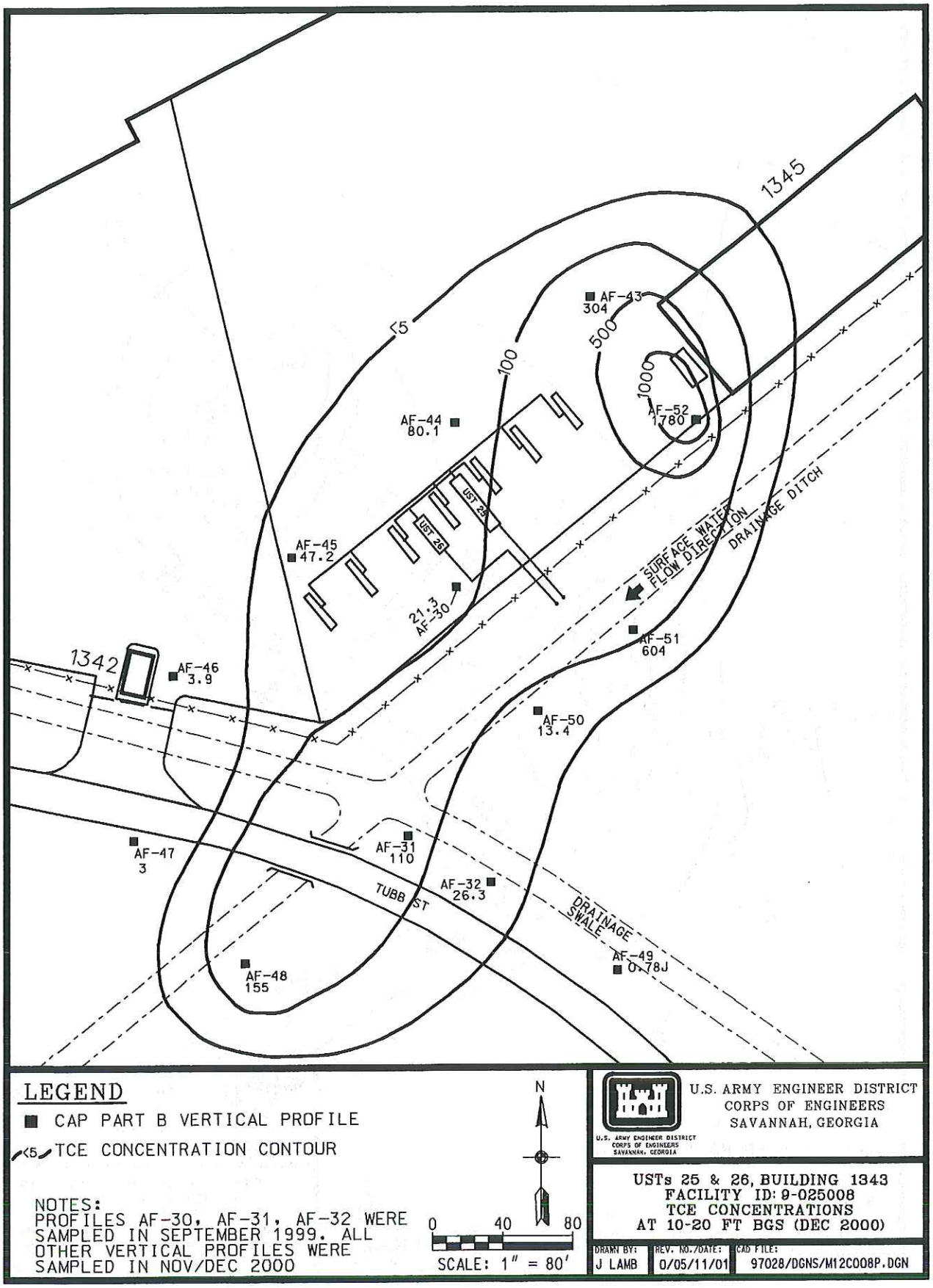

Figure 13. TCE Concentrations in Groundwater at 10 – 20 feet bgs at the USTs 25 & 26 Site, Facility ID #9-025008

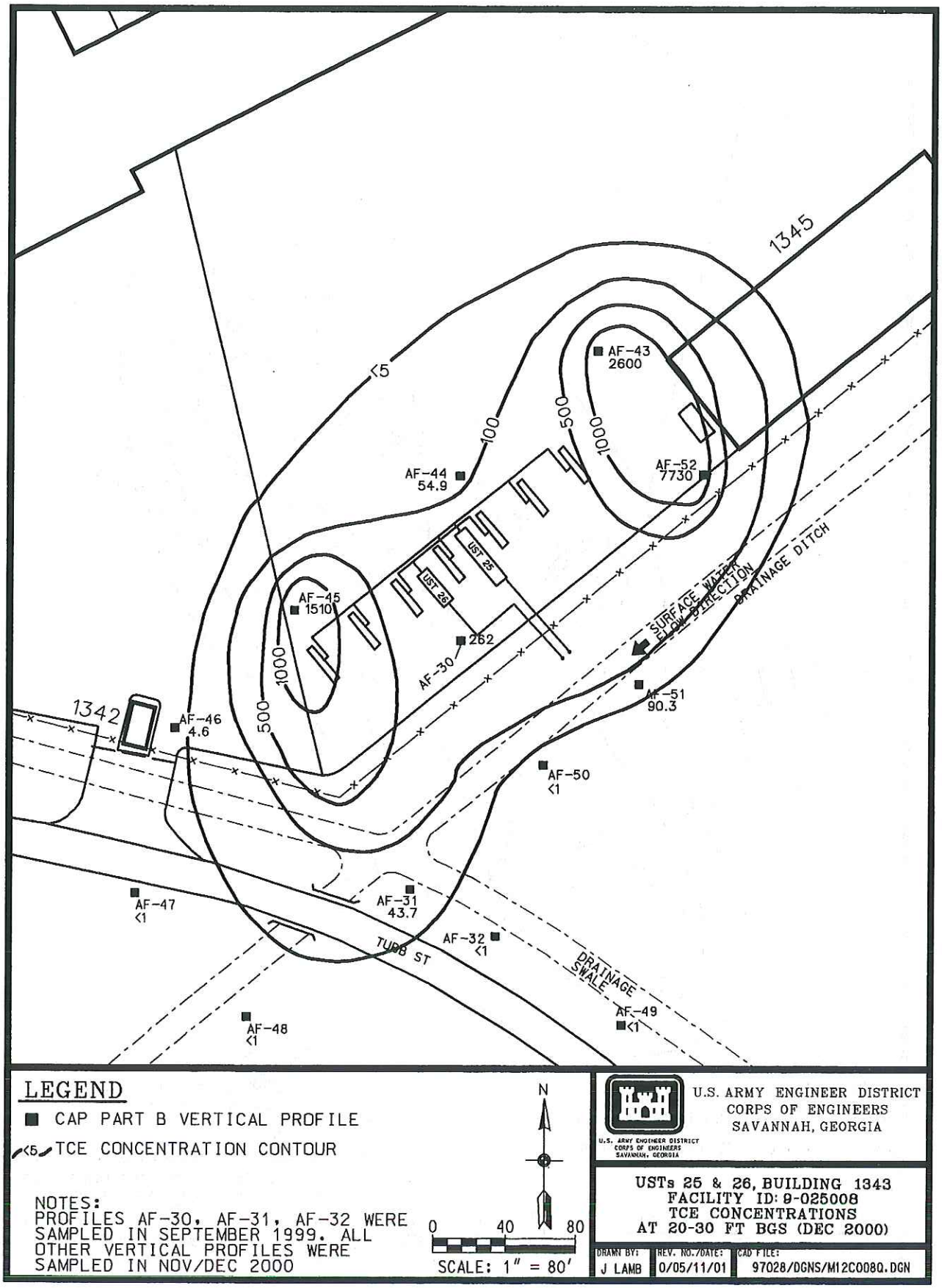

Figure 14. TCE Concentrations in Groundwater at 20 – 30 feet bgs at the USTs 25 & 26 Site, Facility ID #9-025008

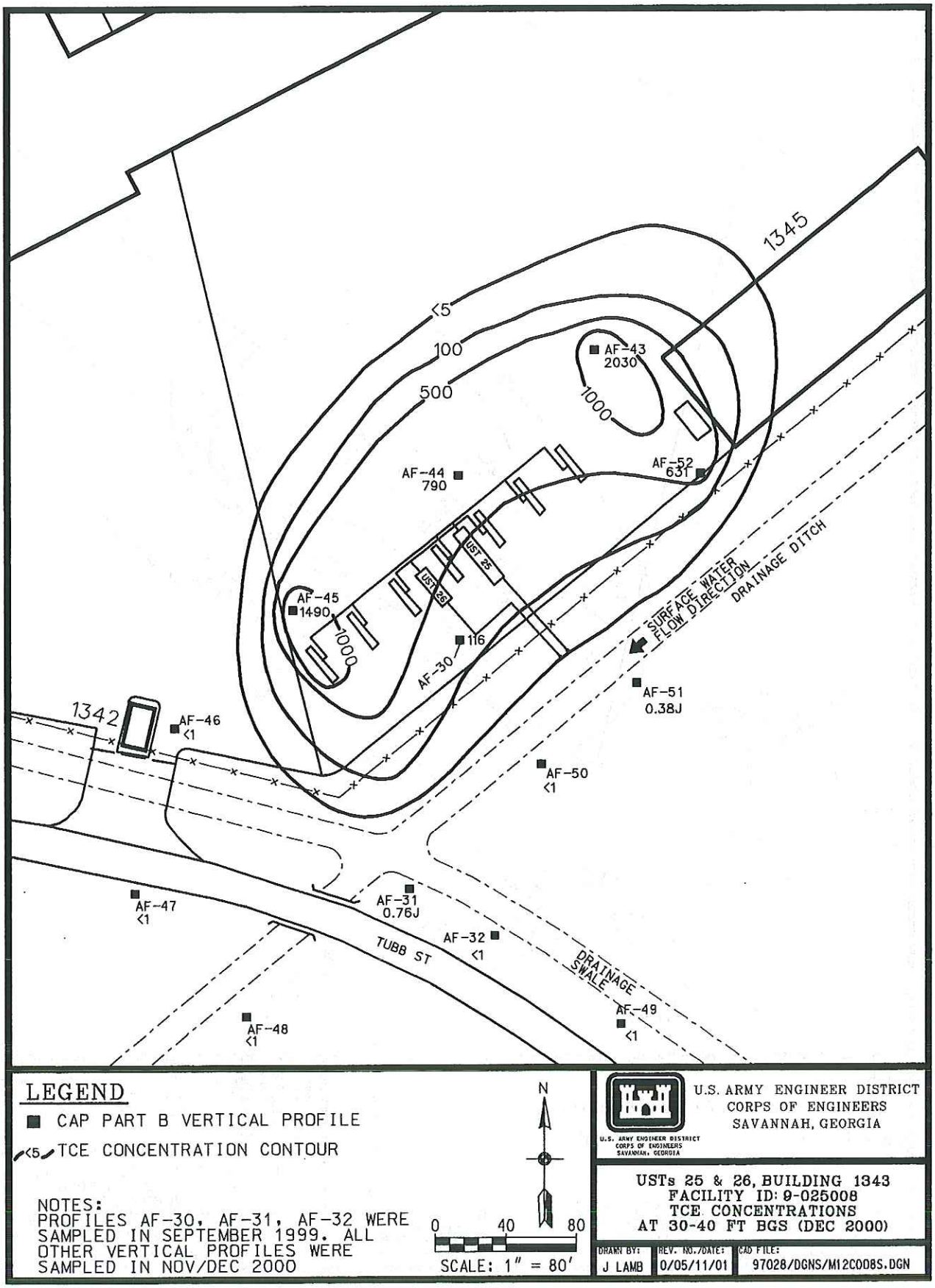

Figure 15. TCE Concentrations in Groundwater at 30 – 40 feet bgs at the USTs 25 & 26 Site, Facility ID #9-025008

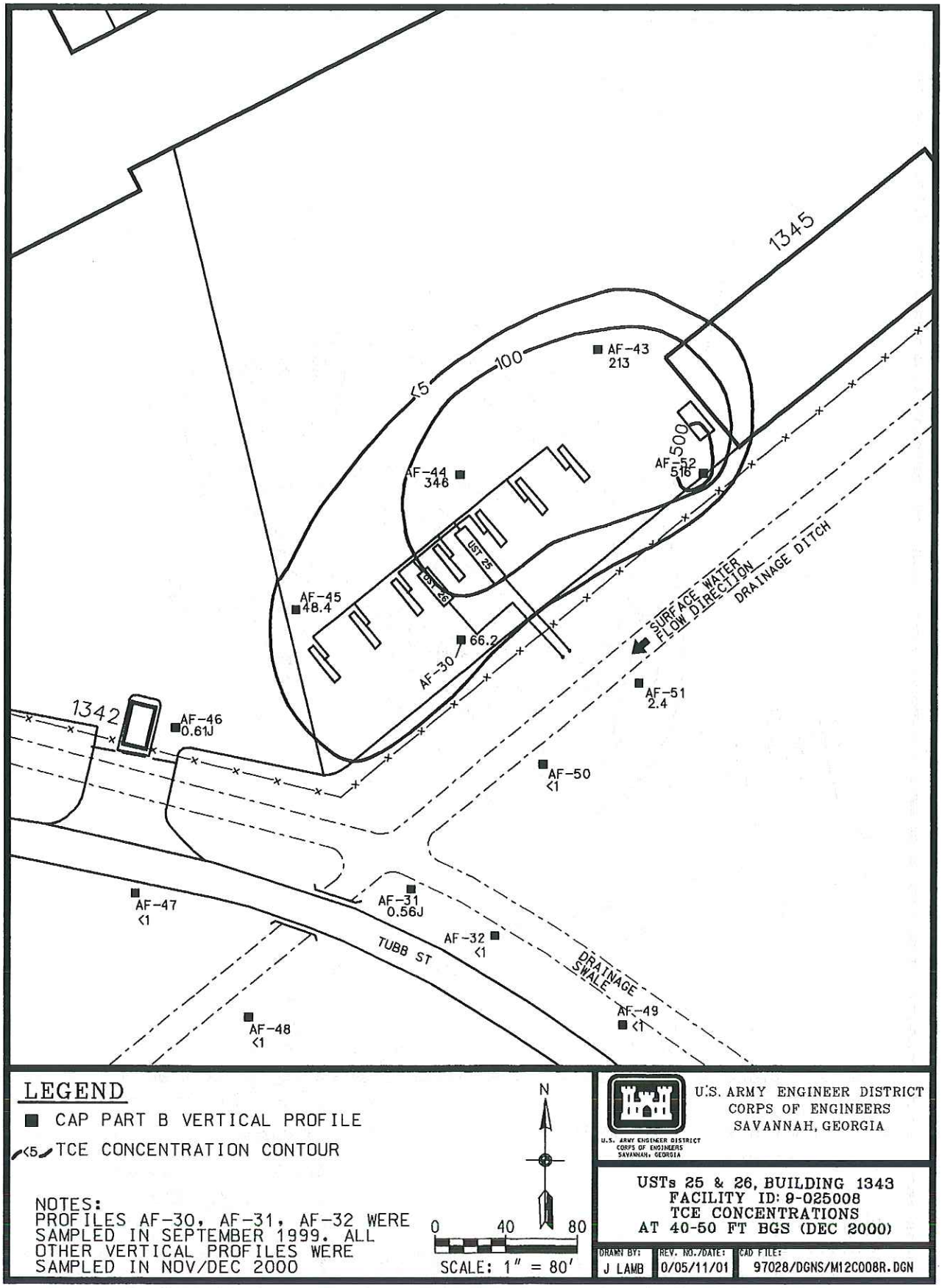

Figure 16. TCE Concentrations in Groundwater at 40 – 50 feet bgs at the USTs 25 & 26 Site, Facility ID #9-025008

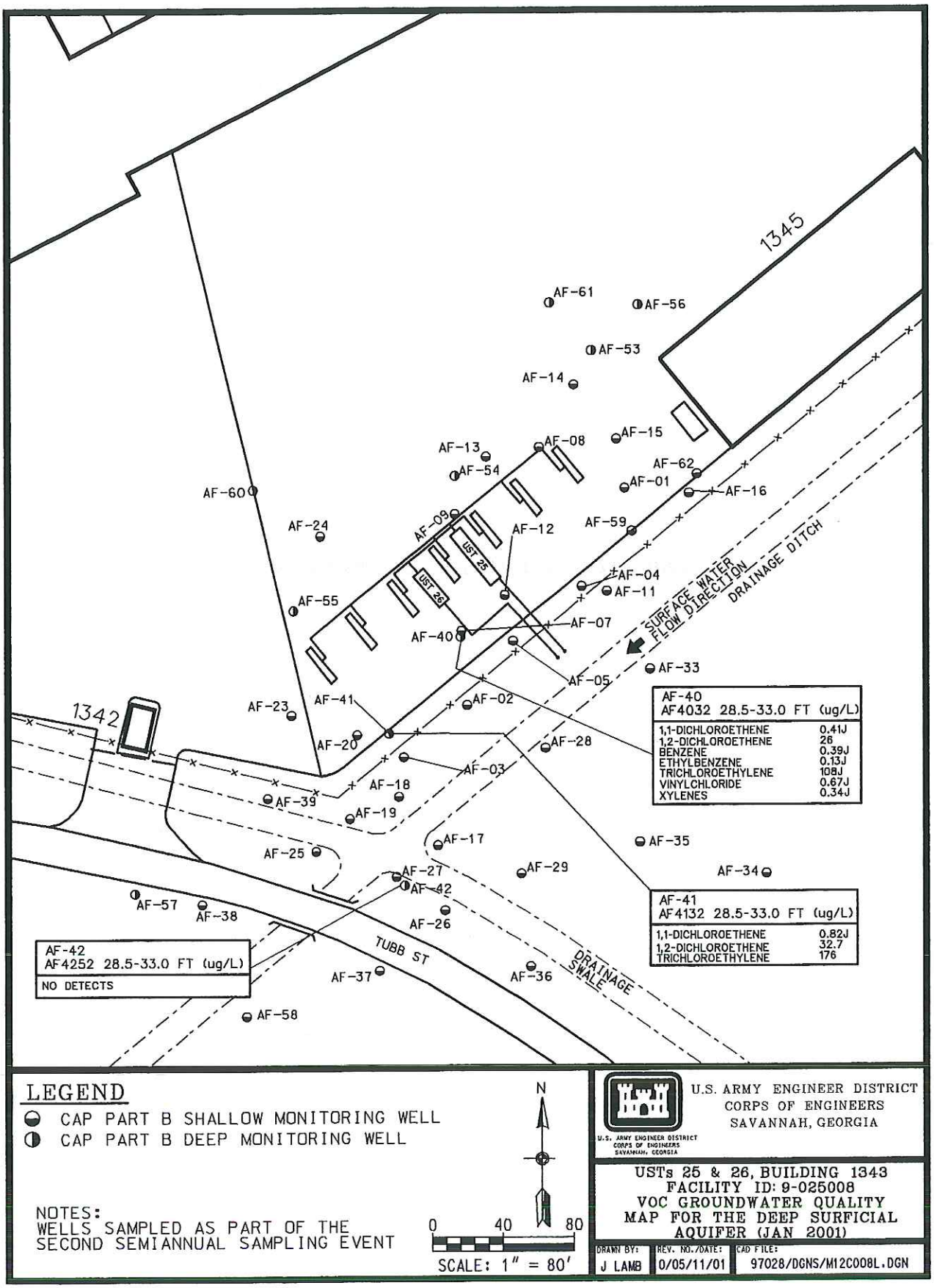

Figure 17. VOC Groundwater Quality Map for the Deep Surficial Aquifer (January 2001) at the USTs 25 & 26 Site, Facility ID #9-025008

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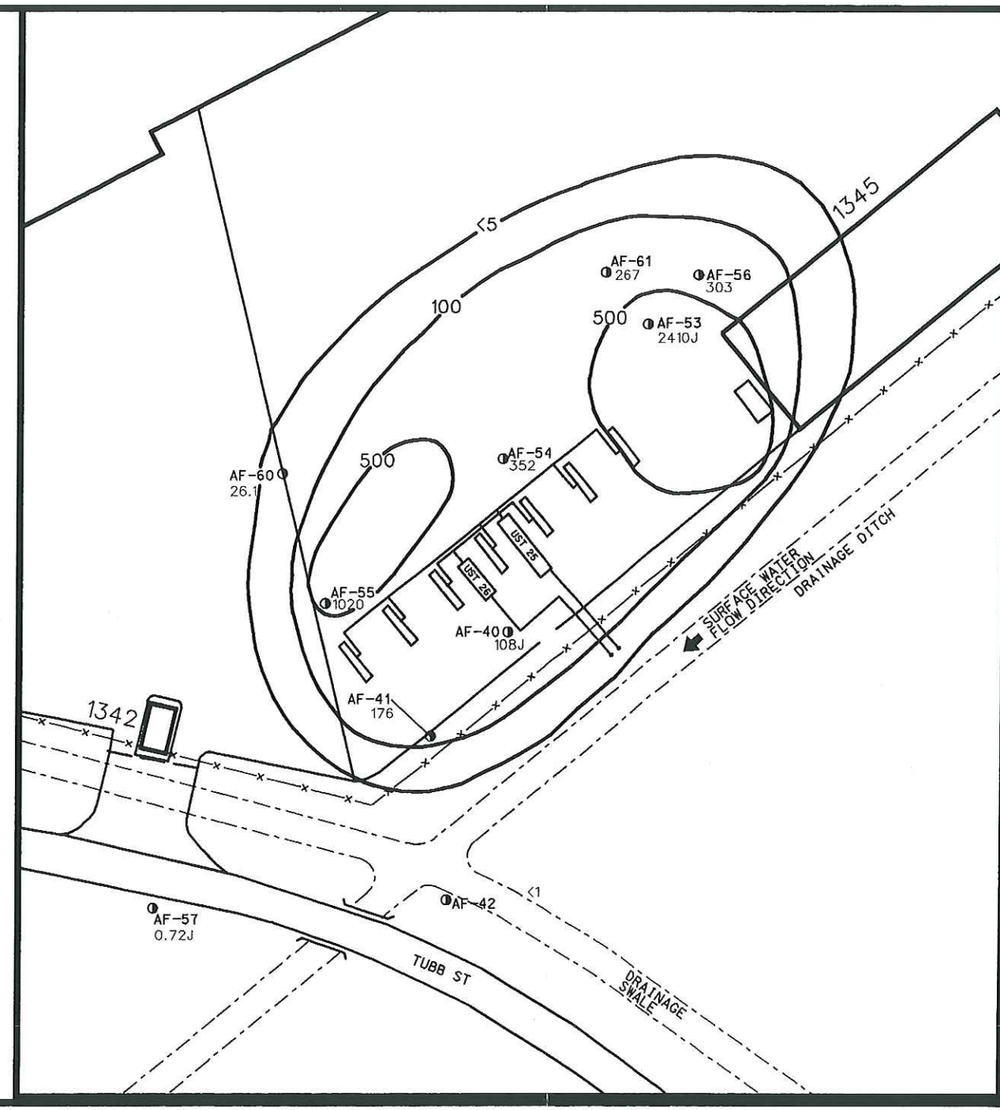
AF-53	
AF5312 20.0-30.0 FT	(ug/L)
1,1-Dichloroethene	4.6
1,2-Dichloroethene	88.8
Acetone	97.3
Benzene	0.22 J
Toluene	0.27 J
Trichloroethene	2410 J

AF-54	
AF5412 32.4-42.4 FT	(ug/L)
1,2-Dichloroethene	53.2
Acetone	613 J
Chloroform	2.5
Trichloroethene	352

AF-55	
AF5512 24.0-34.0 FT	(ug/L)
1,2-Dichloroethene	154
Acetone	3100 J
Benzene	0.35 J
Chloroform	0.21 J
Trichloroethene	1020

AF-56	
AF5612 19.9-29.9 FT	(ug/L)
1,2-Dichloroethene	7.9 J
Trichloroethene	303



AF-57	
AF5712 57.8-62.8 FT	(ug/L)
Acetone	220
Chloroform	4.7
Trichloroethene	0.72 J

AF-60	
AF6012 20.0-30.0 FT	(ug/L)
1,2-Dichloroethene	3.4
Benzene	0.26 J
Trichloroethene	26.1

AF-61	
AF6112 20.0-30.0 FT	(ug/L)
1,2-Dichloroethene	1.3 J
2-Butanone	2.3 J
Acetone	356
Chloroform	0.39 J
Trichloroethene	267

LEGEND

◑ CAP PART B DEEP MONITORING WELL

<5 TCE CONCENTRATION CONTOUR

NOTES:
WELLS AF-40, AF-41, AF-42 WERE SAMPLED IN JANUARY 2001. ALL OTHER WELLS WERE SAMPLED IN MARCH 2001.

NOTES
CONCENTRATIONS IN ug/L

SEE SITE LOCATION PLAN FOR LOCATION OF UTILITIES

N

0 40 80
SCALE: 1" = 80'

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

USTs 25 & 26, BUILDING 1343
FACILITY ID #9-025008
VOC GROUNDWATER QUALITY MAP FOR
THE DEEP SURFICIAL AQUIFER
(MARCH 2001)

DRAWN BY:	REV. NO./DATE:	CAD FILE:
J. LAMB	0/05/14/01	97028/DGNS/M12C008N.DGN

Figure 18. VOC Groundwater Quality Map for the Deep Surficial Aquifer (March 2001) at the USTs 25 & 26 Site, Facility ID #9-025008

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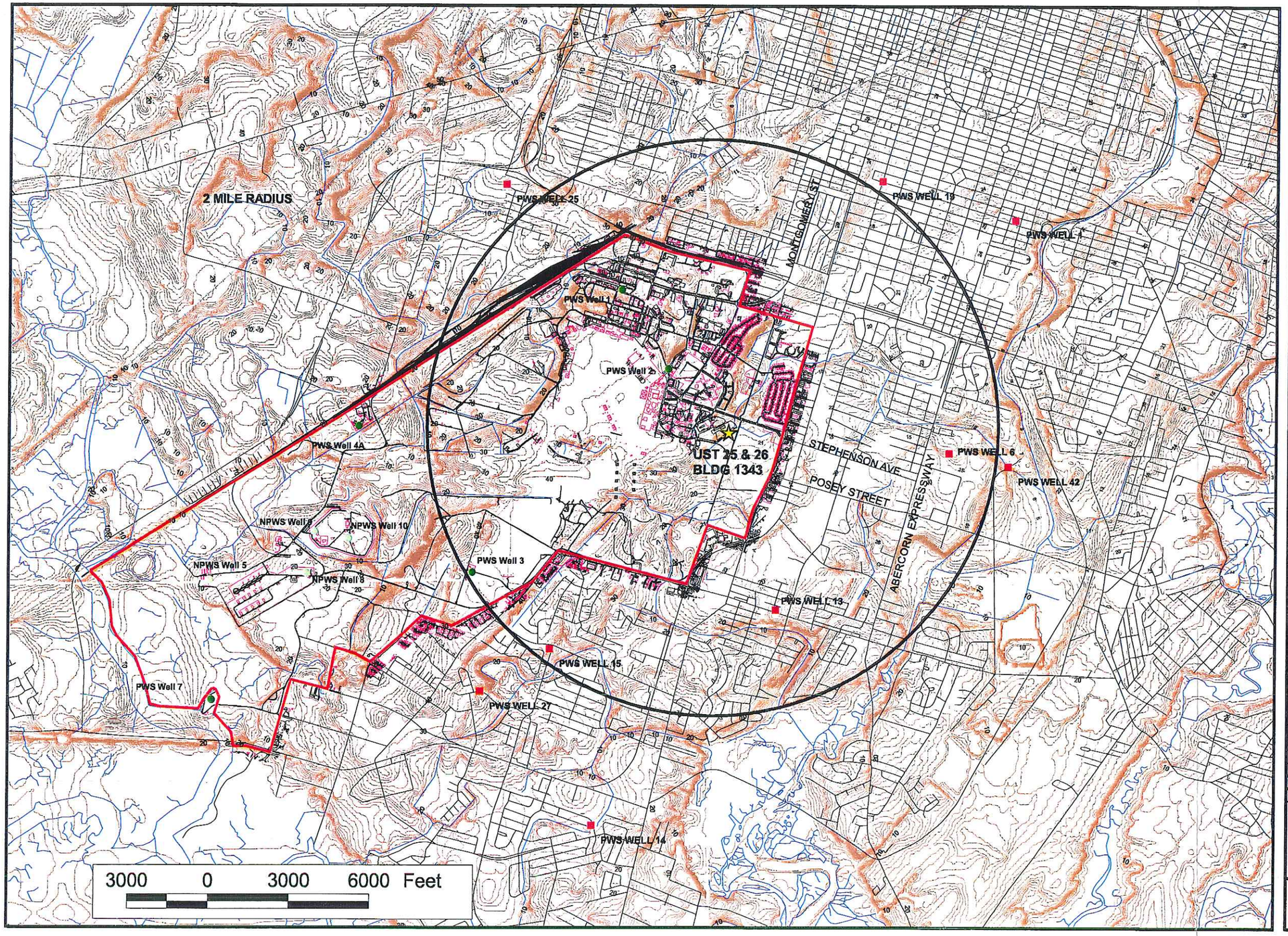

Legend:

- Hunter Army Airfield Boundary
- Surface Water (streams/rivers/drains)
- Railroad
- Roads (primary)
- Buildings and Planimetric Features
- Ground Contour (1 FT Intervals)
- HAAF Non-Public Water Supply Well
- HAAF Public Water Supply Well
- City of Savannah Public Water Supply Well

NOTE:
Contours were created from Digital Elevation Models translated from http://mapping.usgs.gov/, which were obtained from the following U.S.G.S. 7.5 minuteTopographic Quad sheets: Borroughs, Isle of Hope, Savannah, and Garden City. Roads, surface water, and railroad were translated from http://www.gis.state.ga.us/ . Hunter Army Airfield BaseMap received as Microstation files from Fort Stewart.

N

GA State Plane NAD83 (feet)

SAIC
Science Applications International Corporation

UST 25 & 26, BLDG 1343
FACILITY ID: 9-025008

REVISION	DRAWN BY:	CHKD BY:	DATE:
0	K. Cutshaw	S. Stoller	01/07/00

FILE REFERENCES

051rds_polyline
051hyd_polyline
051rr
hunterarea
burroughsctrf
isleofhopectrf
savannahctrf
gardencityctrf
trveh.dgn
bggen.dgn

SHT 1 of 1
DRAWING #

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ARCVIEW PROJECT NAME

Figure 19. Locations of Public and Non-Public Supply Wells at Hunter Army Airfield and Surrounding Area

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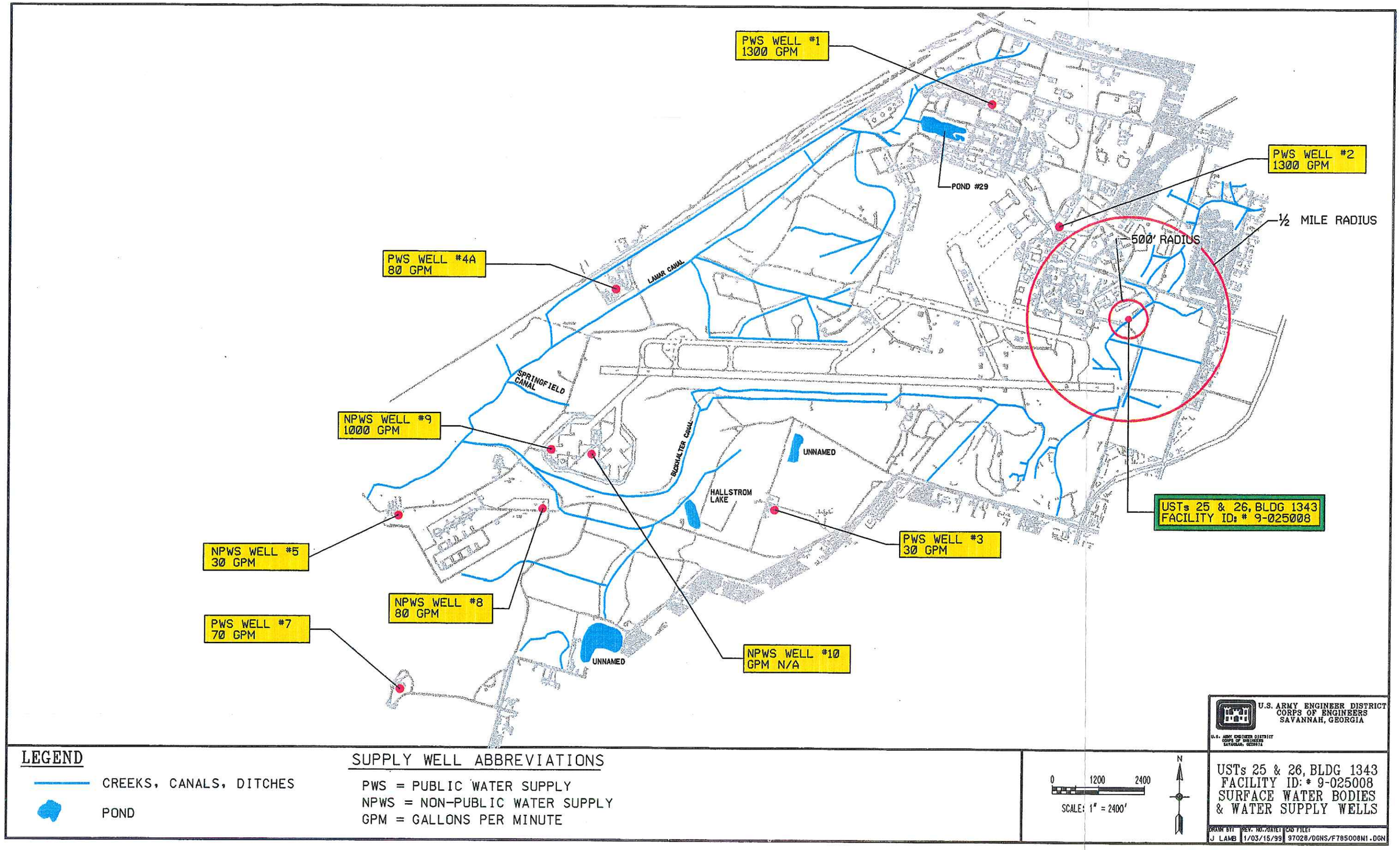

Figure 20. Locations of Surface Water Bodies and Water Supply Wells at Hunter Army Airfield

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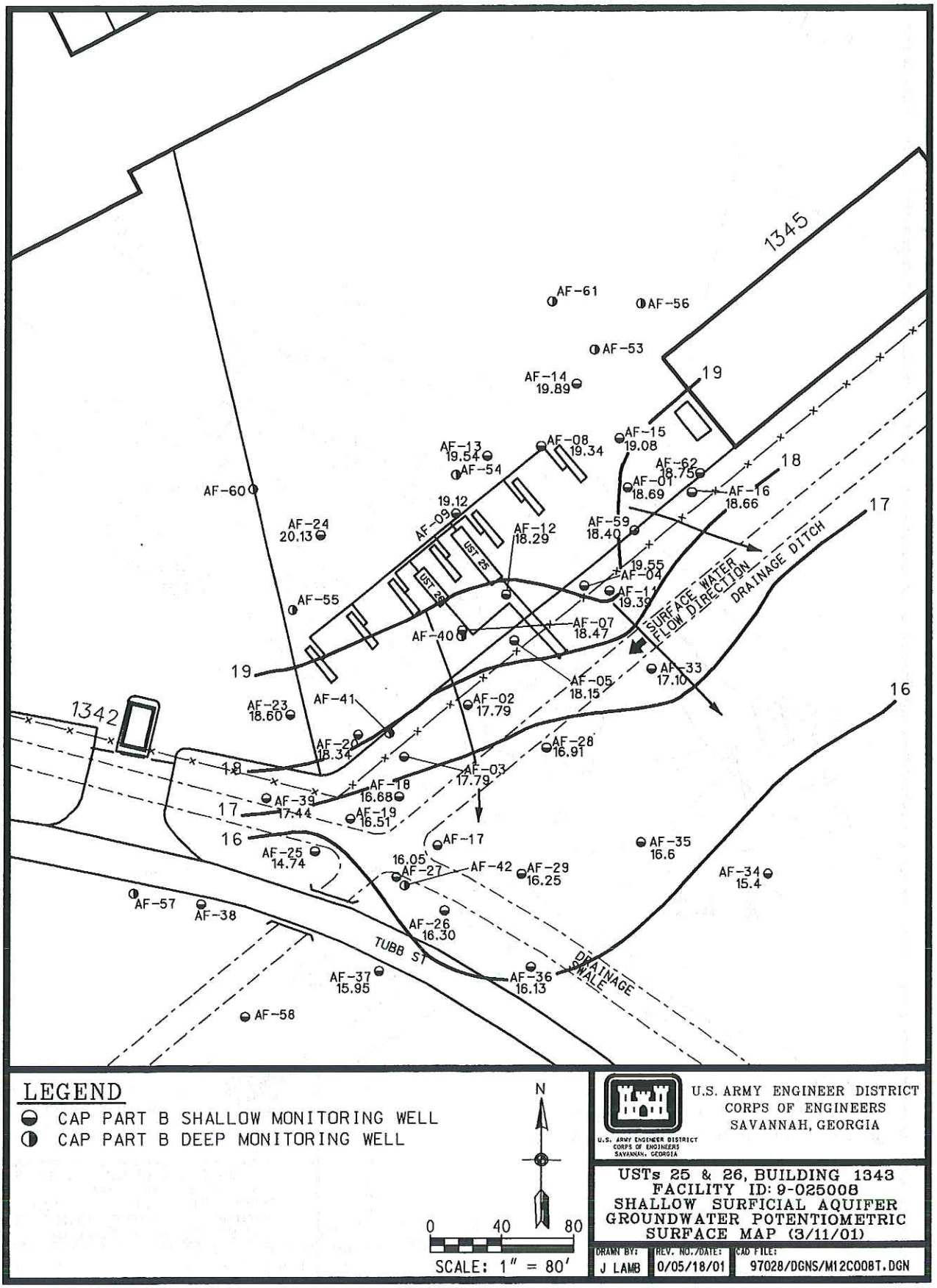

Figure 21. Shallow Surficial Aquifer Groundwater Potentiometric Surface Map and Equipotential Flow Net (March 2001) for the USTs 25 & 26 Site, Facility ID #9-025008

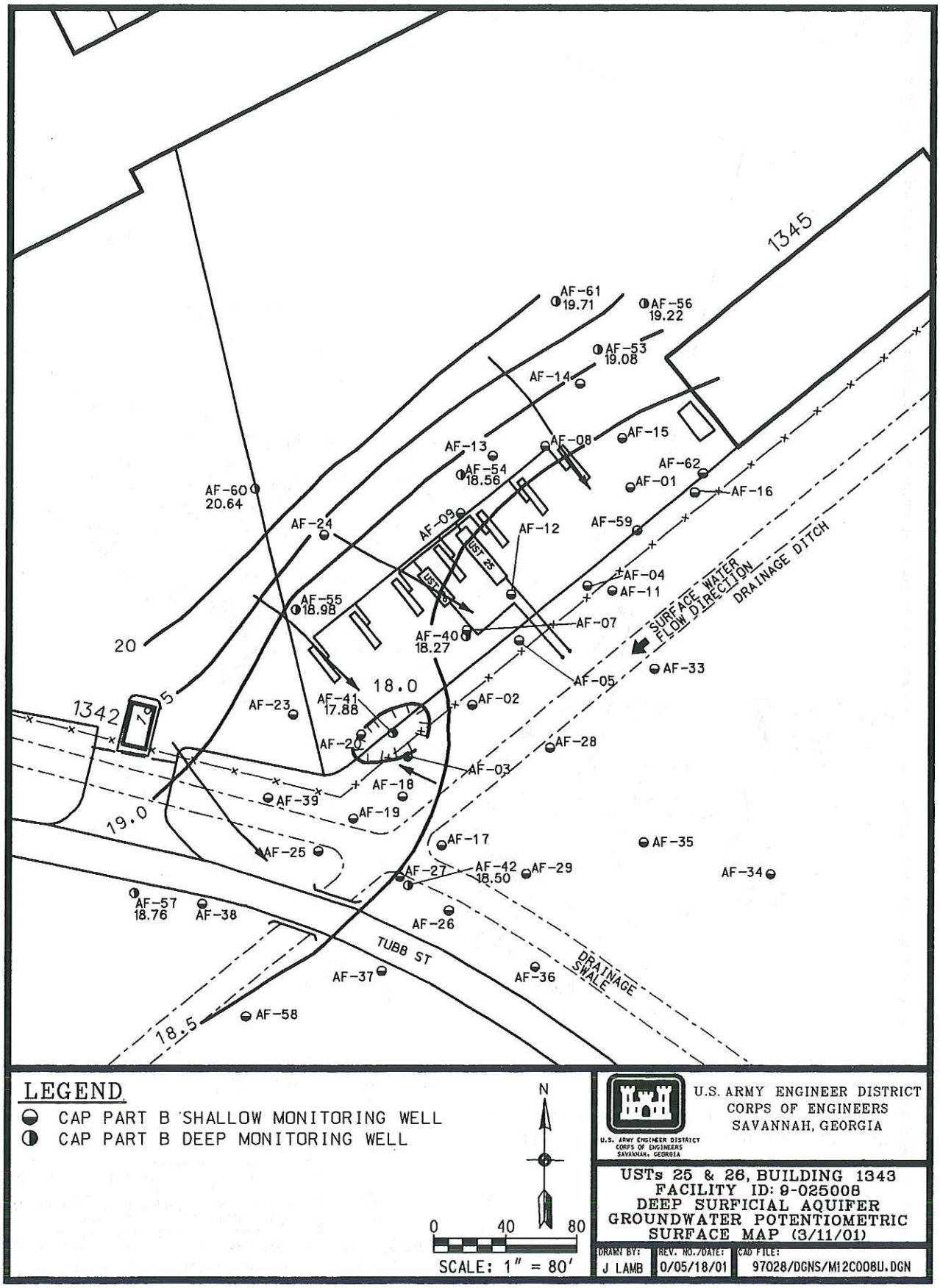

Figure 22. Deep Surficial Aquifer Groundwater Potentiometric Surface Map and Equipotential Flow Net (March 2001) for the USTs 25 & 26 Site, Facility ID #9-025008

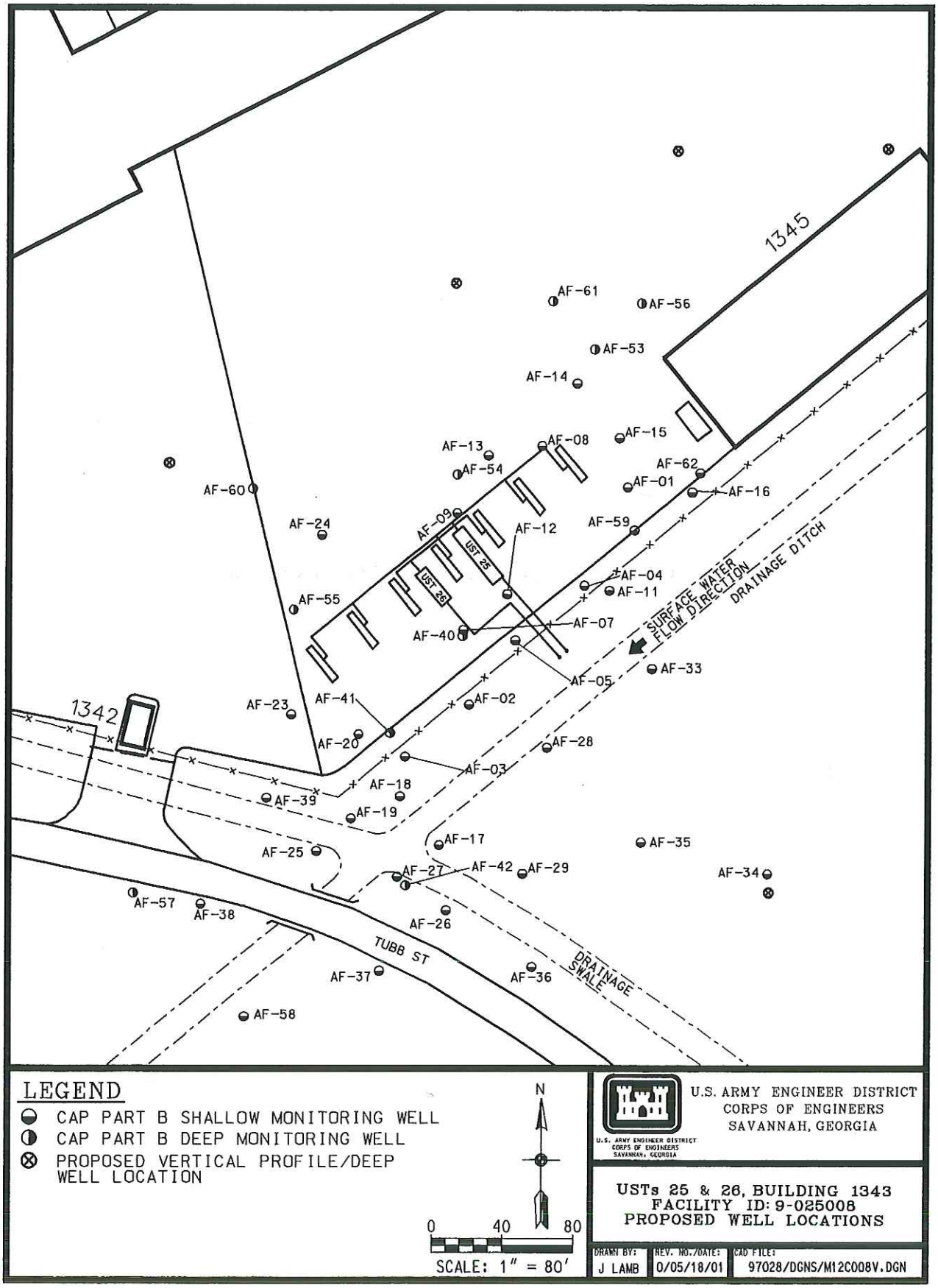

Figure 23. Proposed Vertical Profile and Well Locations at the USTs 25 & 26 Site

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APPENDIX II

REPORT TABLES

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Table 1. Groundwater Analytical Results

Boring ID	Sample ID	Screened Interval (feet BGS)	Sample Date	Detected Volatile Organic Compounds (µg/L)																
				1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene	1,2-Dichloropropane	2-Butanone	2-Hexanone	Acetone	Benzene	Carbon Disulfide	Ethylbenzene	Methylene Chloride	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride	Xylenes, Total
CAP–Part B Groundwater Sampling – September 1999																				
AF-01	AF0122	2.5 – 12.5	09/26/99												1.2 J					
AF-02	AF0222	2.0 – 12.0	09/26/99								11.1 J	**8.4** =			0.54 J		0.65 J			
AF-03	AF0322	2.0 – 12.0	09/26/99									2.2 =		1.6 J						0.96 J
AF-04	AF0422	2.0 – 12.0	09/26/99																	
AF-05	AF0522	2.0 – 12.0	09/26/99									**11.8** =		9.5 =			3 =			46.5 =
AF-07	AF0722	2.5 – 12.5	09/26/99							40.2 =		**9130**		493 =			24.8 =			246 =
AF-08	AF0822	2.5 – 12.5	09/26/99										1.1 J							
AF-09	AF0922	2.0 – 12.0	09/26/99				3.9 =					**11.8** =		27.7 =						1.4 J
AF-11	AF1122	1.0 – 11.0	09/26/99																	
AF-12	AF1222	2.5 – 12.5	09/26/99									**23.4** =		54.8 =	2 J					8.5 J
AF-13	AF1322	2.5 – 12.5	09/26/99				1.5 J													
AF-14	AF1422	1.4 – 11.4	09/26/99										2 J							
AF-15	AF1522	1.5 – 11.5	09/26/99																	
AF-16	AF1622	1.5 – 11.5	09/26/99																	
AF-17	AF1722	2.5 – 12.5	09/26/99				19.9 =					**14** =						**112** =		
AF-18	AF1822	1.5 – 11.5	09/26/99				13.2 =					**10.3** =						1.6 J		
AF-19	AF1922	1.5 – 11.5	09/26/99				8.3 =					3.5 =						2.6 =		
AF-20	AF2022	3.0 – 13.0	09/26/99				1.7 J					2.1 =								
Maximum Contaminant Level				NRC	7	5	NRC	5	NRC	NRC	NRC	5	NRC	700	NRC	5	1,000	5	2	10,000
In-Stream Water Quality Standard				NRC	3.2	98.6	NRC	NRC	NRC	NRC	NRC	71.28	NRC	28,718	NRC	8.85	200,000	80.7	525	NRC

See page II-14 for footnotes.

Table 1. Groundwater Analytical Results (continued)

Boring ID	Sample ID	Screened Interval (feet BGS)	Sample Date	Detected Volatile Organic Compounds (µg/L)																
				1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene	1,2-Dichloropropane	2-Butanone	2-Hexanone	Acetone	Benzene	Carbon Disulfide	Ethylbenzene	Methylene Chloride	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride	Xylenes, Total
AF-23	AF2322	3.0 – 13.0	09/26/99				5.3 =		5.9 J			1.1 J						1.6 J		
AF-24	AF2422	2.0 – 12.0	09/26/99																	
AF-25	AF25222	0.5 – 10.5	09/26/99		0.66 J		40.2 =					4.8 =		0.59 J				243 =	0.6 J	
AF-26	AF2622	2.0 – 12.0	09/26/99				27.9 =					**16.6 =**			1.5 J			116 =		
AF-27	AF2722	1.0 – 11.0	09/26/99				49.3 =					**5.1 J**			12.8 J			596 =		
AF-28	AF2822	2.0 – 12.0	09/26/99		0.67 J		41.9 =					3.9 =						**60.9 =**		
AF-29	AF2922	2.0 – 12.0	09/26/99				9.5 =					**53.6 =**			1.2 J			**11 =**	1.8 J	
AF-30	AF3012	11.0 – 15.0	09/26/99				3.3 =			14.2 =		7,670 J		500 J	2.2 =		19 =	1.7 J		72.7 =
AF-30	AF3022	16.0 – 20.0	09/26/99				24 =			15.5 =		2,290 =		168 =			5.5 =	**21.3 =**	0.88 J	9.6 =
AF-30	AF3032	21.0 – 25.0	09/26/99		0.74 J		33 =					**37.9 =**		2.7 =	0.95 J		0.55 J	**75.9 =**		1.8 J
AF-30	AF3042	26.0 – 30.0	09/26/99		2.2 =		90.3 =					**16.2 =**	1.1 J	1.3 J				262 =		
AF-30	AF3052	31.0 – 35.0	09/26/99		0.62 J		24.3 =					**11 =**		0.53 J				116 =		0.51 J
AF-30	AF3062	36.0 – 40.0	09/26/99				11.3 =					**6.4 =**		0.67 J				**66.5 =**		0.67 J
AF-30	AF3072	41.0 – 45.0	09/26/99				8.7 =					**5.5 =**		5.5 =			0.78 J	**66.2 =**		9.3 =
AF-30	AF3082	46.0 – 50.0	09/26/99									**6.8 =**	1.3 J	1.8 J			0.5 J	0.91 J		2.9 J
Maximum Contaminant Level				NRC	7	5	NRC	5	NRC	NRC	NRC	5	NRC	700	NRC	5	1,000	5	2	10,000
In-Stream Water Quality Standard				NRC	3.2	98.6	NRC	NRC	NRC	NRC	NRC	71.28	NRC	28,718	NRC	8.85	200,000	80.7	525	NRC

See page II-14 for footnotes.

Table 1. Groundwater Analytical Results (continued)

Boring ID	Sample ID	Screened Interval (feet BGS)	Sample Date	Detected Volatile Organic Compounds (µg/L)																
				1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene	1,2-Dichloropropane	2-Butanone	2-Hexanone	Acetone	Benzene	Carbon Disulfide	Ethylbenzene	Methylene Chloride	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride	Xylenes, Total
AF-31	AF3112	6.0 – 10.0	09/25/99				17.9 =					**11.1 =**						**168 =**		
AF-31	AF3122	11.0 – 15.0	09/25/99				10.7 =					0.99 J						**110 =**		
AF-31	AF3132	16.0 – 20.0	09/25/99															2.6 =		
AF-31	AF3142	21.0 – 25.0	09/25/99				16.4 =								3 =			**43.7 =**		
AF-31	AF3152	26.0 – 30.0	09/25/99															1.3 J		
AF-31	AF3162	31.0 – 35.0	09/25/99						1.9 J									1.0 J		
AF-31	AF3172	36.0 – 40.0	09/25/99						1.3 J									0.76 J		
AF-31	AF3182	41.0 – 45.0	09/25/99																	
AF-31	AF3192	46.0 – 50.0	09/25/99															0.56 J		
AF-32	AF3212	11.0 – 15.0	09/25/99				6.4 =					2.1 =						**26.3 =**		
AF-32	AF3222	16.0 – 20.0	09/25/99						0.93 J								0.52 J			
AF-32	AF3232	21.0 – 25.0	09/25/99												2.9 =					
AF-32	AF3242	26.0 – 30.0	09/25/99																	
AF-32	AF3252	31.0 – 35.0	09/25/99																	
AF-32	AF3262	36.0 – 40.0	09/25/99										0.56 J							
AF-32	AF3272	41.0 – 45.0	09/25/99																	
AF-32	AF3282	46.0 – 50.0	09/25/99																	
Maximum Contaminant Level				NRC	7	5	NRC	5	NRC	NRC	NRC	5	NRC	700	NRC	5	1,000	5	2	10,000
In-Stream Water Quality Standard				NRC	3.2	98.6	NRC	NRC	NRC	NRC	NRC	71.28	NRC	28,718	NRC	8.85	200,000	80.7	525	NRC

See page II-14 for footnotes.

Table 1. Groundwater Analytical Results (continued)

Boring ID	Sample ID	Screened Interval (feet BGS)	Sample Date	Detected Volatile Organic Compounds (µg/L)																
				1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene	1,2-Dichloropropane	2-Butanone	2-Hexanone	Acetone	Benzene	Carbon Disulfide	Ethylbenzene	Methylene Chloride	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride	Xylenes, Total
AF-33	AF3312	2.3 – 11.8	09/25/99				6.4 =							2.1 =				45.8 =		
AF-34	AF3412	1.4 – 10.9	09/25/99	3.4 =	4.8 =		10.8 =								3.6 =			95.5 =		
AF-35	AF3512	1.2 – 10.7	09/25/99				8.8 =					2.1 =						23 =		
AF-36	AF3612	1.4 – 10.9	09/25/99				17.3 =					2.4 =			2.6 =			38 =		
AF-37	AF3712	4.4 – 14.3	09/25/99		0.6 J		26.4 =					4.2 =		0.63 J			0.69 J	346 =		3.4 J
AF-38	AF3812	4.1 – 14.1	09/25/99				3.8 =					2 =		1.6 J			2 =	6.8 =		9.4 =
AF-39	AF3912	4.4 – 14.4	09/25/99				4.3 =					0.92 J								
Additional Deep Well Installation & Sampling – February 2000																				
AF-40	AF4012	28.5 – 33.0	02/02/00				15.4 =					21.3 =		3.2 =			0.60 J	53.3 =		8.8 =
AF-41	AF4112	28.5 – 33.0	02/02/00		0.94 J		35.6 =					0.20 J						158 =		
AF-42	AF4212	28.5 – 33.0	02/02/00														0.30 J			
First Semiannual Sampling Event – June 2000																				
AF-40	AF4032	28.5 – 33.0	06/23/00		1.6 =		63.3 =					1.3 =		0.57 J				353 =		
AF-41	AF4132	28.5 – 33.0	06/23/00		3.0 =		110 =											636 =		
AF-42	AF4232	28.5 – 33.0	06/23/00														0.81 J			
Maximum Contaminant Level				NRC	7	5	NRC	5	NRC	NRC	NRC	5	NRC	700	NRC	5	1,000	5	2	10,000
In-Stream Water Quality Standard				NRC	3.2	98.6	NRC	NRC	NRC	NRC	NRC	71.28	NRC	28,718	NRC	8.85	200,000	80.7	525	NRC

See page II-14 for footnotes.

Table 1. Groundwater Analytical Results (continued)

Boring ID	Sample ID	Screened Interval (feet BGS)	Sample Date	Detected Volatile Organic Compounds (µg/L)																
				1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene	1,2-Dichloropropane	2-Butanone	2-Hexanone	Acetone	Benzene	Carbon Disulfide	Chloromethane	Ethylbenzene	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride	Xylenes, Total
Supplemental Groundwater Sampling to Support Geophysical Survey – September 2000																				
AF-01	AF0142	2.5 – 12.5	09/28/00								6.7 =									
AF-02	AF0242	2.0 – 12.0	09/28/00								8.0 =	0.82 J								
AF-03	AF0342	2.0 – 12.0	09/28/00								18 =									
AF-04	AF0442	2.0 – 12.0	09/28/00								9.1 =									
AF-05	AF0542	2.0 – 12.0	09/28/00								11.7 =	4.7 =			4.7 =		0.82 J			20.9 =
AF-07	AF0742	2.5 – 12.5	09/28/00									**9,920 =**			645 =		39.2 =			300 U
AF-08	AF0842	2.5 – 12.5	09/28/00								6.8 =	0.20 J								
AF-09	AF0942	2.0 – 12.0	09/28/00				3.4 =				7.4 =	**7 =**			16.7 =		0.36 J			
AF-11	AF1142	1.0 – 11.0	09/28/00																	
AF-12	AF1242	2.5 – 12.5	09/28/00								8.2 =	**33.2 =**			94.1 =		0.29 J			3.2 =
AF-13	AF1342	2.5 – 12.5	09/28/00				1.2 J				7.2 =				0.17 J					1.2 J
AF-14	AF1442	1.4 – 11.4	09/28/00								8.3 =				0.064 J					
AF-15	AF1542	1.5 – 11.5	09/28/00								8.2 =	0.19 J								
AF-16	AF1642	1.5 – 11.5	09/28/00								6.5 =									
AF-18	AF1842	1.5 – 11.5	09/28/00				5.6 =				11.2 =	**5.8 =**			0.11 J		0.7 J	1.4 =		
AF-19	AF1942	1.5 – 11.5	09/28/00				0.36 J				7.4 =	0.24 J					0.99 J			
AF-20	AF2042	3.0 – 13.0	09/27/00				2.3 =				7.7 =	0.55 J								
Maximum Contaminant Level				NRC	7	5	NRC	5	NRC	NRC	NRC	5	NRC	NRC	700	5	1,000	5	2	10,000
In-Stream Water Quality Standard				NRC	3.2	98.6	NRC	NRC	NRC	NRC	NRC	71.28	NRC	NRC	28,718	8.85	200,000	80.7	525	NRC

See page II-14 for footnotes.

Table 1. Groundwater Analytical Results (continued)

Boring ID	Sample ID	Screened Interval (feet BGS)	Sample Date	Detected Volatile Organic Compounds (µg/L)																
				1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene	1,2-Dichloropropane	2-Butanone	2-Hexanone	Acetone	Benzene	Carbon Disulfide	Chloromethane	Ethylbenzene	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride	Xylenes, Total
AF-23	AF2342	3.0 – 13.0	09/27/00				8.5 =				6.6 =	1.6 =						0.33 J		
AF-24	AF2442	2.0 – 12.0	09/28/00																	
AF-25	AF2542	0.5 – 10.5	09/28/00				34 =					1.6 =						**197 =**		
AF-26	AF2642	2.0 – 12.0	09/28/00				21.8 =					**11.2 =**					1.9 =	**102 J**		
AF-27	AF2742	1.0 – 11.0	09/28/00				30.7 =					1.9 =						**179 =**		
AF-28	AF2842	2.0 – 12.0	09/28/00				42.6 =					8.6 =					1.2 =	**56.8 =**		
AF-29	AF2942	2.0 – 12.0	09/28/00				2.4 =					**351 =**			54.1 =		2.8 =	2.6 =	0.77 J	5.1 =
AF-33	AF3342	2.3 – 11.8	09/28/00				8.1 =											**34.4 =**		
AF-34	AF3442	1.4 – 10.9	09/28/00	2.8 =	**3.9 =**		13 =										0.47 J	**105 J**		
AF-35	AF3542	1.2 – 10.7	09/28/00				9.6 =					0.38 J						**27.6 =**		
AF-36	AF3642	1.4 – 10.9	09/28/00				3.3 =					0.83 J					0.78 J	**10.3 =**		
AF-37	AF3742	4.4 – 14.3	09/28/00				17.2 =					2.7 =					1.9 =	**226 =**		
AF-38	AF3842	4.1 – 14.1	09/28/00				0.39 J					0.19 J					1.4 =			
AF-40	AF4042	28.5 – 33.0	09/28/00				14.6 =					1.8 =			0.45 J			**42.9 =**	0.76 J	
AF-41	AF4142	28.5 – 33.0	09/28/00				1.7 J											1.2 =		
AF-42	AF4242	28.5 – 33.0	09/28/00																	
Maximum Contaminant Level				NRC	7	5	NRC	5	NRC	NRC	NRC	5	NRC	NRC	700	5	1,000	5	2	10,000
In-Stream Water Quality Standard				NRC	3.2	98.6	NRC	NRC	NRC	NRC	NRC	71.28	NRC	NRC	28,718	8.85	200,000	80.7	525	NRC

See page II-14 for footnotes.

Table 1. Groundwater Analytical Results (continued)

Boring ID	Sample ID	Screened Interval (feet BGS)	Sample Date	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene	1,2-Dichloropropane	2-Butanone	2-Hexanone	Acetone	Benzene	Carbon Disulfide	Chloromethane	Ethylbenzene	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride	Xylenes, Total
				Detected Volatile Organic Compounds (µg/L)																
Vertical Profile Sampling – November/December 2000																				
AF-43	AF4312	4.0 – 9.0	11/30/00								11 =									
AF-43	AF4322	9.0 – 14.0	11/30/00				0.46 J		1.2 J		3.6 J							1.2 =		
AF-43	AF4332	14.0 – 19.0	11/30/00		0.51 J		5.3 =				1.6 J							**304 =**		
AF-43	AF4342	19.0 – 24.0	11/30/00		2.3 =		20.2 =				1.8 J	0.68 J						**2,600 =**		
AF-43	AF4352	24.0 – 29.0	11/30/00		**5.4 =**		103 =				2 J						0.27 J	**2,140 =**		
AF-43	AF4362	29.0 – 34.0	11/30/00	1.3 =	**12.8 =**		116 =				1.8 J							**2,030 =**		
AF-43	AF4372	34.0 – 39.0	11/30/00	0.9 J	**7.2 =**		68.2 =				2.9 J							**883 =**		
AF-43	AF4382	39.0 – 44.0	11/30/00		0.1 J		9.8 =				2 J							**213 J**		
AF-43	AF4392	44.0 – 49.0	11/30/00				5.4 =								0.062 J		0.45 J	**71.2 =**		0.32 J
AF-44	AF4412	4.0 – 9.0	12/01/00				7 =											**14.3 =**		
AF-44	AF4422	9.0 – 14.0	12/01/00				2.8 =								0.072 J		0.29 J	**80.1 =**		0.46 J
AF-44	AF4432	14.0 – 19.0	12/01/00															**13 =**		
AF-44	AF4442	19.0 – 24.0	12/01/00				5.6 =										0.31 J	**54.9 =**		
AF-44	AF4452	24.0 – 29.0	12/01/00				7 =										0.30 J	**33.5 =**		
AF-44	AF4462	29.0 – 34.0	12/01/00				1.1 J										0.38 J	0.83 J		
AF-44	AF4472	34.0 – 39.0	12/01/00		3.2 =		104 =				1.8 J	0.16 J						**790 =**		
AF-44	AF4482	39.0 – 44.0	12/01/00		0.84 J		38.6 =		2.4 J		4.3 J	0.31 J			0.11 J		0.48 J	**346 =**		
AF-44	AF4492	44.0 – 49.0	12/01/00				9.2 =		1.4 J	2.2 J	4.5 J							**60.8 =**		
Maximum Contaminant Level				NRC	7	5	NRC	5	NRC	NRC	NRC	5	NRC	NRC	700	5	1,000	5	2	10,000
In-Stream Water Quality Standard				NRC	3.2	98.6	NRC	NRC	NRC	NRC	NRC	71.28	NRC	NRC	28,718	8.85	200,000	80.7	525	NRC

See page II-14 for footnotes.

Table 1. Groundwater Analytical Results (continued)

Boring ID	Sample ID	Screened Interval (feet BGS)	Sample Date	Detected Volatile Organic Compounds (µg/L)																
				1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene	1,2-Dichloropropane	2-Butanone	2-Hexanone	Acetone	Benzene	Carbon Disulfide	Chloromethane	Ethylbenzene	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride	Xylenes, Total
AF-45	AF4512	4.0 – 9.0	12/01/00				10.3 =					1.8 =	0.41 J				0.39 J	1.9 =		
AF-45	AF4522	9.0 – 14.0	12/01/00		0.17 J		7.6 =					4.2 =	0.59 J					**47.2 =**		
AF-45	AF4532	14.0 – 19.0	12/01/00				1.5 =					0.99 J						**18.3 =**		
AF-45	AF4542	19.0 – 24.0	12/01/00		0.63 J		67.5 =					0.33 J						**428 =**		
AF-45	AF4552	24.0 – 29.0	12/01/00		3.8 =		279 =					0.24 J						**1,510 =**	0.27 J	
AF-45	AF4562	29.0 – 34.0	12/01/00		4.7 =		206 =					0.19 J						**1,490 =**	0.24 J	
AF-45	AF4572	34.0 – 39.0	12/02/00				15.2 =										0.66 J	**181 =**		
AF-45	AF4582	39.0 – 44.0	12/02/00				5.9 =											**48.4 =**		
AF-45	AF4592	44.0 – 49.0	12/02/00															0.59 J		
AF-46	AF4612	6.0 – 10.0	12/02/00				0.73 J					0.22 J								
AF-46	AF4622	11.0 – 15.0	12/02/00				1.4 J					0.65 J	0.84 J					3.9 =		
AF-46	AF4632	16.0 – 20.0	12/02/00									0.30 J						2.6 =		
AF-46	AF4642	21.0 – 25.0	12/02/00				1.4 J					0.63 J						4.6 =		
AF-46	AF4652	26.0 – 30.0	12/02/00				2.3 =					0.16 J						1.2 =		
AF-46	AF4662	31.0 – 35.0	12/02/00				0.46 J													
AF-46	AF4672	36.0 – 40.0	12/02/00																	
AF-46	AF4682	41.0 – 45.0	12/02/00															0.61 J		
AF-46	AF4692	46.0 – 50.0	12/02/00																	
Maximum Contaminant Level				NRC	7	5	NRC	5	NRC	NRC	NRC	5	NRC	NRC	700	5	1,000	5	2	10,000
In-Stream Water Quality Standard				NRC	3.2	98.6	NRC	NRC	NRC	NRC	NRC	71.28	NRC	NRC	28,718	8.85	200,000	80.7	525	NRC

See page II-14 for footnotes.

Table 1. Groundwater Analytical Results (continued)

Boring ID	Sample ID	Screened Interval (feet BGS)	Sample Date	Detected Volatile Organic Compounds (µg/L)																
				1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene	1,2-Dichloropropane	2-Butanone	2-Hexanone	Acetone	Benzene	Carbon Disulfide	Chloromethane	Ethylbenzene	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride	Xylenes, Total
AF-47	AF4722	11.0 – 15.0	12/02/00				0.84 J	0.3 J				1.2 =						3 =		
AF-47	AF4732	16.0 – 20.0	12/02/00			0.51 J						0.21 J						0.27 J		
AF-47	AF4742	21.0 – 25.0	12/02/00																	
AF-47	AF4752	26.0 – 30.0	12/02/00																	
AF-47	AF4762	31.0 – 35.0	12/03/00																	
AF-47	AF4772	36.0 – 40.0	12/03/00																	
AF-47	AF4782	41.0 – 45.0	12/03/00																	
AF-47	AF4792	46.0 – 50.0	12/03/00																	
AF-48	AF4812	5.0 – 10.0	12/04/00				6.7 =				2.4 J	0.88 J			1.6 =		8.9 =	**5.9 =**		7.3 =
AF-48	AF4822	10.0 – 15.0	12/04/00				9.6 =					0.63 J			0.14 J			**155 =**		0.42 J
AF-48	AF4832	15.0 – 20.0	12/04/00																	0.40 J
AF-48	AF4842	20.0 – 25.0	12/04/00																	
AF-48	AF4852	25.0 – 30.0	12/04/00																	
AF-48	AF4862	30.0 – 35.0	12/04/00																	
AF-48	AF4872	35.0 – 40.0	12/04/00																	
AF-48	AF4882	40.0 – 45.0	12/04/00																	
AF-48	AF4892	45.0 – 50.0	12/04/00																	
Maximum Contaminant Level				NRC	7	5	NRC	5	NRC	NRC	NRC	5	NRC	NRC	700	5	1,000	5	2	10,000
In-Stream Water Quality Standard				NRC	3.2	98.6	NRC	NRC	NRC	NRC	NRC	71.28	NRC	NRC	28,718	8.85	200,000	80.7	525	NRC

See page II-14 for footnotes.

Table 1. Groundwater Analytical Results (continued)

Boring ID	Sample ID	Screened Interval (feet BGS)	Sample Date	Detected Volatile Organic Compounds (µg/L)																
				1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene	1,2-Dichloropropane	2-Butanone	2-Hexanone	Acetone	Benzene	Carbon Disulfide	Chloromethane	Ethylbenzene	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride	Xylenes, Total
AF-49	AF4912	6.0 – 10.0	12/03/00				1.4 J		2.4 J				0.63 J					0.48 J		
AF-49	AF4922	11.0 – 15.0	12/03/00				1.9 J					0.21 J	0.98 J					0.78 J		
AF-49	AF4932	16.0 – 20.0	12/03/00										0.66 J							
AF-49	AF4942	21.0 – 25.0	12/03/00																	
AF-49	AF4952	26.0 – 30.0	12/03/00																	
AF-49	AF4962	31.0 – 35.0	12/03/00																	
AF-49	AF4972	36.0 – 40.0	12/03/00											0.38 J						
AF-49	AF4982	41.0 – 45.0	12/03/00								2 J					0.58 J	3.9 =			
AF-49	AF4992	46.0 – 50.0	12/03/00								2.6 J					0.69 J	3.7 =			
AF-50	AF5012	4.0 – 9.0	12/02/00				4.0 =				1.8 J	**9.5 =**						6.5 =		
AF-50	AF5022	9.0 – 14.0	12/02/00				4.4 =				2 J	0.86 J						**13.4 =**		
AF-50	AF5032	14.0 – 19.0	12/02/00				0.21 J													
AF-50	AF5042	19.0 – 24.0	12/03/00						1.6 J											
AF-50	AF5052	24.0 – 29.0	12/03/00																	
AF-50	AF5062	29.0 – 34.0	12/03/00																	
AF-50	AF5072	34.0 – 39.0	12/03/00																	
AF-50	AF5082	39.0 – 44.0	12/03/00																	
AF-50	AF5092	44.0 – 49.0	12/03/00																	
Maximum Contaminant Level				NRC	7	5	NRC	5	NRC	NRC	NRC	5	NRC	NRC	700	5	1,000	5	2	10,000
In-Stream Water Quality Standard				NRC	3.2	98.6	NRC	NRC	NRC	NRC	NRC	71.28	NRC	NRC	28,718	8.85	200,000	80.7	525	NRC

See page II-14 for footnotes.

Table 1. Groundwater Analytical Results (continued)

Boring ID	Sample ID	Screened Interval (feet BGS)	Sample Date	Detected Volatile Organic Compounds (µg/L)																
				1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene	1,2-Dichloropropane	2-Butanone	2-Hexanone	Acetone	Benzene	Carbon Disulfide	Chloromethane	Ethylbenzene	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride	Xylenes, Total
AF-51	AF5112	5.0 – 10.0	12/03/00				3.4 =					1.3 =					0.27 J	**25.6 =**		
AF-51	AF5122	10.0 – 15.0	12/03/00		0.64 J		5.1 =					0.86 J						**37.3 =**		
AF-51	AF5132	15.0 – 20.0	12/03/00	10.3 =	**22.5 =**		65.4 =											**604 =**	0.60 J	
AF-51	AF5142	20.0 – 25.0	12/03/00	2.1 =	1.9 =		4.0 =											**10.9 =**		
AF-51	AF5152	25.0 – 30.0	12/04/00	0.76 J	2.3 =		11.9 =											**90.3 =**		
AF-51	AF5162	30.0 – 35.0	12/04/00				0.51 J											0.38 J		
AF-51	AF5172	35.0 – 40.0	12/04/00												0.16 J					0.45 J
AF-51	AF5182	40.0 – 45.0	12/04/00				0.97 J											2.4 =		
AF-51	AF5192	45.0 – 50.0	12/04/00																	
AF-52	AF5212	4.0 – 9.0	12/02/00						1.2 J		8.5 =	0.18 J								
AF-52	AF5222	9.0 – 14.0	12/02/00								1.8 J							0.33 J		
AF-52	AF5232	14.0 – 19.0	12/02/00				34.5 J											**1,780 =**		
AF-52	AF5242	19.0 – 24.0	12/02/00		**16.3 J**		378 =											**7,730 =**		
AF-52	AF5252	24.0 – 29.0	12/02/00		**15 J**		174 =											**2120 =**		
AF-52	AF5262	29.0 – 34.0	12/02/00		0.61 J		6 =											**34.1 =**		
AF-52	AF5272	34.0 – 39.0	12/02/00				65.2 =											**631 =**		
AF-52	AF5282	39.0 – 44.0	12/02/00				42.7 =											**516 =**		
AF-52	AF5292	44.0 – 49.0	12/02/00				0.31 J											2.8 =		
Maximum Contaminant Level				NRC	7	5	NRC	5	NRC	NRC	NRC	5	NRC	NRC	700	5	1,000	5	2	10,000
In-Stream Water Quality Standard				NRC	3.2	98.6	NRC	NRC	NRC	NRC	NRC	71.28	NRC	NRC	28,718	8.85	200,000	80.7	525	NRC

See page II-14 for footnotes.

Table 1. Groundwater Analytical Results (continued)

Boring ID	Sample ID	Screened Interval (feet BGS)	Sample Date	Detected Volatile Organic Compounds (µg/L)																
				1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene	1,2-Dichloropropane	2-Butanone	2-Hexanone	Acetone	Benzene	Carbon Disulfide	Chloroform	Ethylbenzene	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride	Xylenes, Total
Second Semiannual Sampling Event – January 2001																				
AF-40	AF4052	28.5 – 33.0	01/07/01		0.41 J		26 =					0.39 J			0.13 J			108 J	0.67 J	0.34 J
AF-41	AF4152	28.5 – 33.0	01/07/01		0.82 J		32.7 =											176 =		
AF-42	AF4252	28.5 – 33.0	01/07/01																	
Well Installation & Sampling – February/March 2001																				
AF-53	AF5312	20.0 – 30.0	03/10/01		4.6 =		88.8 =				97.3 =	0.22 J					0.27 J	2,410 J		
AF-54	AF5412	32.4 – 42.4	03/10/01				53.2 =				613 J			2.5 =				352 =		
AF-55	AF5512	34.0 – 34.0	03/10/01				154 =				3,100 J	0.35 J		0.21J				1,020 =		
AF-56	AF5612	19.9 – 29.9	03/10/01				7.9 J											303 =		
AF-57	AF5712	57.8 – 62.8	03/09/01								220 =			4.7 =				0.72 J		
AF-58	AF5812	2.7 – 12.7	03/09/01				8.0 =		2.8 J		1,360 J	0.16 J		1.1 =			0.62 J	13 =		0.25 J
AF-59	AF5912	2.3 – 12.3	03/10/01						1.0 J		2,250 J	0.67 J		0.66 J						
AF-60	AF6012	20.0 – 30.0	03/10/01				3.4 =					0.26 J						26.1 =		
AF-61	AF6112	20.0 – 30.0	03/10/01				1.3 J		2.3 J		356 =			0.39 J				267 =		
AF-62	AF6212	3.0 – 13.0	03/10/01						1.9 J		8,630 J	0.15 J		1.0 =			0.23 J	0.39 J		
Maximum Contaminant Level				NRC	7	5	NRC	5	NRC	NRC	NRC	5	NRC	NRC	700	5	1,000	5	2	10,000
In-Stream Water Quality Standard				NRC	3.2	98.6	NRC	NRC	NRC	NRC	NRC	71.28	NRC	NRC	28,718	8.85	200,000	80.7	525	NRC

NOTES:
Bold values exceed maximum contaminant level.
Shaded values exceed GA EPD water quality standards (Chapter 391-03-6.03).

Laboratory Qualifiers
U Indicates the compound was not detected at the concentration reported.
UJ Indicates the compound was not detected above an approximated sample quantitation limit.
J Indicates the value for the compound is an estimated value.
= Indicates the compound was detected at the concentration reported.

Table 2. CAP–Part B – Well Construction Details

Boring/ Well Number	Date Installed	Boring Depth (feet BGS)	Screened Interval (feet BGS)	Type of Completion	Coordinates (NAD 88)		Elevation (NGVD 88)	
					Northing	Easting	Ground Surface	Top of Casing
CAP–Part B Investigation — 1999								
AF-01	5/4/99	12.7	2.5 – 12.5	¾" PVC shallow well	734225.90	979645.78	23.28	23.02
AF-02[a]	5/5/99	12.2	2.0 – 12.0	¾" PVC shallow well	734103.05	979556.81	22.10	21.94
AF-03[a]	5/5/99	12.2	2.0 – 12.0	¾" PVC shallow well	734073.65	979520.84	22.30	22.27
AF-04	5/5/99	12.2	2.0 – 12.0	¾" PVC shallow well	734170.32	979621.51	22.32	22.24
AF-05	5/5/99	12.2	2.0 – 12.0	¾" PVC shallow well	734139.42	979582.77	22.46	22.21
AF-06	5/5/99	12.2	2.0 – 12.0	temporary piezometer	734083.64	979514.88	22.70	N/A
AF-07	5/4/99	12.7	2.5 – 12.5	¾" PVC shallow well	734145.20	979553.53	23.13	22.90
AF-08	5/4/99	12.7	2.5 – 12.5	¾" PVC shallow well	734249.25	979597.57	23.30	23.10
AF-09	5/4/99	12.2	2.0 – 12.0	¾" PVC shallow well	734211.34	979549.77	23.11	22.93
AF-10	5/4/99	12.7	2.5 – 12.5	temporary piezometer	734145.04	979465.65	23.23	N/A
AF-11[a]	5/5/99	11.2	1.0 – 11.0	¾" PVC shallow well	734167.54	979635.77	22.03	21.89
AF-12	5/4/99	12.7	2.5 – 12.5	¾" PVC shallow well	734165.46	979578.22	23.05	22.86
AF-13	5/7/99	12.7	2.5 – 12.5	¾" PVC shallow well	734243.82	979567.47	23.01	22.79
AF-14	5/7/99	11.5	1.4 – 11.4	¾" PVC shallow well	734284.56	979617.09	23.33	23.04
AF-15	5/7/99	11.6	1.5 – 11.5	¾" PVC shallow well	734253.79	979641.17	23.30	23.28
AF-16	5/7/99	12.0	1.6 – 11.6	¾" PVC shallow well	734223.09	979682.24	22.06	22.17
AF-17	5/8/99	12.2	2.0 – 12.0	¾" PVC shallow well	734023.58	979539.92	18.64	18.93
AF-18[a]	5/8/99	11.5	1.3 – 11.3	¾" PVC shallow well	734051.22	979517.96	19.06	20.13
AF-19[a]	5/8/99	11.5	1.4 – 11.4	¾" PVC shallow well	734038.69	979490.11	19.52	19.68
AF-20	5/8/99	13.2	3.0 – 13.0	¾" PVC shallow well	734086.22	979494.33	23.03	22.84
AF-21	5/7/99	55.0	N/A	vertical profile	734143.75	979553.06	23.05	N/A
AF-22	5/8/99	55.0	N/A	vertical profile	734085.32	979516.34	22.61	N/A
AF-23	5/8/99	13.2	3.0 – 13.0	¾" PVC shallow well	734097.56	979456.29	23.43	23.25
AF-24	5/8/99	12.2	2.0 – 12.0	¾" PVC shallow well	734199.08	979473.21	23.10	22.85
AF-25[a]	5/11/99	10.5	0.1 – 10.1	¾" PVC shallow well	734020.29	979470.48	14.75	15.03
AF-26[a]	5/11/99	12.2	2.0 – 12.0	¾" PVC shallow well	733986.65	979544.00	16.90	17.65
AF-27[a]	5/11/99	11.5	1.0 – 11.0	¾" PVC shallow well	734005.71	979516.52	16.40	16.50
AF-28[a]	5/11/99	12.2	2.0 – 12.0	¾" PVC shallow well	734078.69	979600.87	16.80	17.11
AF-29	5/11/99	12.2	2.0 – 12.0	¾" PVC shallow well	734007.36	979587.21	18.90	19.06
AF-30	9/26/99	50.0	N/A	vertical profile	734139.86	979550.68	23.10	N/A
AF-31	9/25/99	50.0	N/A	vertical profile	733998.85	979522.67	16.70	N/A
AF-32	9/25/99	50.0	N/A	vertical profile	733972.47	979570.12	17.00	N/A
AF-33[a]	9/25/99	12.0	2.3 – 11.8	¾" PVC shallow well	734123.31	979659.91	17.60	18.07
AF-34	9/25/99	11.0	1.4 – 10.9	¾" PVC shallow well	734007.30	979725.81	17.60	17.85
AF-35	9/25/99	11.0	1.2 – 10.7	¾" PVC shallow well	734025.16	979653.95	17.30	17.63
AF-36[a]	9/25/99	11.0	1.4 – 10.9	¾" PVC shallow well	733954.70	979592.53	17.40	17.52
AF-37[a]	9/25/99	15.0	4.4 – 14.3	¾" PVC shallow well	733952.49	979506.73	19.80	20.06
AF-38[a]	9/25/99	14.5	4.1 – 14.0	¾" PVC shallow well	733990.35	979405.78	20.00	20.14
AF-39[a]	9/25/99	15.0	4.4 – 14.3	¾" PVC shallow well	734050.46	979442.65	21.70	22.12

NOTES:

[a] Well was damaged and repaired following the installation and initial survey. The top of casing was resurveyed in February 2001.

N/A = Not applicable.

Table 2. CAP–Part B – Well Construction Details (continued)

Boring/ Well Number	Date Installed	Boring Depth (feet BGS)	Screened Interval (feet BGS)	Type of Completion	Coordinates (NAD 88)		Elevation (NGVD 88)	
					Northing	Easting	Ground Surface	Top of Casing
Supplemental CAP–Part B Investigation Activities – 2000 and 2001								
AF-40	01/15/00	33.5	28.5 – 33.0	2″ PVC deep well	734141.9	979553.1	23.05	22.78
AF-41	01/15/00	33.5	28.5 – 33.0	2″ PVC deep well	734087.0	979512.4	22.70	22.33
AF-42	01/15/00	33.5	28.5 – 33.0	2″ PVC deep well	734000.8	979521.2	16.40	19.03
AF-43	11/30/00	49.0	N/A	vertical profile	734303.9	979627.0	23.31	N/A
AF-44	12/01/00	49.0	N/A	vertical profile	734233.0	979549.9	22.77	N/A
AF-45	12/01/00	49.0	N/A	vertical profile	734156.9	979457.5	23.14	N/A
AF-46	12/02/00	50.0	N/A	vertical profile	734090.1	979390.2	23.16	N/A
AF-47	12/02/00	50.0	N/A	vertical profile	733996.5	979367.3	19.90	N/A
AF-48	12/04/00	50.0	N/A	vertical profile	733926.8	979430.7	19.70	N/A
AF-49	12/02/00	50.0	N/A	vertical profile	733922.2	979641.8	22.69	N/A
AF-50	12/02/00	49.0	N/A	vertical profile	734069.3	979596.9	17.30	N/A
AF-51	12/03/00	50.0	N/A	vertical profile	734115.2	979650.9	18.10	N/A
AF-52	12/02/00	49.0	N/A	vertical profile	734234.0	979686.7	22.60	N/A
AF-53	02/04/01	31.0	20.0 – 30.0	2″ PVC deep well	734303.9	979627.0	23.31	22.93
AF-54	02/04/01	43.5	32.4 – 42.4	2″ PVC deep well	734233.0	979549.9	22.77	22.43
AF-55	02/04/01	34.5	24.0 – 34.0	2″ PVC deep well	734156.9	979457.5	23.14	22.76
AF-56	02/04/01	31.0	19.9 – 29.9	2″ PVC deep well	734329.8	979653.2	23.27	22.99
AF-57	02/03/01	65.0	57.8 – 62.8	2″ PVC deep well	733996.5	979367.3	19.90	22.21
AF-58	02/05/01	13.0	2.7 – 12.7	2″ PVC shallow well	733926.8	979430.7	19.70	22.32
AF-59	02/04/01	14.9	2.3 – 12.3	2″ PVC shallow well	734201.6	979649.7	22.69	22.33
AF-60	02/05/01	31.0	20.0 – 30.0	2″ PVC deep well	734225.2	979434.6	24.08	23.77
AF-61	02/05/01	31.0	20.0 – 30.0	2″ PVC deep well	734331.1	979603.5	23.79	23.47
AF-62	02/05/01	14.0	3.0 – 13.0	2″ PVC shallow well	734234.0	979686.7	22.60	22.11

NOTES:
N/A = Not applicable.

Table 3. CAP–Part A/B – Groundwater Elevations

Well Number	Date Measured	Ground Surface Elev. (feet MSL)	Top of Casing Elev. (feet MSL)	Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Specific Gravity Adjustment	Corrected Groundwater Elev. (feet MSL)
CAP-Part A Investigation – November 1998									
MW-3	11/19/98	not reported	21.44	3.0 – 7.0	N/A	4.72	0	N/A	16.72
MW-4	11/19/98	not reported	22.80	2.5 – 6.5	N/A	2.65	0	N/A	20.15
MW-5	11/19/98	not reported	21.51	3.5 – 7.5	N/A	5.00	0	N/A	16.51
CAP–Part B Investigation – June 1999									
AF-01	06/02/99	23.28	23.02	2.5 – 12.5	N/A	4.88	0	N/A	18.14
AF-02	06/02/99	22.10	21.97	2.0 – 12.0	N/A	4.91	0	N/A	17.06
AF-03	06/02/99	22.30	22.30	2.0 – 12.0	N/A	5.11	0	N/A	17.19
AF-04	06/02/99	22.32	22.24	2.0 – 12.0	N/A	4.66	0	N/A	17.58
AF-05	06/02/99	22.46	22.21	2.0 – 12.0	N/A	4.97	0	N/A	17.24
AF-07	06/02/99	23.13	22.9	2.5 – 12.5	N/A	5.01	0	N/A	17.89
AF-08	06/02/99	23.30	23.1	2.5 – 12.5	N/A	3.94	0	N/A	19.16
AF-09	06/02/99	23.11	22.93	2.0 – 12.0	N/A	4.01	0	N/A	18.92
AF-11	06/02/99	22.03	21.93	1.0 – 11.0	N/A	4.72	0	N/A	17.21
AF-12	06/02/99	23.05	22.86	2.5 – 12.5	N/A	5.29	0	N/A	17.57
AF-13	06/02/99	23.01	22.79	2.5 – 12.5	N/A	3.34	0	N/A	19.45
AF-14	06/02/99	23.33	23.04	1.4 – 11.4	N/A	3.12	0	N/A	19.92
AF-15	06/02/99	23.30	23.28	1.5 – 11.5	N/A	4.46	0	N/A	18.82
AF-16	06/02/99	22.06	22.17	1.6 – 11.6	N/A	4.22	0	N/A	17.95
AF-17	06/02/99	18.64	18.93	2.0 – 12.0	N/A	4.46	0	N/A	14.47
AF-18	06/02/99	19.06	19.33	1.3 – 11.3	N/A	3.40	0	N/A	15.93
AF-19	06/02/99	19.52	19.70	1.4 – 11.4	N/A	3.85	0	N/A	15.85
AF-20	06/02/99	23.03	22.84	3.0 – 13.0	N/A	4.91	0	N/A	17.93
AF-23	06/02/99	23.43	23.25	3.0 – 13.0	N/A	4.91	0	N/A	18.34
AF-24	06/02/99	23.10	22.85	2.0 – 12.0	N/A	2.66	0	N/A	20.19
AF-25	06/02/99	14.75	15.01	0.1 – 10.1	N/A	0.87	0	N/A	14.14
AF-26	06/02/99	16.90	17.04	2.0 – 12.0	N/A	2.76	0	N/A	14.28
AF-27	06/02/99	16.40	16.55	1.0 – 11.0	N/A	1.98	0	N/A	14.57
AF-28	06/02/99	16.80	17.13	2.0 – 12.0	N/A	1.74	0	N/A	15.39
AF-29	06/02/99	18.90	19.06	2.0 – 12.0	N/A	4.67	0	N/A	14.39
CAP–Part B Investigation – December 1999									
AF-01	12/03/99	23.28	23.02	2.5 – 12.5	N/A	4.97	0	N/A	18.05
AF-02	12/03/99	22.10	21.97	2.0 – 12.0	N/A	4.86	0	N/A	17.11
AF-03	12/03/99	22.30	22.30	2.0 – 12.0	N/A	5.09	0	N/A	17.21
AF-04	12/03/99	22.32	22.24	2.0 – 12.0	N/A	4.67	0	N/A	17.57
AF-05	12/03/99	22.46	22.21	2.0 – 12.0	N/A	4.94	0	N/A	17.27
AF-07	12/03/99	23.13	22.9	2.5 – 12.5	5.00	5.02	0.02	N/A	17.88
AF-08	12/03/99	23.30	23.1	2.5 – 12.5	N/A	4.10	0	N/A	19.00
AF-09	12/03/99	23.11	22.93	2.0 – 12.0	N/A	4.11	0	N/A	18.82

NOTES:

BGS Below ground surface.
BTOC Below top of casing.
MSL Mean sea level.
N/A Not applicable.

Table 3. CAP–Part A/B – Groundwater Elevations (continued)

Well Number	Date Measured	Ground Surface Elev. (feet MSL)	Top of Casing Elev. (feet MSL)	Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Specific Gravity Adjustment	Corrected Groundwater Elev. (feet MSL)
AF-11	12/03/99	22.03	21.93	1.0 – 11.0	N/A	4.71	0	N/A	17.22
AF-12	12/03/99	23.05	22.86	2.5 – 12.5	N/A	5.19	0	N/A	17.67
AF-13	12/03/99	23.01	22.79	2.5 – 12.5	N/A	3.54	0	N/A	19.25
AF-14	12/03/99	23.33	23.04	1.4 – 11.4	N/A	3.34	0	N/A	19.70
AF-15	12/03/99	23.30	23.28	1.5 – 11.5	N/A	4.49	0	N/A	18.79
AF-16	12/03/99	22.06	22.17	1.6 – 11.6	N/A	3.98	0	N/A	18.19
AF-17	12/03/99	18.64	18.93	2.0 – 12.0	N/A	3.79	0	N/A	15.14
AF-18	12/03/99	19.06	19.33	1.3 – 11.3	N/A	3.23	0	N/A	16.10
AF-19	12/03/99	19.52	19.70	1.4 – 11.4	N/A	3.56	0	N/A	16.14
AF-20	12/03/99	23.03	22.84	3.0 – 13.0	N/A	5.00	0	N/A	17.84
AF-23	12/03/99	23.43	23.25	3.0 – 13.0	N/A	5.03	0	N/A	18.22
AF-24	12/03/99	23.10	22.85	2.0 – 12.0	N/A	2.81	0	N/A	20.04
AF-25	12/03/99	14.75	15.01	0.1 – 10.1	N/A	0.60	0	N/A	14.41
AF-26	12/03/99	16.90	17.04	2.0 – 12.0	N/A	2.02	0	N/A	15.02
AF-27	12/03/99	16.40	16.55	1.0 – 11.0	N/A	1.41	0	N/A	15.14
AF-28	12/03/99	16.80	17.13	2.0 – 12.0	N/A	1.14	0	N/A	15.99
AF-29	12/03/99	18.90	19.06	2.0 – 12.0	N/A	3.79	0	N/A	15.27
AF-33	12/03/99	17.6	18.02	2.3 – 11.8	N/A	2.06	0	N/A	15.96
AF-34	12/03/99	17.6	17.85	1.4 – 10.9	N/A	4.62	0	N/A	13.23
AF-35	12/03/99	17.3	17.63	1.2 – 10.7	N/A	2.55	0	N/A	15.08
AF-36	12/03/99	17.4	17.52	1.4 – 10.9	N/A	2.71	0	N/A	14.81
AF-37	12/03/99	19.8	20.07	4.4 – 14.3	N/A	5.46	0	N/A	14.61
AF-38	12/03/99	20.0	20.24	4.1 – 14.0	N/A	5.84	0	N/A	14.40
AF-39	12/03/99	21.7	22.14	4.4 – 14.3	N/A	4.93	0	N/A	17.21
First Semiannual Monitoring Event – June 2000									
AF-01	06/26/00	23.28	23.02	2.5 – 12.5	N/A	5.07	0	N/A	17.95
AF-02	06/26/00	22.10	21.97	2.0 – 12.0	N/A	5.05	0	N/A	16.92
AF-03	06/26/00	22.30	22.30	2.0 – 12.0	N/A	5.03	0	N/A	17.27
AF-04	06/26/00	22.32	22.24	2.0 – 12.0	N/A	4.61	0	N/A	17.63
AF-05	06/26/00	22.46	22.21	2.0 – 12.0	N/A	4.96	0	N/A	17.25
AF-07	06/26/00	23.13	22.90	2.5 – 12.5	N/A	5.35	0	N/A	17.55
AF-08	06/26/00	23.30	23.10	2.5 – 12.5	N/A	4.25	0	N/A	18.85
AF-09	06/26/00	23.11	22.93	2.0 – 12.0	N/A	5.37	0	N/A	17.56
AF-11	06/26/00	22.03	21.93	1.0 – 11.0	N/A	4.55	0	N/A	17.38
AF-12	06/26/00	23.05	22.86	2.5 – 12.5	N/A	5.53	0	N/A	17.33
AF-13	06/26/00	23.01	22.79	2.5 – 12.5	N/A	3.62	0	N/A	19.17
AF-14	06/26/00	23.33	23.04	1.4 – 11.4	N/A	3.35	0	N/A	19.69
AF-15	06/26/00	23.30	23.28	1.5 – 11.5	N/A	4.66	0	N/A	18.62
AF-16	06/26/00	22.06	22.17	1.6 – 11.6	N/A	3.31	0	N/A	18.86

NOTES:

BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level
N/A Not applicable

Table 3. CAP–Part A/B – Groundwater Elevations (continued)

Well Number	Date Measured	Ground Surface Elev. (feet MSL)	Top of Casing Elev. (feet MSL)	Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Specific Gravity Adjustment	Corrected Groundwater Elev. (feet MSL)
AF-17	06/26/00	18.64	18.93	2.0 – 12.0	N/A	destroyed	destroyed	N/A	destroyed
AF-18	06/26/00	19.06	19.33	1.3 – 11.3	N/A	4.12	0	N/A	15.21
AF-19	06/26/00	19.52	19.70	1.4 – 11.4	N/A	<1.00	—	N/A	—
AF-20	06/26/00	23.03	22.84	3.0 – 13.0	N/A	5.22	0	N/A	17.62
AF-23	06/26/00	23.43	23.25	3.0 – 13.0	N/A	3.12	0	N/A	20.13
AF-24	06/26/00	23.10	22.85	2.0 – 12.0	N/A	NM	NM	N/A	NM
AF-25	06/26/00	14.75	15.01	0.1 – 10.1	N/A	NM	NM	N/A	NM
AF-26	06/26/00	16.90	17.04	2.0 – 12.0	N/A	3.01	0	N/A	14.03
AF-27	06/26/00	16.40	16.55	1.0 – 11.0	N/A	1.29	0	N/A	15.26
AF-28	06/26/00	16.80	17.13	2.0 – 12.0	N/A	1.93	0	N/A	15.20
AF-29	06/26/00	18.90	19.06	2.0 – 12.0	N/A	5.15	0	N/A	13.91
AF-33	06/26/00	17.6	18.02	2.3 – 11.8	N/A	2.93	0	N/A	15.09
AF-34	06/26/00	17.6	17.85	1.4 – 10.9	N/A	6.31	0	N/A	11.54
AF-35	06/26/00	17.3	17.63	1.2 – 10.7	N/A	3.64	0	N/A	13.99
AF-36	06/26/00	17.4	17.52	1.4 – 10.9	N/A	3.68	0	N/A	13.84
AF-37	06/26/00	19.8	20.07	4.4 – 14.3	N/A	6.50	0	N/A	13.57
AF-38	06/26/00	20.0	20.24	4.1 – 14.0	N/A	6.44	0	N/A	13.80
AF-39	06/26/00	21.7	22.14	4.4 – 14.3	N/A	5.12	0	N/A	17.02
AF-40	06/26/00	23.05	22.78	28.5 – 33.0	N/A	5.76	0	N/A	17.02
AF-41	06/26/00	22.70	22.33	28.5 – 33.0	N/A	5.80	0	N/A	16.53
AF-42	06/26/00	16.40	19.03	28.5 – 33.0	N/A	1.42	0	N/A	17.61
Second Semiannual Monitoring Event – January 2001									
AF-01	1/10/01	23.28	23.02	2.5 – 12.5	N/A	5.00	0	N/A	18.02
AF-02	1/10/01	22.10	21.97	2.0 – 12.0	N/A	4.61	0	N/A	17.36
AF-03	1/10/01	22.30	22.30	2.0 – 12.0	N/A	4.94	0	N/A	17.36
AF-04	1/10/01	22.32	22.24	2.0 – 12.0	N/A	4.85	0	N/A	17.39
AF-05	1/10/01	22.46	22.21	2.0 – 12.0	N/A	4.85	0	N/A	17.36
AF-07	1/10/01	23.13	22.90	2.5 – 12.5	N/A	5.27	0	N/A	17.63
AF-08	1/10/01	23.30	23.10	2.5 – 12.5	N/A	4.39	0	N/A	18.71
AF-09	1/10/01	23.11	22.93	2.0 – 12.0	N/A	4.54	0	N/A	18.39
AF-11	1/10/01	22.03	21.93	1.0 – 11.0	N/A	4.59	0	N/A	17.34
AF-12	1/10/01	23.05	22.86	2.5 – 12.5	N/A	5.32	0	N/A	17.54
AF-13	1/10/01	23.01	22.79	2.5 – 12.5	N/A	3.59	0	N/A	19.20
AF-14	1/10/01	23.33	23.04	1.4 – 11.4	N/A	3.82	0	N/A	19.22
AF-15	1/10/01	23.30	23.28	1.5 – 11.5	N/A	4.87	0	N/A	18.41
AF-16	1/10/01	22.06	22.17	1.6 – 11.6	N/A	3.70	0	N/A	18.47

NOTES:

BGS	Below ground surface.
BTOC	Below top of casing.
MSL	Mean sea level.
N/A	Not applicable.
NM	Not measured.

Table 3. CAP–Part A/B – Groundwater Elevations (continued)

Well Number	Date Measured	Ground Surface Elev. (feet MSL)	Top of Casing Elev. (feet MSL)	Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Specific Gravity Adjustment	Corrected Groundwater Elev. (feet MSL)
AF-17	1/10/01	18.64	18.93	2.0 – 12.0	N/A	destroyed	destroyed	N/A	destroyed
AF-18	1/10/01	19.06	19.33	1.3 – 11.3	N/A	broken	broken	N/A	broken
AF-19	1/10/01	19.52	19.70	1.4 – 11.4	N/A	3.78	0	N/A	15.92
AF-20	1/10/01	23.03	22.84	3.0 – 13.0	N/A	5.18	0	N/A	17.66
AF-23	1/10/01	23.43	23.25	3.0 – 13.0	N/A	5.28	0	N/A	17.97
AF-24	1/10/01	23.10	22.85	2.0 – 12.0	N/A	3.34	0	N/A	19.51
AF-25	1/10/01	14.75	15.01	0.1 – 10.1	N/A	0.45	0	N/A	14.56
AF-26	1/10/01	16.90	17.04	2.0 – 12.0	N/A	2.21	0	N/A	14.83
AF-27	1/10/01	16.40	16.55	1.0 – 11.0	N/A	0.97	0	N/A	15.58
AF-28	1/10/01	16.80	17.13	2.0 – 12.0	N/A	0.86	0	N/A	16.27
AF-29	1/10/01	18.90	19.06	2.0 – 12.0	N/A	3.43	0	N/A	15.63
AF-33	1/10/01	17.6	18.02	2.3 – 11.8	N/A	1.98	0	N/A	16.04
AF-34	1/10/01	17.6	17.85	1.4 – 10.9	N/A	4.21	0	N/A	13.64
AF-35	1/10/01	17.3	17.63	1.2 – 10.7	N/A	1.95	0	N/A	15.68
AF-36	1/10/01	17.4	17.52	1.4 – 10.9	N/A	2.26	0	N/A	15.26
AF-37	1/10/01	19.8	20.07	4.4 – 14.3	N/A	5.00	0	N/A	15.07
AF-38	1/10/01	20.0	20.24	4.1 – 14.0	N/A	destroyed	destroyed	N/A	destroyed
AF-39	1/10/01	21.7	22.14	4.4 – 14.3	N/A	4.91	0	N/A	17.23
AF-40	1/10/01	23.05	22.78	28.5 – 33.0	N/A	5.10	0	N/A	17.68
AF-41	1/10/01	22.70	22.33	28.5 – 33.0	N/A	5.04	0	N/A	17.29
AF-42	1/10/01	16.40	19.03	28.5 – 33.0	N/A	0.77	0	N/A	18.26
Well Installation and Sampling – February/March 2001									
AF-01	3/11/01	23.28	23.02	2.5 – 12.5	N/A	4.33	0	N/A	18.69
AF-02	3/11/01	22.10	21.97	2.0 – 12.0	N/A	4.15	0	N/A	17.79
AF-03	3/11/01	22.30	22.30	2.0 – 12.0	N/A	4.37	0	N/A	17.90
AF-04	3/11/01	22.32	22.24	2.0 – 12.0	N/A	2.69	0	N/A	19.55
AF-05	3/11/01	22.46	22.21	2.0 – 12.0	N/A	4.06	0	N/A	18.15
AF-07	3/11/01	23.13	22.90	2.5 – 12.5	N/A	4.43	0	N/A	18.47
AF-08	3/11/01	23.30	23.10	2.5 – 12.5	N/A	3.76	0	N/A	19.34
AF-09	3/11/01	23.11	22.93	2.0 – 12.0	N/A	3.81	0	N/A	19.12
AF-11	3/11/01	22.03	21.93	1.0 – 11.0	N/A	2.50	0	N/A	19.39
AF-12	3/11/01	23.05	22.86	2.5 – 12.5	N/A	4.57	0	N/A	18.29
AF-13	3/11/01	23.01	22.79	2.5 – 12.5	N/A	3.25	0	N/A	19.54
AF-14	3/11/01	23.33	23.04	1.4 – 11.4	N/A	3.15	0	N/A	19.89
AF-15	3/11/01	23.30	23.28	1.5 – 11.5	N/A	4.20	0	N/A	19.08
AF-16	3/11/01	22.06	22.17	1.6 – 11.6	N/A	3.51	0	N/A	18.66

NOTES:

BGS	Below ground surface.
BTOC	Below top of casing.
MSL	Mean sea level.
N/A	Not applicable.
NM	Not measured.

Table 3. CAP–Part A/B – Groundwater Elevations (continued)

Well Number	Date Measured	Ground Surface Elev. (feet MSL)	Top of Casing Elev. (feet MSL)	Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Specific Gravity Adjustment	Corrected Groundwater Elev. (feet MSL)
AF-17	3/11/01	18.64	18.93	2.0 – 12.0	N/A	NM	NM	NM	NM
AF-18	3/11/01	19.06	20.13	1.3 – 11.3	N/A	3.45	0	N/A	16.68
AF-19	3/11/01	19.52	19.68	1.4 – 11.4	N/A	3.17	0	N/A	16.51
AF-20	3/11/01	23.03	22.84	3.0 – 13.0	N/A	4.50	0	N/A	18.34
AF-23	3/11/01	23.43	23.25	3.0 – 13.0	N/A	4.65	0	N/A	18.60
AF-24	3/11/01	23.10	22.85	2.0 – 12.0	N/A	2.72	0	N/A	20.13
AF-25	3/11/01	14.75	15.03	0.1 – 10.1	N/A	0.29	0	N/A	14.74
AF-26	3/11/01	16.90	17.65	2.0 – 12.0	N/A	1.35	0	N/A	16.30
AF-27	3/11/01	16.40	16.5	1.0 – 11.0	N/A	0.45	0	N/A	16.05
AF-28	3/11/01	16.80	17.11	2.0 – 12.0	N/A	0.20	0	N/A	16.91
AF-29	3/11/01	18.90	19.06	2.0 – 12.0	N/A	2.81	0	N/A	16.25
AF-33	3/11/01	17.6	18.07	2.3 – 11.8	N/A	0.97	0	N/A	17.10
AF-34	3/11/01	17.6	17.85	1.4 – 10.9	N/A	2.45	0	N/A	15.40
AF-35	3/11/01	17.3	17.63	1.2 – 10.7	N/A	1.03	0	N/A	16.60
AF-36	3/11/01	17.4	17.52	1.4 – 10.9	N/A	1.39	0	N/A	16.13
AF-37	3/11/01	19.8	20.06	4.4 – 14.3	N/A	4.11	0	N/A	15.95
AF-38	3/11/01	20.0	20.14	4.1 – 14.0	N/A	NM	NM	NM	NM
AF-39	3/11/01	21.7	22.12	4.4 – 14.3	N/A	4.68	0	N/A	17.44
AF-40	3/11/01	23.05	22.78	28.5 – 33.0	N/A	4.51	0	N/A	18.27
AF-41	3/11/01	22.70	22.33	28.5 – 33.0	N/A	4.45	0	N/A	17.88
AF-42	3/11/01	16.40	19.03	28.5 – 33.0	N/A	0.53	0	N/A	18.50
AF-53	3/11/01	23.31	22.93	20.0 – 30.0	N/A	3.85	0	N/A	19.08
AF-54	3/11/01	22.77	22.43	32.4 – 42.4	N/A	3.87	0	N/A	18.56
AF-55	3/11/01	23.14	22.76	24.0 – 34.0	N/A	3.78	0	N/A	18.98
AF-56	3/11/01	23.27	22.99	19.9 – 29.9	N/A	3.77	0	N/A	19.22
AF-57	3/11/01	19.90	22.21	57.8 – 62.8	N/A	3.45	0	N/A	18.76
AF-58	3/11/01	19.70	22.32	2.7 – 12.7	N/A	NM	NM	NM	NM
AF-59	3/11/01	22.69	22.33	2.3 – 12.3	N/A	3.93	0	N/A	18.40
AF-60	3/11/01	24.08	23.77	20.0 – 30.0	N/A	3.13	0	N/A	20.64
AF-61	3/11/01	23.79	23.47	20.0 – 30.0	N/A	3.76	0	N/A	19.71
AF-62	3/11/01	22.60	22.11	3.0 – 13.0	N/A	3.36	0	N/A	18.75

NOTES:

BGS	Below ground surface.
BTOC	Below top of casing.
MSL	Mean sea level.
N/A	Not applicable.
NM	Not measured.

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APPENDIX III

WATER RESOURCES SURVEY DOCUMENTATION

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WATER RESOURCES SURVEY DOCUMENTATION

1.0 LOCAL WATER RESOURCES

As required by the Georgia Environmental Protection Division (GA EPD) Underground Storage Tank (UST) Corrective Action Plan (CAP)–Part A Guidance (GA EPD 1998), a water resource survey documenting information for public and non-public water supply wells, surface water bodies, underground utilities, and potential receptors was conducted for the USTs 25 & 26 site. The information presented in this section provides the supporting documentation for Section II.D.1 of the CAP–Part B Report (SAIC 2000).

1.1 WATER SUPPLY WELL SURVEY

The water supply well survey was conducted in accordance with the following GA EPD guidelines/requirements:

- Hunter Army Airfield (HAAF) is located in an area of average or higher groundwater pollution susceptibility (GA EPD 1976).
- All public supply wells, as defined by the GA EPD, that exist within 2 miles of the investigation sites were located.
- All non-public supply wells that exist within 0.5 mile of the investigation sites were located.
- All supply wells nearest the investigation sites were located.
- All wells downgradient of the investigation sites were located.

The required survey was accomplished by obtaining information for the Fort Stewart Directorate of Public Works (DPW) and the City of Savannah Bureau of Water Operations, performing a field survey, obtaining a U.S. Environmental Protection Agency site map displaying the public water supply for HAAF, and conducting a U.S. Geological Survey (USGS) database search. A summary of the information obtained from the survey is provided in the following sections.

1.1.1 Fort Stewart Directorate of Public Works Survey Summary

According to the DPW, nine water supply wells are located within the confines of the HAAF area. These wells have the potential to provide up to 3,890 gallons per minute (gpm) of water to occupants of the HAAF installation. The Fort Stewart DPW was unable to provide documentation listing the companies responsible for well installation and drillers' logs showing as-built information and subsurface geologic data. The DPW provided well locations, pumps rates, treatment methods, casing depths, and total depths for three of the nine wells located within 3 miles of the subject site (Table III-A). However, documentation of subsurface geology based on HAAF drill logs remains extremely limited. Therefore, other references containing deep-well information were used to document the subsurface geology and aquifer characteristics beneath the HAAF area.

Wells 1, 2, and 3 are located within a 2-mile radius of the USTs 25 & 26 site. Wells 1 and 2 are both public water supply wells located in the cantonment area of HAAF and constitute the main water supply system at the HAAF installation. Well 1, located at Building 711 on the corner of Moore Road and Douglas Street, is a 12-inch-diameter well with a 100-horsepower turbine pump serving a 100,000-gallon elevated storage tank (Tank 1) through 10-inch lines. Water from Well 1 is injected with hydrofluosilic acid and chlorine gas solution at the well house. Well 2, located at Building 1205 on the corner of Neal Street and Strachan Road, is a 12-inch-

diameter well with a 100-horsepower turbine pump serving a 200,000-gallon elevated tank (Tank 2) through 10-inch lines. Water from Well 2 is also injected with hydrofluosilic acid and chlorine gas solution at the well house. Wells 1 and 2 provide water to a 500,000-gallon elevated storage tank (Tank 3) located on Middleground Road behind Noncommissioned Officer family housing. This tank provides potable water to 694 service connections, which are used by an average of at least 5,000 individuals year-round.

Well 3, is a public supply well located outside the cantonment area of HAAF. Well 3, located at Building 8455, is a 4.0-inch-diameter well with a 1.0-horsepower electric submersible pump serving a 1,000-gallon hydropneumatic storage tank through 1.5-inch galvanized steel lines. Water from Well 3 is treated with calcium hypochlorite solution and is consumed by approximately 25 people during daytime hours year-round.

Pump rates, casing depths, bore depths, treatment methods, and storage tank information for Wells 1, 2, and 3 are provided in Table III-A.

1.1.2 City of Savannah Bureau of Water Operations Survey Summary

The locations of supply wells found outside the boundary of HAAF that are within 2 miles of the USTs 25 & 26 site are shown on Figure 18, Appendix I. Data concerning casing depths, borehole depths, casing sizes, and capacities are listed in Table III-B. The City of Savannah Bureau of Water Operations was unable to provide drilling logs or as-built well information.

1.2 SURFACE WATER BODIES

Surface water(s) in the state of Georgia, as defined by *Rules and Regulations for Water Quality Control, Chapter 391-3-6* (GA EPD 1998), shall mean any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs producing 100,000 gallons per day, and all other bodies of surface water, natural or artificial, lying within or forming a part of the boundaries of the state, which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation. The surface water body survey was conducted in accordance with the following GA EPD guidelines/requirements:

- surface water bodies that exist within 1 mile of the investigation sites,
- all surface water bodies nearest the investigation sites if these bodies lie outside the 1-mile radius of concern,
- all surface water bodies downgradient of the investigation sites, and
- the storm and sanitary sewers adjacent to investigation sites.

The locations of surface water bodies at HAAF were obtained from USGS topographic maps and from maps provided by the DPW. Storm and sanitary sewer location maps, storm sewer invert elevations, and storm sewer and culvert construction details were provided by the DPW.

1.3 POTENTIAL RECEPTOR SURVEY SUMMARY OF THE USTs 25 & 26 SITE

Earth Tech, Inc., conducted a field potential receptor survey for the USTs 25 & 26 site on November 19, 1998. The site and adjacent areas were surveyed for locations of surface water bodies, utility lines, and basements. Basements do not exist in the buildings adjacent to the site. Additional information, provided by the Fort Stewart DPW, was used to determine the location of the nearest public supply wells and downgradient surface water bodies not located during the field survey.

1.3.1 Water Supply Wells Near USTs 25 & 26 Site

The following information is presented to provide supplemental information to Section II.D.1 of the CAP–Part B Report (SAIC 2000) and provides detailed information relating to public and non-public water supply wells located 2 miles and 1/2 mile, respectively, from the USTs 25 & 26 site.

- Well 1, located on the corner of Moore Road and Douglas Street, at Building 711, is located approximately 6,500 feet north-northwest (upgradient) of the USTs 25 & 26 site.
- Well 2, located at Building 1205 on the corner of Neal Street and Strachan Road, is located approximately 2,900 feet northwest (upgradient) of the USTs 25 & 26 site.
- Well 3, located at Building 8455, is approximately 11,000 feet southwest (cross-gradient) of the USTs 25 & 26 site.

Therefore, the USTs 25 & 26 site is classified as being located greater than 500 feet from these withdrawal points. Based on the estimated nature and extent of petroleum-related groundwater contamination at the site, there is no indication that Wells 1, 2, or 3 have been impacted; therefore, collection and analysis of groundwater samples from Wells 1, 2, or 3 are not recommended.

1.3.2 Surface Water Bodies Near the USTs 25 & 26 Site

A small drainage ditch is located approximately 75 feet southeast of the Building 1343, 260th QM Motor Pool site and ultimately flows southeast and off-site toward the Vernon River. The Springfield Canal lies 7,000 feet to the west-northwest of the USTs 25 & 26 site and flows into the Little Ogeechee River. Because of the ditch 75 feet southeast of the USTs 25 & 26 site, the site is classified as being less than 500 feet from a downgradient surface water body.

1.3.3 Underground Utilities at the USTs 25 & 26 Site

There are numerous water and electrical underground utilities located southeast (downgradient) of the site. The depth of these lines is estimated to be approximately 2 to 3 feet below ground surface (BGS). In addition, there is a force main for the sanitary sewer that is located approximate 5 feet southeast of the UST 25 tank. The invert depth of this line is approximately 3.0 feet BGS. There are three wells that are located adjacent to the force main, and in March 2001, the depths to groundwater in these wells were 4.33 feet in AF-01, 4.43 feet in AF-07, and 4.50 feet in AF-20. Thus, the invert depth of the force main is located approximately 1.5 feet above the water table.

Table III-A. Water Supply Well Information Provided by the Fort Stewart DPW

Building	Well ID	Year Drilled	Bore Depth	Casing Depth	Pump Rate (gpm)	Number of Service Connections	Population	Public or Non-Public Supply
711	1	1941	550	250	1,300	525	7,500	Public
1205	2	1941	600	250	1,300	525	7,500	Public
8455	3	1951	360	40	30	2	25	Public
8581	4a	1976	300	92	80	10	15	Public

Table III-B. Water Supply Information Provided by the City of Savannah Bureau of Water Operations

Well ID	Year Drilled	Bore Depth	Casing Depth	Pump Rate (gpm)	Number of Service Connections	Population	Public or Non-Public Supply
6	TBD	750	1,240	1,500	TBD	TBD	Public
13	TBD	TBD	TBD	2,200	TBD	TBD	Public
14	TBD	800	338	571	TBD	TBD	Public
15	TBD	414	252	1,000	TBD	TBD	Public
23	TBD	639	320	1,056	TBD	TBD	Public
25	TBD	540	287	1,120	TBD	TBD	Public
27	TBD	550	321	1,468	TBD	TBD	Public

NOTE:
TBD = to be determined

APPENDIX IV

SOIL BORING LOGS

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Boring logs associated with borings AF-01 through AF-39 that were installed as part of the initial Corrective Action Plan (CAP)–Part B investigation were provided in the CAP–Part B Report dated February 2000.

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Boring Logs Associated With Borings AF-40 through AF-62

(January 2000 – February 2001)

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HTRW DRILLING LOG

HOLE NUMBER AF-40

PROJECT USTs 25 & 26 | INSPECTOR S. Pulaski | SHEET 1 OF 2

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Asphalt & Subbase				
	2	sandy silt (ML), fine grained sand, moist, gray (7.5 YR 5/1)				
	4	silty SAND (SM), fine grained, moist, gray				
	6	sandy CLAY (CL), fine grained sand, non plastic, wet, black				
	8	sandy SILT (ML), fine grained sand, wet, gray (7.5 YR 5/1)				
	10					
	12	silty SAND (SM), fine grained, moist, gray (7.5 YR 5/1)				
	14					
	16					
	18					
	20					

HTRW DRILLING LOG

HOLE NUMBER AF-40

PROJECT: USTs 25 & 26

INSPECTOR S. Pulaski

SHEET 2 OF 2

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		same as above				
	22					
	24					
		silty SAND (SM), fine to medium grained, very soft, wet, gray (7.5 YR 5/1)				
	26					
	28					
	30					
	32					
		END OF DRILLING AT 33.5 FT				SET 2" MONITORING WELL SCREENED FROM 28.5 TO 33.0 FT BGS
	34					
	36					
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-41

PROJECT USTs 25 & 26 | INSPECTOR S. Pulaski | SHEET 1 OF 2

ELEV. (A)	DEPTH (D)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Silty SAND, fine to medium grained, subangular, damp light brown (7.5 YR 6/3				
	2					
	4					
	6	silty SAND, fine grained, damp, dark gray (7.5 YR 4/1)				
	8					
	10	sandy SILT (ML), fine grained sand, moist, gray (7.5 YR 5/1)				
	12					
	14					∇ WET AT 14.0 FT
	16					
	18					
	20					

HTRW DRILLING LOG

HOLE NUMBER AF-41

PROJECT: USTs 25 & 26 | INSPECTOR S. Pulaski | SHEET 2 OF 2

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Same as above, but with some clay				
	22					
	24					
		sandy SILT (ML), fine to medium grains, some clay, wet, gray (7.5YR5/1)				
	26					
	28					
	30					
	32					
		END OF DRILLING AT 33.5 FT				SET 2" MONITORING WELL SCREENED FROM 28.5 TO 33.0 FT BGS
	34					
	36					
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-42

PROJECT UST3 25&26 | INSPECTOR S. Pulaski | SHEET 1 OF 2

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		SILT (ML), some clay, slightly plastic, moist, dark brown (7.5YR 3/3)				
	2					
	4					
	6					
		sandy SILT (ML), fine grained sand, some clay, moist, gray 7.5YR 5/1				
	8					
	10					
		silty SAND (SM), fine grained, non plastic, wet, gray (7.5YR 6/1)				
	12					
	14					
	16					
	18					
	20					

HTRW DRILLING LOG

HOLE NUMBER AF-42

PROJECT: USTs 25 & 26

INSPECTOR S. Pulaski

SHEET 2 OF 2

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Same as above				
	22					
	24					
	26					
	28					
	30					
	32	END OF DRILLING AT 33.0 FT				SET 2" MONITORING WELL SCREENED FROM 28.5 TO 33.0 FT BGS
	34					
	36					
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER: AF-43

PROJECT: USTs 25 & 26 at HAAF

INSPECTOR: A. Makee

SHEET 1 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.				
	2					
	4				Groundwater Sample AF4312	
	6					
	8					
	10				Groundwater Sample AF4322	
	12					
	14					
	16				Groundwater Sample AF4332	
	18					
	20					

HTRW DRILLING LOG

HOLE NUMBER: AF-43

PROJECT: USTs 25 & 26 at HAAF | INSPECTOR: A. Makee | SHEET 2 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	22	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.			Groundwater Sample AF4342 19.0 to 24.0	
	24					
	26				Groundwater Sample AF4352	
	28					
	30				Groundwater Sample AF4362	
	32					
	34				Groundwater Sample AF4362	
	36					
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-43

PROJECT: USTs 25 & 26 at HAAF

INSPECTOR: A. Makee

SHEET 3 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	42	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.			Groundwater Sample AF4382 39.0 to 44.0	
	44					
	46				Groundwater Sample AF4392	
	48					
		End of drilling at 49.0 ft BGS				
	50					
	52					
	54					
	56					
	58					
	60					

HTRW DRILLING LOG

HOLE NUMBER: AF-44

PROJECT: USTs 25 & 26 at HAAF

INSPECTOR: A. Makee

SHEET 1 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	2	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.				
	4					
	6				Groundwater Sample AF4412	
	8					
	10				Groundwater Sample AF4422	
	12					
	14					
	16				Groundwater Sample AF4432	
	18					
	20					

HTRW DRILLING LOG

HOLE NUMBER: AF-44

PROJECT: USTs 25 & 26 at HAAF

INSPECTOR: A. Makee

SHEET 2 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	22	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.			Groundwater Sample AF4442 19.0 to 24.0	
	24					
	26				Groundwater Sample AF4452	
	28					
	30				Groundwater Sample AF4462	
	32					
	34				Groundwater Sample AF4462	
	36					
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-44

PROJECT: USTs 25 & 26 at HAAF | INSPECTOR: A. Makee | SHEET 3 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	42	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.			Groundwater Sample AF4482 39.0 to 44.0	
	44					
	46				Groundwater Sample AF4492	
	48					
		End of drilling at 49.0 ft BGS				
	50					
	52					
	54					
	56					
	58					
	60					

HTRW DRILLING LOG

HOLE NUMBER: AF-44

PROJECT: USTs 25 & 26 at HAAF

INSPECTOR: A. Makee

SHEET 1 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.				
	2					
	4					
	6				Groundwater Sample AF4512	
	8					
	10					
	12				Groundwater Sample AF4522	
	14					
	16				Groundwater Sample AF4532	
	18					
	20					

HTRW DRILLING LOG

HOLE NUMBER: AF-45

PROJECT: USTs 25 & 26 at HAAF | INSPECTOR: A. Makee | SHEET 2 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	22	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.			Groundwater Sample AF4542 19.0 to 24.0	
	24					
	26				Groundwater Sample AF4552	
	28					
	30				Groundwater Sample AF4562	
	32					
	34				Groundwater Sample AF4562	
	36					
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-45

PROJECT: USTs 25 & 26 at HAAF | INSPECTOR: A. Makee | SHEET 3 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	42	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.			Groundwater Sample AF4582 39.0 to 44.0	
	45					
	46				Groundwater Sample AF4592	
	48					
		End of drilling at 49.0 ft BGS				
	50					
	52					
	54					
	56					
	58					
	60					

HTRW DRILLING LOG

HOLE NUMBER: AF-46

PROJECT: USTs 25 & 26 at HAAF

INSPECTOR: K. Ledbetter

SHEET 1 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.				
	2					
	4					
	6				Groundwater Sample AF4612	
	8					
	10					
	12				Groundwater Sample AF4622	
	14					
	16				Groundwater Sample AF4632	
	18					
	20					

HTRW DRILLING LOG

HOLE NUMBER: AF-46

PROJECT: USTs 25 & 26 at HAAF | INSPECTOR: K. Ledbetter | SHEET 2 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.				
	22				Groundwater Sample AF4642	
	24					
	26				Groundwater Sample AF4652	
	28					
	30				Groundwater Sample AF4662	
	32					
	34				Groundwater Sample AF4762	
	36					
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-46

PROJECT: USTs 25 & 26 at HAAF | INSPECTOR: K. Ledbetter | SHEET 3 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	42	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.			Groundwater Sample AF4682	
	44					
	46					
	48				Groundwater Sample AF4692	
	50	End of drilling at 50.0 ft BGS				
	52					
	54					
	56					
	58					
	60					

HTRW DRILLING LOG

HOLE NUMBER: AF-47

PROJECT: USTs 25 & 26 at HAAF

INSPECTOR: K. Ledbetter

SHEET 1 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.				
	2					
	4					
	6				Groundwater Sample AF4712	
	8					
	10					
	12				Groundwater Sample AF4722	
	14					
	16					
	18				Groundwater Sample AF4732	
	20					

HTRW DRILLING LOG

HOLE NUMBER: AF-47

PROJECT: USTs 25 & 26 at HAAF

INSPECTOR: K. Ledbetter

SHEET 2 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	22	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.			Groundwater Sample AF4742	
	24					
	26				Groundwater Sample AF4752	
	28					
	30				Groundwater Sample AF4762	
	32					
	34				Groundwater Sample AF4772	
	36					
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-47

PROJECT: USTs 25 & 26 at HAAF | INSPECTOR: K. Ledbetter | SHEET 3 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.				
	42				Groundwater Sample AF4782	
	44					
	46					
	48				Groundwater Sample AF4792	
	50	End of drilling at 50.0 ft BGS				
	52					
	54					
	56					
	58					
	60					

HTRW DRILLING LOG

HOLE NUMBER: AF-48

PROJECT: USTs 25 & 26 at HAAF | INSPECTOR: A. Makee | SHEET 1 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	2	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.				
	4					
	6				Groundwater Sample AF4812	
	8					
	10				Groundwater Sample AF4822	
	12					
	14					
	16				Groundwater Sample AF4832	
	18					
	20					

HTRW DRILLING LOG

HOLE NUMBER: AF-48

PROJECT: USTs 25 & 26 at HAAF | INSPECTOR: A. Makee | SHEET 2 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	22	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.			Groundwater Sample AF4842	
	24					
	26				Groundwater Sample AF4852	
	28					
	30				Groundwater Sample AF4862	
	32					
	34					
	36				Groundwater Sample AF4872	
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-48

PROJECT: USTs 25 & 26 at HAAF | INSPECTOR: A. Makee | SHEET 3 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	42	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.			Groundwater Sample AF4882	
	44					
	46				Groundwater Sample AF4892	
	48					
	50	End of drilling at 50.0 ft BGS				
	52					
	54					
	56					
	58					
	60					

HTRW DRILLING LOG

HOLE NUMBER: AF-49

PROJECT: USTs 25 & 26 at HAAF

INSPECTOR: K. Ledbetter

SHEET 1 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.				
	2					
	4					
	6				Groundwater Sample AF4912	
	8					
	10					
	12				Groundwater Sample AF4922	
	14					
	16					
	18				Groundwater Sample AF4932	
	20					

HTRW DRILLING LOG

HOLE NUMBER: AF-49

PROJECT: USTs 25 & 26 at HAAF | INSPECTOR: K. Ledbetter | SHEET 2 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	22	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.			Groundwater Sample AF4942	
	24					
	26				Groundwater Sample AF4952	
	28					
	30				Groundwater Sample AF4962	
	32					
	34				Groundwater Sample AF4972	
	36					
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-49

PROJECT: USTs 25 & 26 at HAAF | INSPECTOR: K. Ledbetter | SHEET 3 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.				
	42				Groundwater Sample AF4982	
	44					
	46					
	48				Groundwater Sample AF4992	
	50	End of drilling at 50.0 ft BGS				
	52					
	54					
	56					
	58					
	60					

HTRW DRILLING LOG

HOLE NUMBER: AF-50

PROJECT: USTs 25 & 26 at HAAF | INSPECTOR: A. Makee | SHEET 1 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	2	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.				
	4					
	6				Groundwater Sample AF5012	
	8					
	10				Groundwater Sample AF5022	
	12					
	14					
	16				Groundwater Sample AF5032	
	18					
	20					

HTRW DRILLING LOG

HOLE NUMBER: AF-50

PROJECT: USTs 25 & 26 at HAAF | INSPECTOR: A. Makee | SHEET 2 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	22	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.			Groundwater Sample AF5042 19.0 to 24.0	
	24					
	26				Groundwater Sample AF5052	
	28					
	30				Groundwater Sample AF5062	
	32					
	34				Groundwater Sample AF5062	
	36					
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-50

PROJECT: USTs 25 & 26 at HAAF | INSPECTOR: A. Makee | SHEET 3 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	42	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.			Groundwater Sample AF5082 39.0 to 44.0	
	44					
	46				Groundwater Sample AF5092	
	48					
		End of drilling at 49.0 ft BGS				
	50					
	52					
	54					
	56					
	58					
	60					

HTRW DRILLING LOG

HOLE NUMBER: AF-51

PROJECT: USTs 25 & 26 at HAAF

INSPECTOR: A. Makee

SHEET 1 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	2	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.				
	4					
	6				Groundwater Sample AF5112	
	8					
	10				Groundwater Sample AF5122	
	12					
	14					
	16				Groundwater Sample AF5132	
	18					
	20					

HTRW DRILLING LOG

HOLE NUMBER: AF-51

PROJECT: USTs 25 & 26 at HAAF | INSPECTOR: A. Makee | SHEET 2 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	22	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.			Groundwater Sample AF5142	
	24					
	26				Groundwater Sample AF5152	
	28					
	30				Groundwater Sample AF5162	
	32					
	34					
	36				Groundwater Sample AF5172	
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-51

PROJECT: USTs 25 & 26 at HAAF | INSPECTOR: A. Makee | SHEET 3 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	42	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.			Groundwater Sample AF5182	
	44					
	46				Groundwater Sample AF5192	
	48					
	50	End of drilling at 50.0 ft BGS				
	52					
	54					
	56					
	58					
	60					

HTRW DRILLING LOG

HOLE NUMBER: AF-44

PROJECT: USTs 25 & 26 at HAAF | INSPECTOR: A. Makee | SHEET 1 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	2	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.				
	4					
	6				Groundwater Sample AF5212	
	8					
	10				Groundwater Sample AF5222	
	12					
	14					
	16				Groundwater Sample AF5232	
	18					
	20					

HTRW DRILLING LOG

HOLE NUMBER: AF-52

PROJECT: USTs 25 & 26 at HAAF

INSPECTOR: A. Makee

SHEET 2 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	22	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.			Groundwater Sample AF5242 19.0 to 24.0	
	24					
	26				Groundwater Sample AF5252	
	28					
	30				Groundwater Sample AF5262	
	32					
	34				Groundwater Sample AF5262	
	36					
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-52

PROJECT: USTs 25 & 26 at HAAF | INSPECTOR: A. Makee | SHEET 3 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	42	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description.			Groundwater Sample AF5282 39.0 to 44.0	
	52					
	46				Groundwater Sample AF5292	
	48					
		End of drilling at 49.0 ft BGS				
	50					
	52					
	54					
	56					
	58					
	60					

HTRW DRILLING LOG

HOLE NUMBER AF-53

PROJECT: USTs 25 & 26

INSPECTOR J. Coffey

SHEET 1 OF 2

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Asphalt w/ gravel subbase				
		silty SAND				
		SAND, very fine grained, soft, dry, pale brown				
	2		0.4ppm			
	4					
	6					
		silty SAND, soft, wet, black				
	8					▽ WET BELOW 8.0FT
	10					
		SAND, very fine grained sand, mottled, wet, light brownish gray				
	12					
	14					
	16					
	18					
	20					

HTRW DRILLING LOG

HOLE NUMBER AF-53

PROJECT: USTs 25 & 26

INSPECTOR T. Coffey

SHEET 2 OF 2

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Clayey SAND, fine grained, <10% clay, nonplastic, wet dark greenish gray				
	22					
	24					
	26					
	28					
	30					
		END OF DRILLING AT 31.0 FT				
	32					
	34					
	36					
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-54

PROJECT: USTs 25 & 26

INSPECTOR P. Bond

SHEET 1 OF 2

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Asphalt w/ gravel subbase				
		silty SAND (SM), fine grained subrounded, loose, moist, dark gray (2.5 Y4/1)				
	2		0.4ppm			
	4		0.3ppm			
	6					
		color grades to light olive brown (2.5 Y5/3)				▽ WET BELOW 7.5ft
	8		0.9ppm			
	10		1.8ppm			
	12		3.9ppm			
	14					
		color change to light brownish gray (2.5 Y6/2)	3.5ppm			
	16					
	18		1.0ppm			
	20		2.6ppm			

HTRW DRILLING LOG

HOLE NUMBER AF-54

PROJECT: USTs 25 & 26 | INSPECTOR P. Bond | SHEET 2 OF 2

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Silty SAND (SM) same as above				
		color change to dark gray (2.5Y4/1)				
	22		2.1 ppm			
	24		1.9 ppm			
	26		1.4 ppm			
	28					
	30		1.7 ppm			
	32		1.3 ppm			
	34	CLAY (CL) w/ sand, soft, plastic, saturated, dark gray (2.5Y4/1)	1.6 ppm			
	36					
	38	Silty SAND (SM), fine to coarse grained, subrounded to sub-angular, loose, saturated, dark gray (2.5Y4/1)	1.0 ppm			
	40	END OF DRILLING AT 43.5 FT	1.4 ppm			

HTRW DRILLING LOG

HOLE NUMBER AF-SS

PROJECT: USTs 25 & 26

INSPECTOR P. Bond

SHEET 1 OF 2

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		ASPHALT w/ gravel subbase				
	2	Silty SAND (SM), fine grained, subrounded, loose, moist, dark grayish brown (2.5Y 4/2)	2.6ppm			
	4		5.5ppm			
	6					
	8	color grades to very dark brown (2.5Y 3/2)	1.7ppm			▽ WET BELOW 7.4 FT
	10		0.4ppm			
	12		1.4ppm			
	14		1.4ppm			
	16	color grades to light olive brown (2.5Y 5/3)	5.9ppm			
	18					
	20	color grades to gray (2.5Y 5/1)	9.1ppm			

HTRW DRILLING LOG

HOLE NUMBER AF-55

PROJECT: USTs 25 & 26

INSPECTOR P. Bond

SHEET 2 OF 2

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		silty SAND (SM), same as above				
	22		9.4ppm			
	24		8.9ppm			
	26					
	28		7.3ppm			
	30		6.5ppm			
	32					
	34	sandy CLAY (CL), plastic, soft, fine grained sand, dark greenish gray (1GY/1)				
		END OF DRILLING AT 34.5FT				
	36					
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-S6

PROJECT: USTs 25 & 26

INSPECTOR T. Coffey

SHEET 1 OF

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Asphalt w/ gravel sub base				
		silty SAND, dry, dark gray	3.4ppm			
	2	SAND, very fine grained, soft dry, very pale brown				
		silty SAND, very fine grained, firm, dry, very dark gray	3.9ppm			
	4					
		No Recovery				
	6					
	8					▽ WET BELOW 7.7 FT
		SAND, very fine grained, firm mottled, wet, light gray				
	10					
	12					
	14					
		clayey SAND, very fine grained, non plastic, dense, dark greenish gray				
	16					
	18					
	20					

HTRW DRILLING LOG

HOLE NUMBER AF-56

PROJECT: USTs 25 & 26

INSPECTOR T. Coffey

SHEET 2 OF 2

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Clayey SAND, same as above				
	22					
	24					
	26					
	28					
	30					
		END OF DRILLING AT 31.0 ft				
	32					
	34					
	36					
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-57

PROJECT: USTs 25 & 26 | INSPECTOR P. BOND | SHEET 1 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		silty SAND (SM), fine grained, subrounded, moist, loose, very dark grayish brown (10YR 3/2)				
	2	SAND (SP), fine grained, subrounded, loose, black (10YR 2/1) to brown (10YR 5/3)	0.2ppm			
	4					
		CLAY (CL), very stiff, intermingled w/ silty sand, light greenish gray (1G 7/1)	0.4ppm			
	6					∇ WET BELOW 6.0 FT
		black (2.5Y 2.5/1)	0.4ppm			
	8					
	10		0.5ppm			
		sandy CLAY (CL), non plastic, soft, greenish gray (1G 5/1)				
	12		0.6ppm			
	14	SAND (SP) fine grained, subrounded, saturated dark greenish gray (1G 4/1)	0.7ppm			
	16					
	18		0.7ppm			
	20					

HTRW DRILLING LOG

HOLE NUMBER AF-57

PROJECT: USTs 25 & 26 | INSPECTOR P. Bond | SHEET 2 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		SAND (SP), fine grained, some silt, subrounded, saturated, dark greenish gray (1G4/1)	0.7ppm			
	22					
			0.7ppm			
	24					
			0.8ppm			
	26					
			0.7ppm			
	28	light greenish gray (1G7/1), coarse grained				
	30		0.7ppm			
	32	CLAY (CL), stiff, plastic, sand lenses, dark greenish gray (2G3/1)	0.6ppm			
	34	silty SAND, fine grained, subrounded, loose, saturated, dark greenish gray (1G4/1)	0.7ppm			
	36					
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-57

PROJECT: USTs 25 & 26 | INSPECTOR P. Bond | SHEET 3 OF 3

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		NO SAMPLE COLLECTED 40-45 DUE TO SAMPLER STUCK IN AUGERS				
	42					
	44					
		sandy CLAY (CL), stiff, dark greenish gray (1G4/1)	1.1ppm			
	46					
		SAND (SP), coarse grained, subrounded, loose, greenish gray (1G 6/1)				
	48					
		silt, sand, & clay, soft, non plastic, some shell fragments at 49' dark greenish gray (1G4/1)				
	50		1.2ppm			
	52					
		SAND (SP), medium grained subrounded, loose, some shell fragments present, greenish gray (1G5/1)				
	54					
	56					
	58					
	60	END OF DRILLING AT 65.0FT				

HTRW DRILLING LOG

HOLE NUMBER AF-SB

PROJECT: USTs 25 & 26 | INSPECTOR P. Bond | SHEET 1 OF 1

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		CLAY w/ sand, stiff, plastic, moist, dark gray (7.5Y3/1)				
	2		2.6ppm			
	4		2.5ppm			
	6					
	8	silty SAND (sm), fine grained subrounded, loose to dense, saturated, grayish brown (2.5Y 5/2)	2.7ppm			▽ WET BELOW 7.5 FT
	10	color grades to gray (2.5 Y5/1)	1.2 ppm			
	12		1.3ppm			
		END OF DRILLING AT 13.6				
	14					
	16					
	18					
	20					

HTRW DRILLING LOG

HOLE NUMBER AF-59

PROJECT: USTs 25 & 26

INSPECTOR P. Bond

SHEET 1 OF 1

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		ASPHALT and gravel subbase				
	2	Silty SAND (SP), fine grained, subrounded, light gray (2.5Y 7/2) to grayish brown (2.5Y 5/2)				
	4					
		SILT (ML), moist, soft, black (2.5Y 2.5/1)				
	6	SAND (SP) fine grained, subrounded, loose, moist, light gray (2.5Y 7/2)				
	8					▽ WET BELOW 7.5 FT
	10	Silty SAND (SM), fine grained subrounded, loose, saturated, gray (2.5Y 6/1)				
	12					
	14	END OF DRILLING AT 14.9 FT				
	16					
	18					
	20					

HTRW DRILLING LOG

HOLE NUMBER AF-60

PROJECT: USTs 25 & 26

INSPECTOR T. Coffey

SHEET 1 OF 2

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Asphalt w/ gravel sub base				
		SAND, medium grained, soft, brown to very pale brown				
	2	silty sand, fine grained, soft, dry, very dark gray	41.3			
	4					
	6					
	8					▽ WET BELOW 8
		SAND, fine grained, wet, grayish brown				
	10					
	12					
	14					
	16					
	18					
	20					

HTRW DRILLING LOG

HOLE NUMBER AF-60

PROJECT: USTs 25 & 26

INSPECTOR T. Coffey

SHEET 2 OF 2

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		clayey SAND, fine grained <10% clay, nonplastic, wet greenish gray				
	22					
	24					
	26					
	28					
	30					
		END OF DRILLING AT 31.0 FT				
	32					
	34					
	36					
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-61

PROJECT: USTs 25 & 26 | INSPECTOR T. Coffey | SHEET 1 OF 2

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Asphalt w/ gravel subbase				
		SAND, fine grained, loose, dry, brown				
	2		0.8ppm			
		color change to light brownish gray				
	4	color change to very pale brown	0.7ppm			
	6					
						∇ WET BELOW 7.5 FT
	8					
		colorchange to grayish brown				
	10					
	12					
		Clayey SAND, fine grained cohesive, <20% clay, wet very pale brown to white				
	14					
	16					
	18					
	20					

HTRW DRILLING LOG

HOLE NUMBER AF-61

PROJECT: USTs 25 & 26

INSPECTOR T. Coffey

SHEET 2 OF 2

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		clayey SAND, fine grained, greenish gray				
	22					
	24					
	26					
	28					
	30					
		END OF DRILLING AT 31.0 ft				
	32					
	34					
	36					
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-62

PROJECT: USTs 25 & 26

INSPECTOR T. Coffey

SHEET 1 OF 1

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Asphalt w/ gravel subbase				
		SAND, fine to medium grained soft, dry, brown to light brownish gray				
	2					
	4					
	6					
	8					
		clayey SAND, fine to medium grained, cohesive, wet, very dark gray.				
	10					
	12					
	14					
	16					
	18					
	20					

APPENDIX V

SOIL AND SEDIMENT LABORATORY RESULTS

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No soil samples were collected as part of the Corrective Action Plan (CAP)–Part A investigation; however, analytical data sheets associated with the closure activities were provided in the CAP–Part A Report dated March 1999. Soil samples were collected during the initial CAP–Part B investigation, and the analytical results were provided in the CAP–Part B Report dated February 2000.

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APPENDIX VI

ALTERNATE CONCENTRATION LIMITS (ACLs) AND ALTERNATE THRESHOLD LEVELS (ATLs) CALCULATIONS

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Alternate concentration limits for constituents in groundwater [i.e., benzene, benzo(*a*)pyrene, and naphthalene] and alternate threshold levels for constituents in soil (i.e., benzene) were calculated in the Corrective Action Plan–Part B Report dated February 2000.

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APPENDIX VII

MONITORING WELL DETAILS

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Well construction diagrams associated with wells AF-01 through AF-39 that were installed as part of the initial Corrective Action Plan (CAP)–Part B investigation were provided in the CAP–Part B Report dated February 2000.

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Well Construction Diagrams Associated with Wells AF-40 through AF-62

(January 2000 through February 2001)

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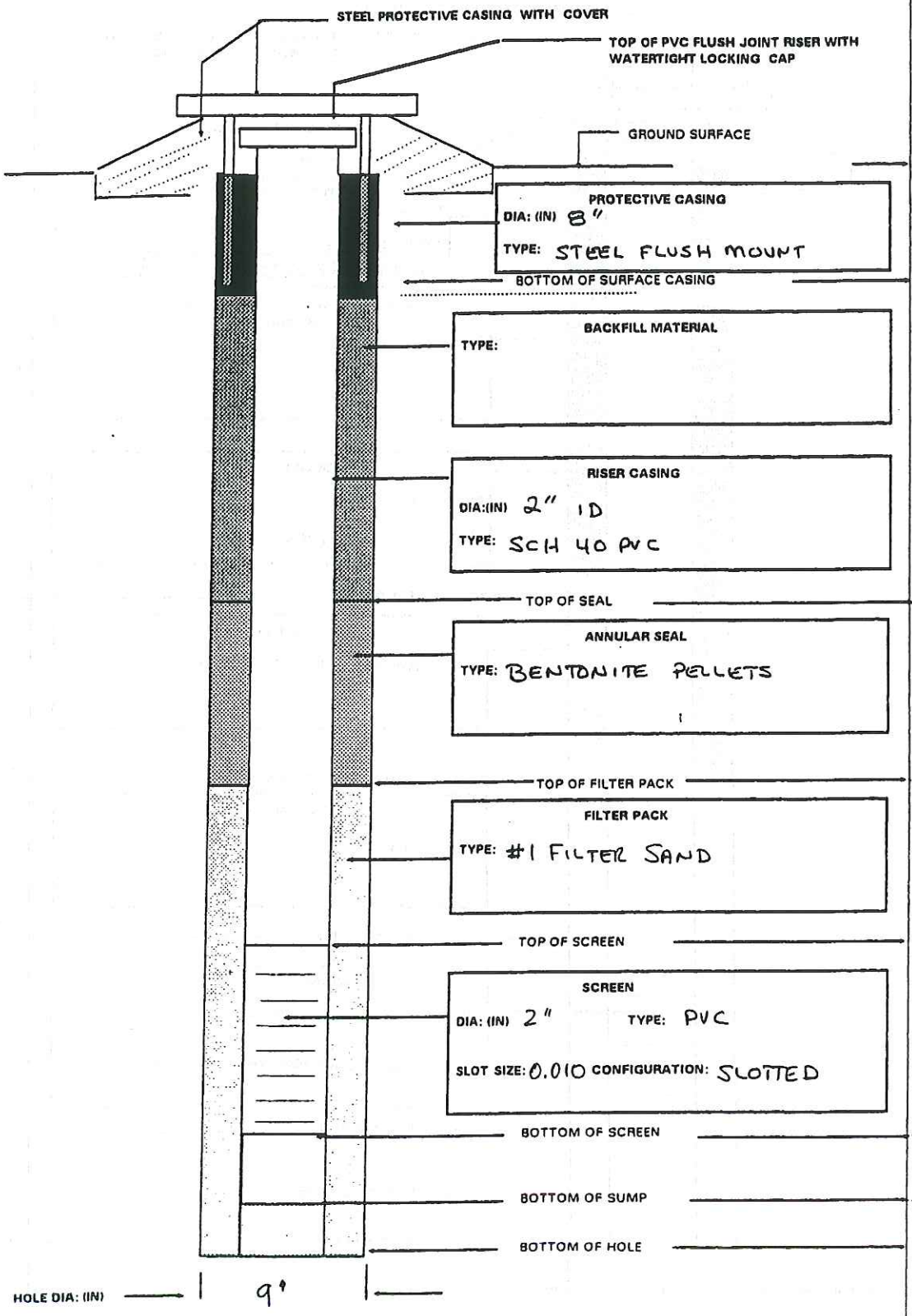
MONITORING WELL

PROJECT: USTs 25 & 26

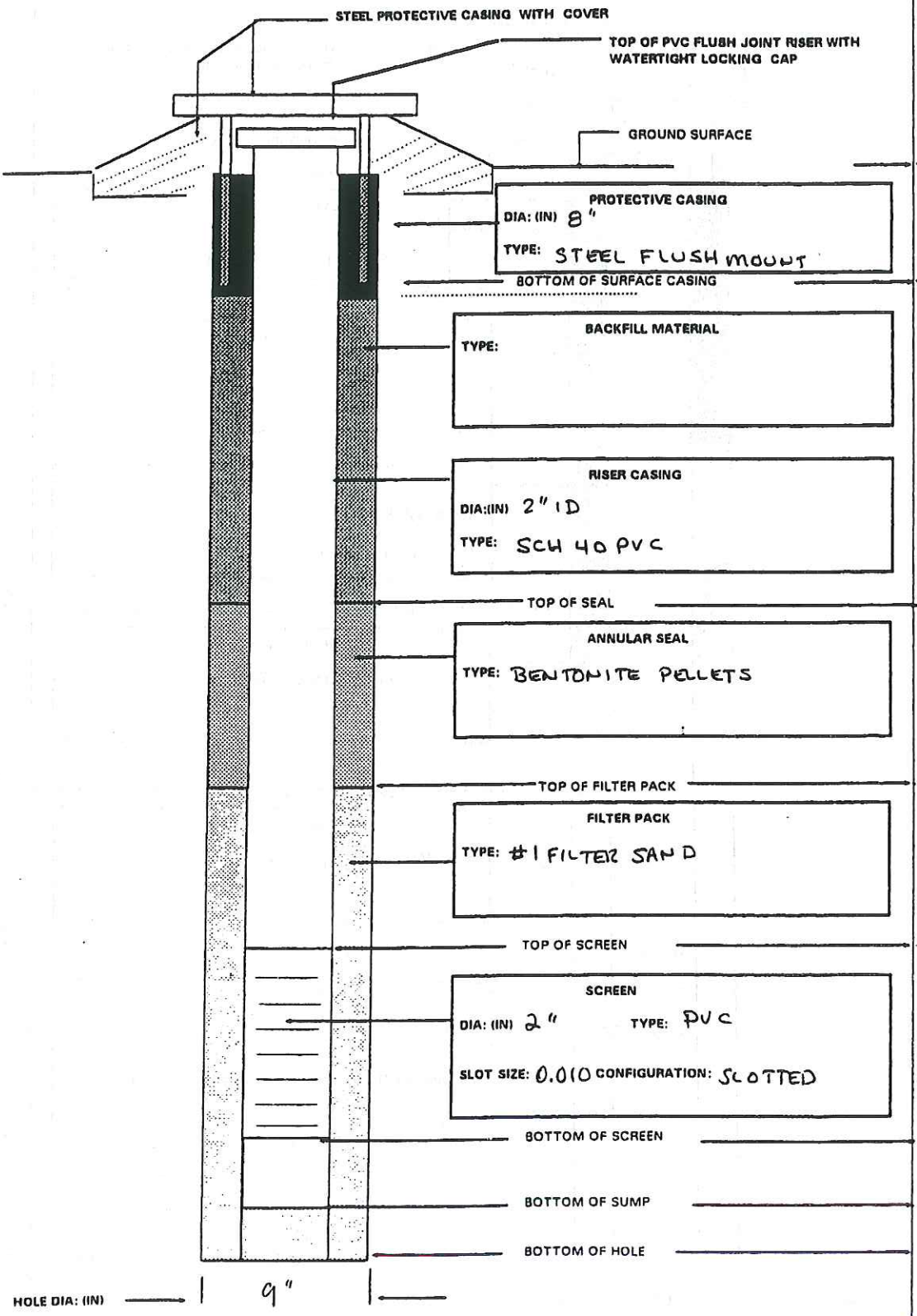
WELL NUMBER: AF-40	**BEGIN:** 1/15/00	**END:** 1/15/00
COORDINATES: N: E:	**REFERENCE POINT:**	**ELEVATION:** / **DATUM/UNITS:**
DATUM/UNITS:		



MONITORING WELL

PROJECT: USTs 25 & 26

WELL NUMBER: AF-41	BEGIN: 1/15/00	END: 1/15/00
COORDINATES: N: E:	REFERENCE POINT:	ELEVATION: DATUM/UNITS:
DATUM/UNITS:		

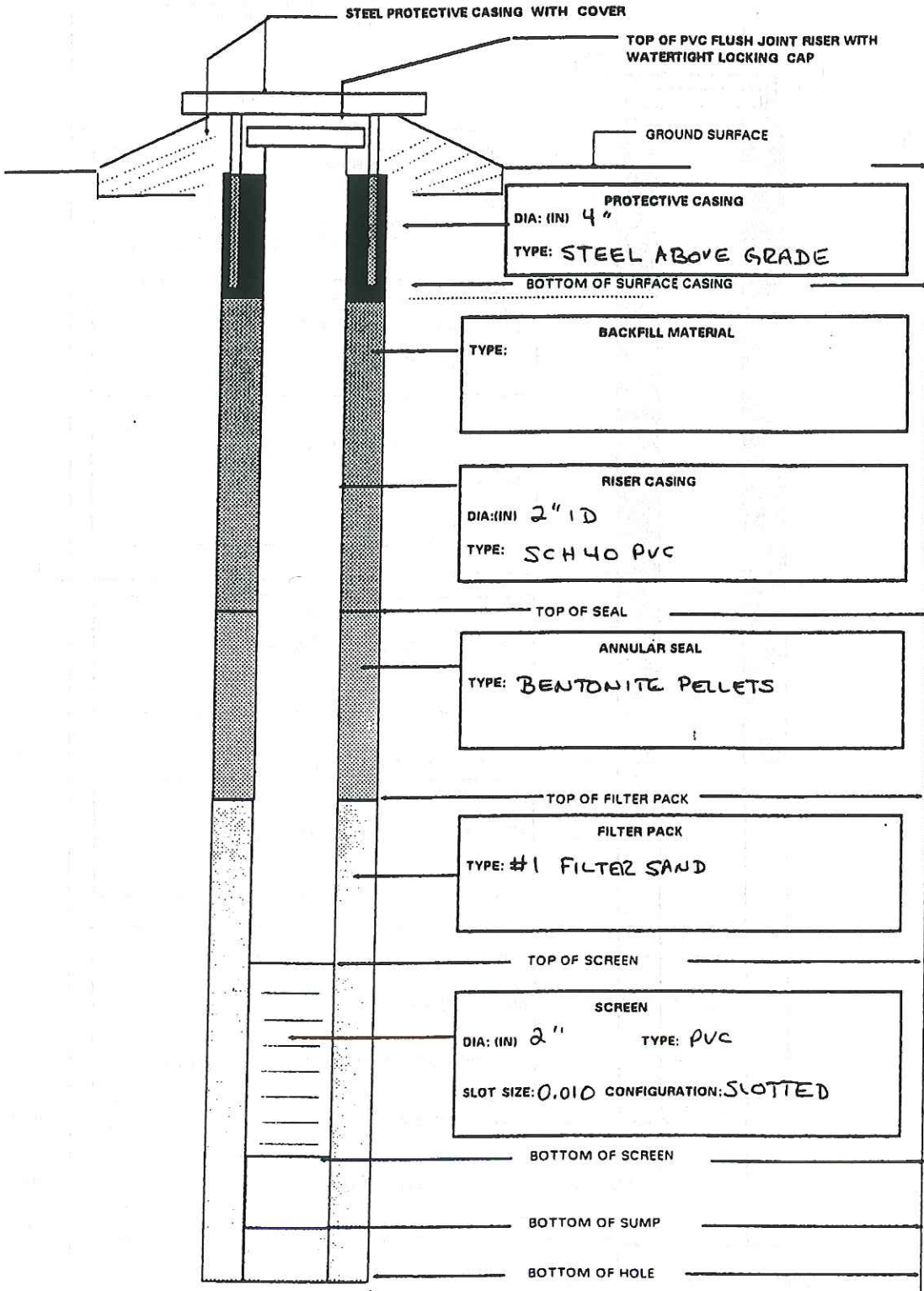


DEPTH (BGS)	ELEV
0	
24.4	
26.5	
28.5	
33.0	
33.2	
33.5	

MONITORING WELL

PROJECT: USTs 25 & 26

WELL NUMBER: AF-42	BEGIN: 1/15/00	END: 1/15/00
COORDINATES: N: E:	REFERENCE POINT:	ELEVATION: DATUM/UNITS:
DATUM/UNITS:		



DEPTH (BGS)	ELEV
0	
24.7	
26.5	
28.5	
33.0	
33.2	
33.5	

MONITORING WELL

PROJECT: USTs 25 & 26

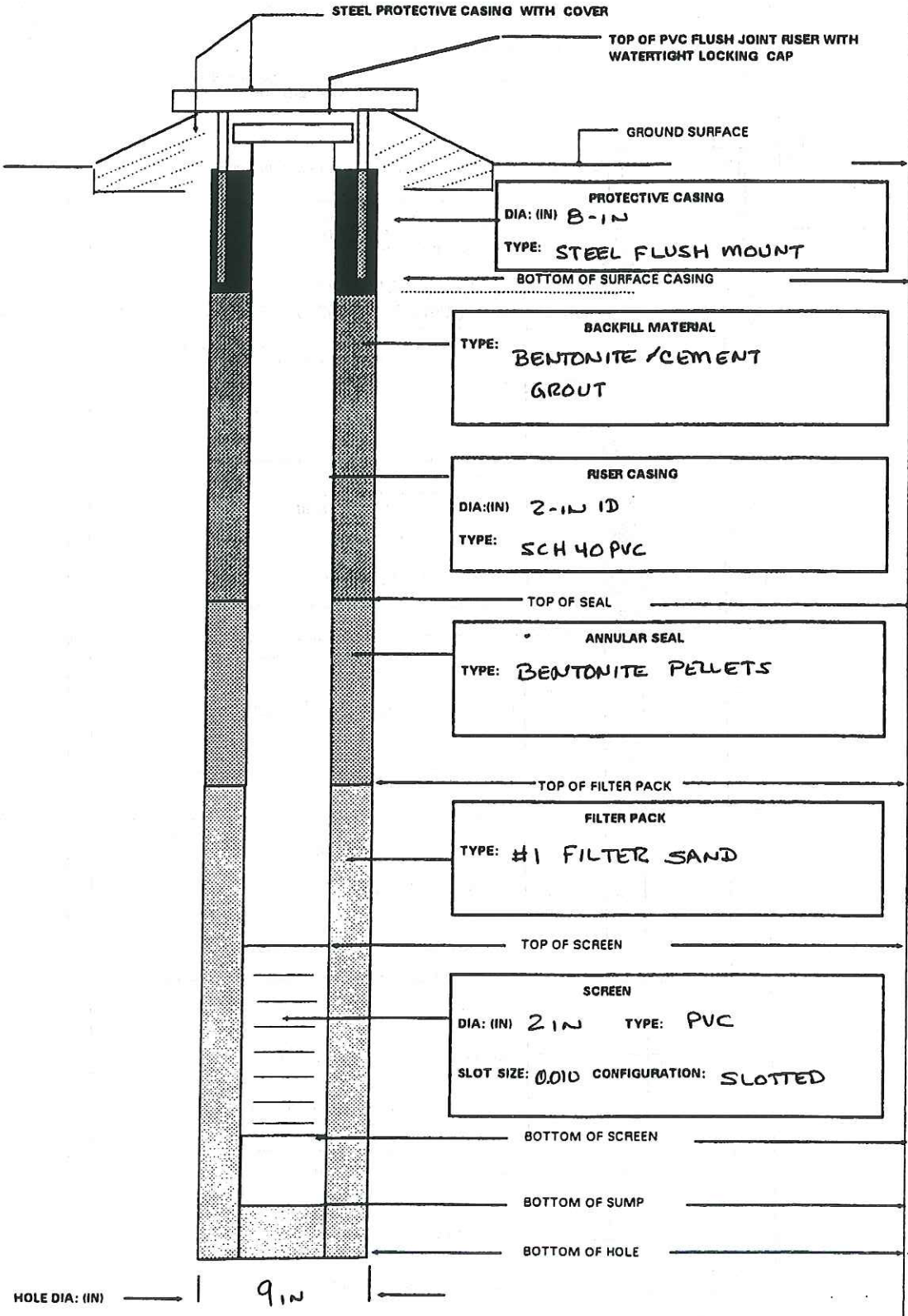
WELL NUMBER: AF-53

BEGIN: 2/4/01 **END:** 2/4/01

COORDINATES: N:
E:

DATUM/UNITS:

REFERENCE POINT: **ELEVATION:** **DATUM/UNITS:**



DEPTH (BGS)	ELEV
0	
1.0	
15.2	
18.1	
20.0	
30.0	
30.3	
31.0	

MONITORING WELL

PROJECT: USTs 25 & 26

WELL NUMBER: AF-S4

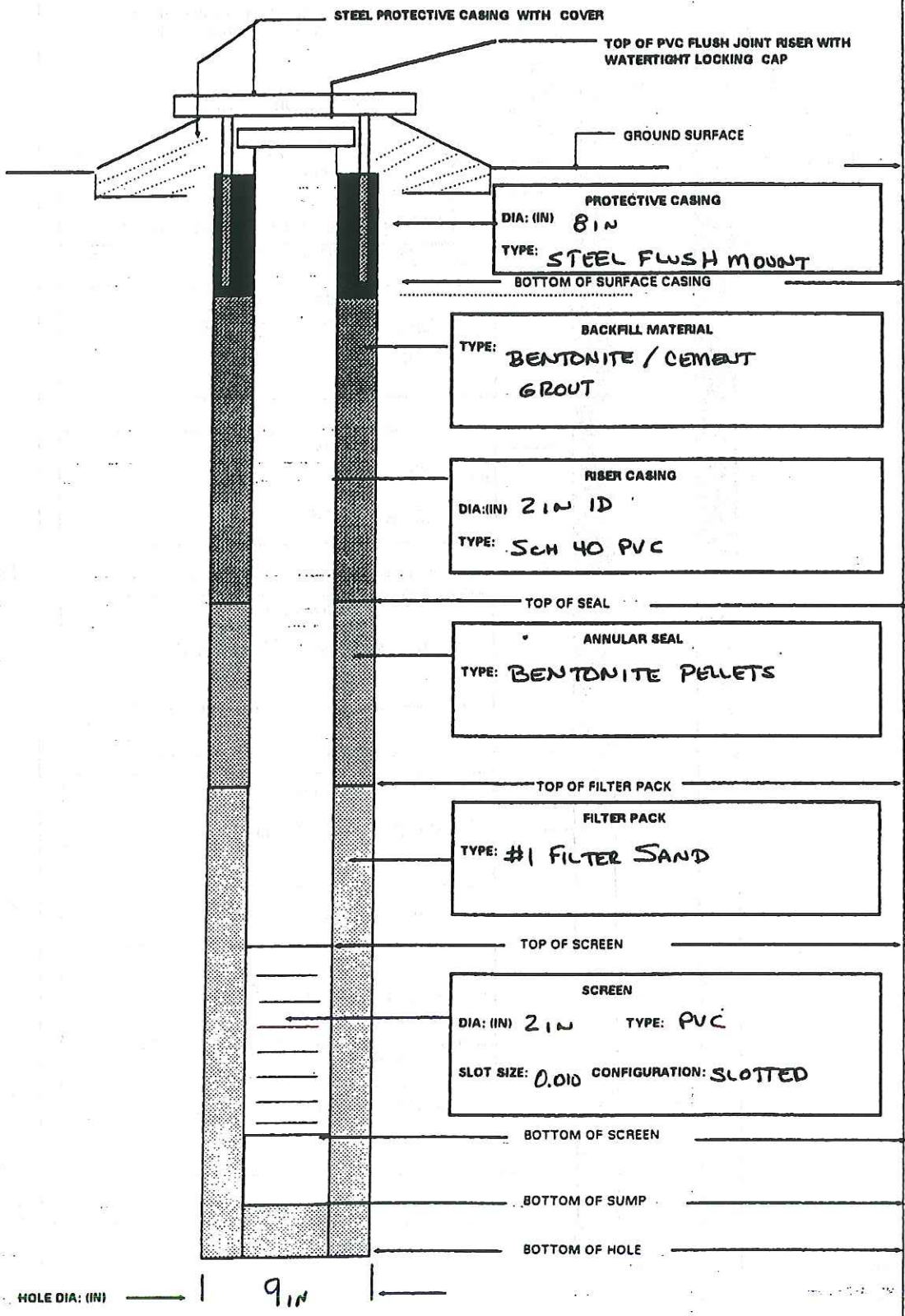
BEGIN: 2/4/01

END: 2/4/01

COORDINATES: N:
E:

DATUM/UNITS:

REFERENCE POINT: **ELEVATION:** **DATUM/UNITS:**



DEPTH (BGS)	ELEV
0	
1.0	
27.9	
29.9	
32.4	
42.4	
42.6	
43.5	

MONITORING WELL

PROJECT: USTs 25 & 26

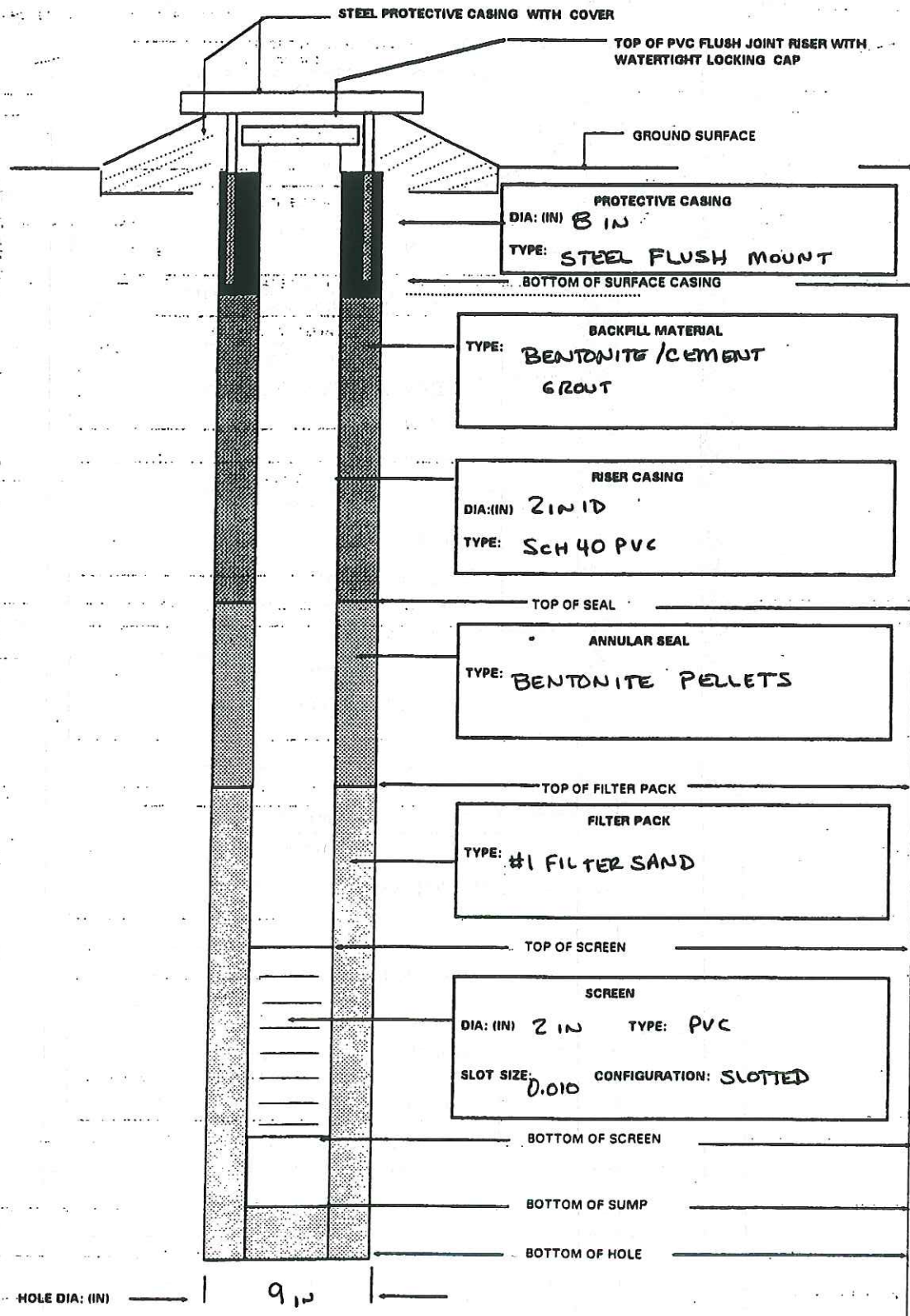
WELL NUMBER: AF-55

BEGIN: 2/4/01 **END:** 2/4/01

COORDINATES: N: E:

REFERENCE POINT: **ELEVATION:** **DATUM/UNITS:**

DATUM/UNITS:



DEPTH (BGS)	ELEV
0	
1.0	
18.6	
21.9	
24.0	
34.0	
34.3	
34.5	

MONITORING WELL

PROJECT: USTs 25 & 26

WELL NUMBER: AF -56

BEGIN: 2/4/01

END: 2/4/01

COORDINATES: N:

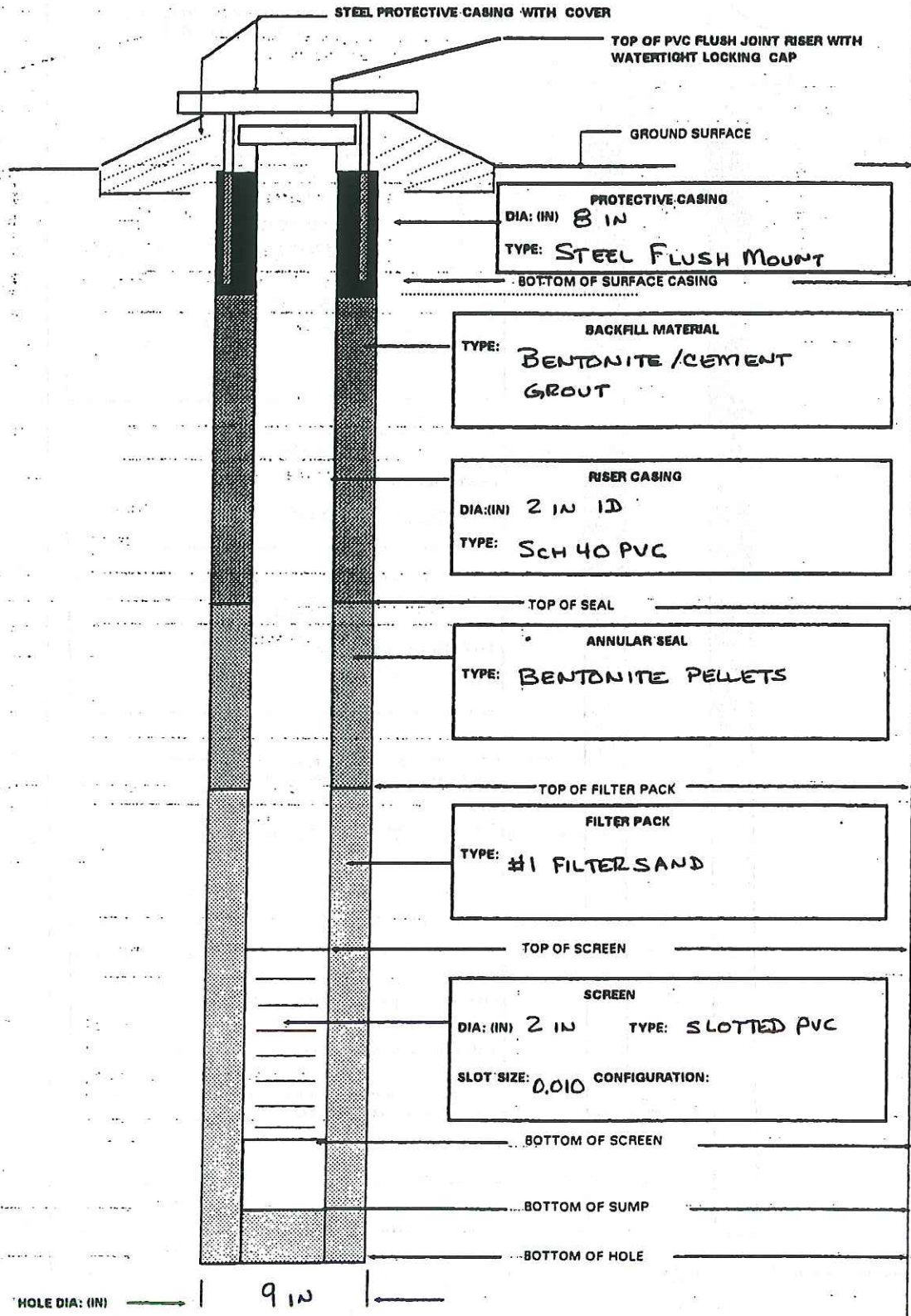
E:

REFERENCE POINT:

ELEVATION:

DATUM/UNITS:

DATUM/UNITS:



DEPTH (BGS)	ELEV
0	
1.0	
15.1	
18.1	
19.9	
29.9	
30.2	
31.0	

MONITORING WELL

PROJECT: USTs 25 & 26

WELL NUMBER: AF-57

BEGIN: 2/3/01

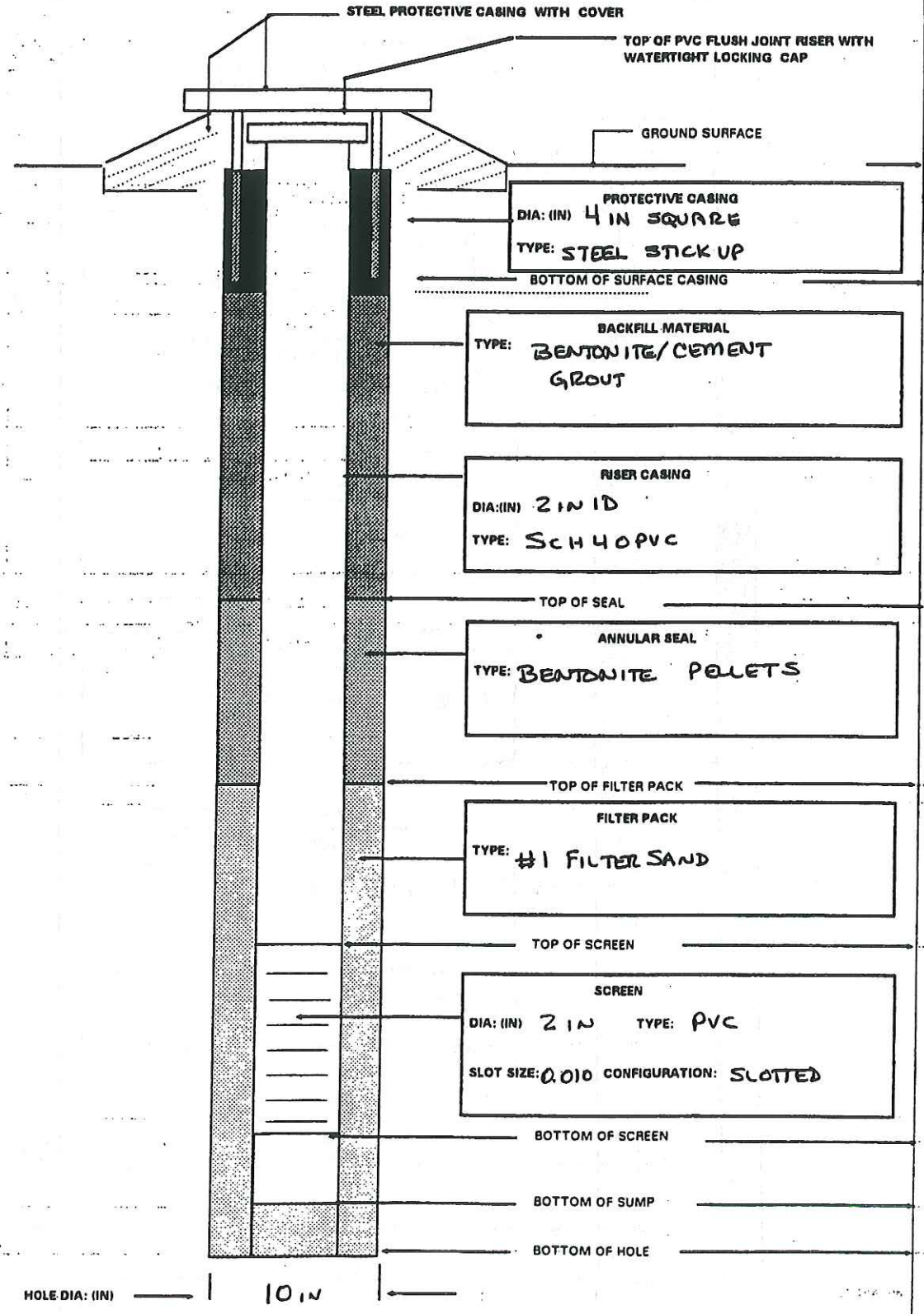
END: 2/4/01

COORDINATES: N:

E:

DATUM/UNITS:

REFERENCE POINT: ELEVATION: DATUM/UNITS:



DEPTH (BGS)	ELEV
0	
2.2	
52.7	
56.1	
57.8	
62.8	
63.0	
65.0	

MONITORING WELL

PROJECT: USTs 25 & 26

WELL NUMBER: AF-5B

BEGIN: 2/5/01

END: 2/5/01

COORDINATES: N:

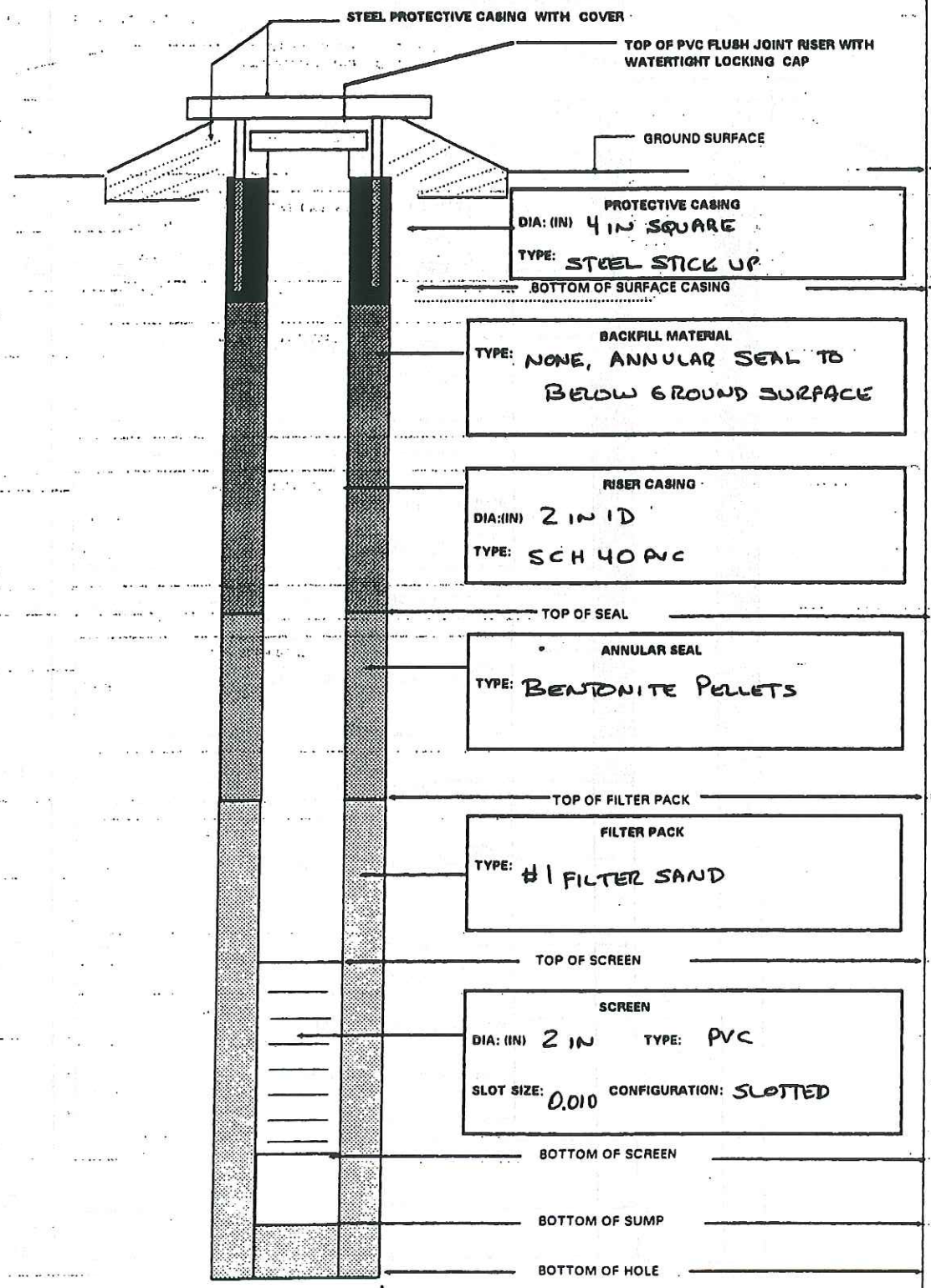
E:

DATUM/UNITS:

REFERENCE POINT:

ELEVATION:

DATUM/UNITS:



DEPTH (BGS)	ELEV
0	
2.0	
0.6	
2.2	
2.7	
12.7	
13.0	
13.0	

MONITORING WELL

PROJECT: USTs 25 & 26

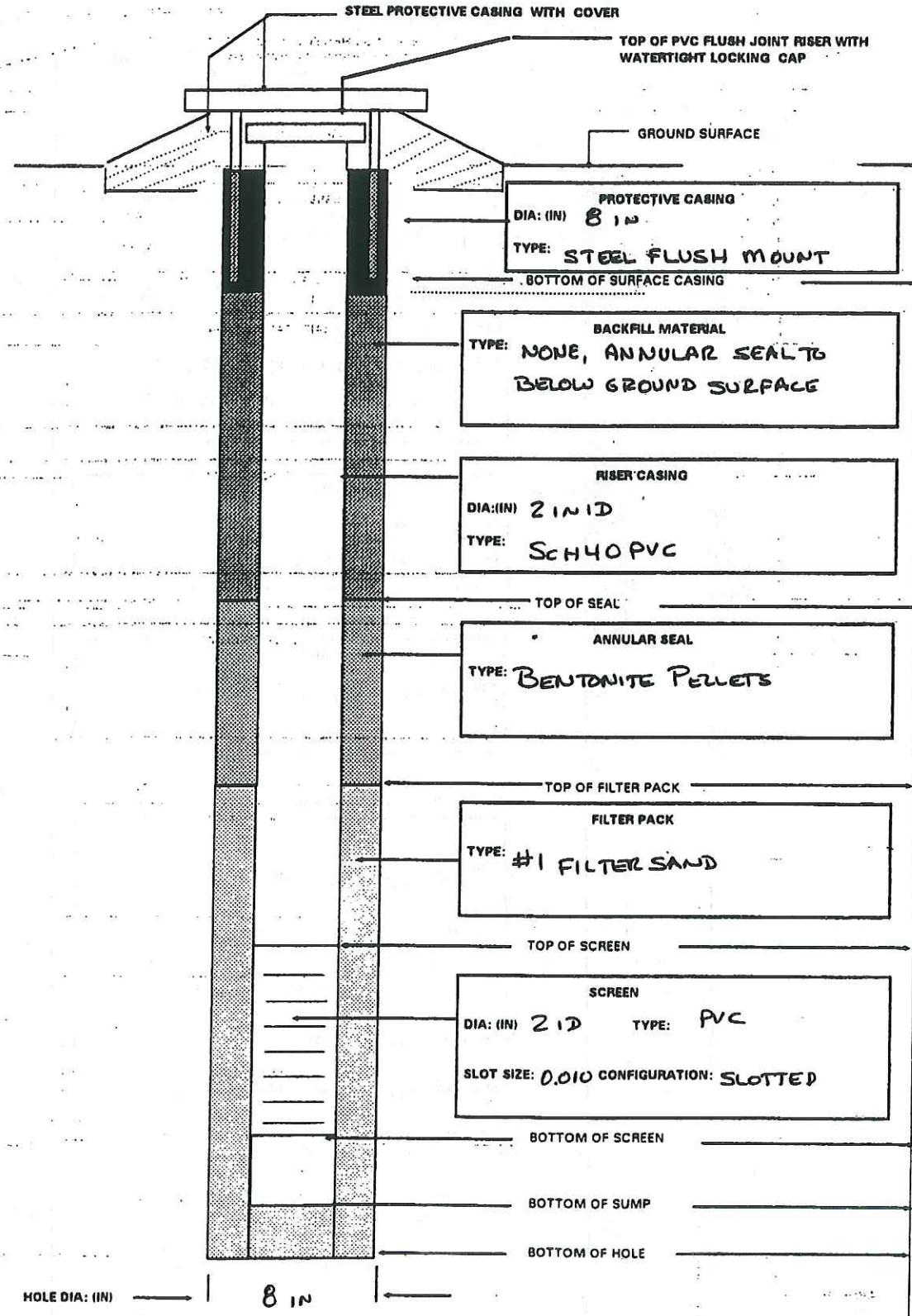
WELL NUMBER: AF-59

BEGIN: 2/4/01 **END:** 2/4/01

COORDINATES: N: E:

REFERENCE POINT: **ELEVATION:** **DATUM/UNITS:**

DATUM/UNITS:



DEPTH (BGS)	ELEV
0	
1.0	
0.5	
1.6	
2.3	
12.3	
12.7	
14.9	

MONITORING WELL

PROJECT: USTs 25 & 26

WELL NUMBER: AF-60

BEGIN: 2/5/01

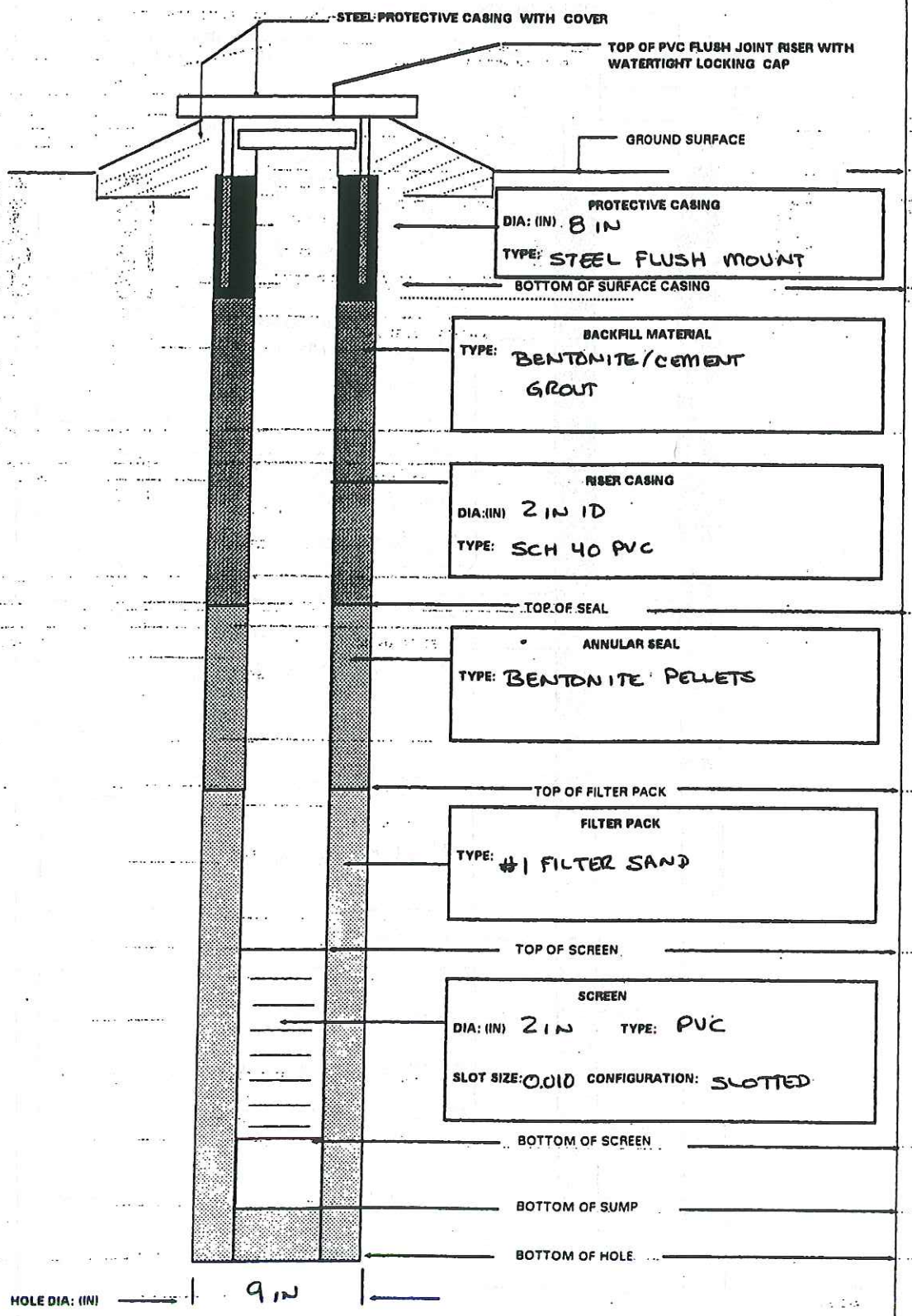
END: 2/5/01

COORDINATES: N:

E:

DATUM/UNITS:

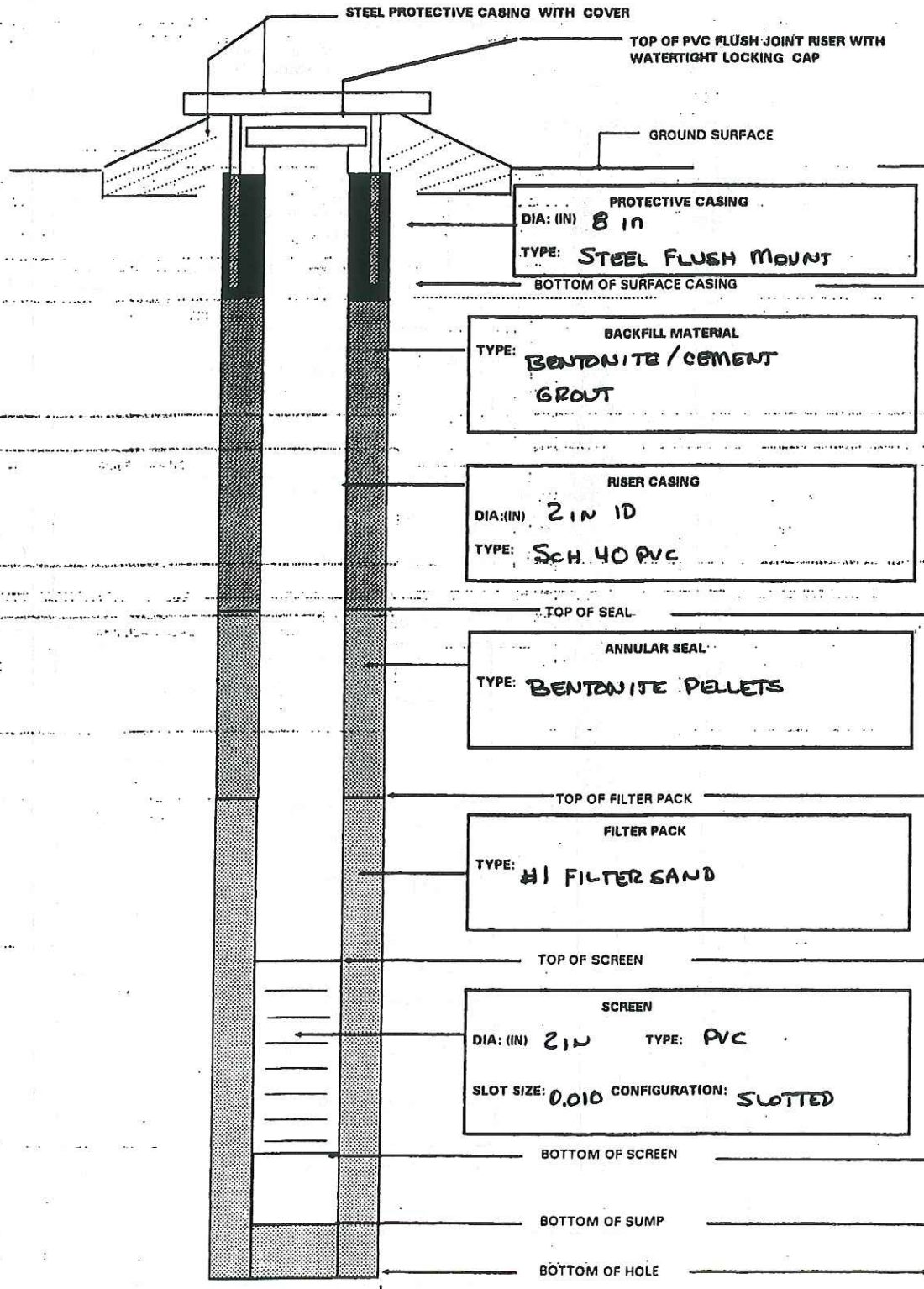
REFERENCE POINT: **ELEVATION:** **DATUM/UNITS:**



MONITORING WELL

PROJECT: USTs 25 & 26

WELL NUMBER: AF-61	BEGIN: 2/5/01	END: 2/5/01
COORDINATES: N: E:	REFERENCE POINT:	ELEVATION: DATUM/UNITS:
DATUM/UNITS:		



DEPTH (BGS)	ELEV
0	
1.0	
15.1	
18.0	
20.0	
30.0	
30.3	
31.0	

MONITORING WELL

PROJECT: USTs 25 & 26

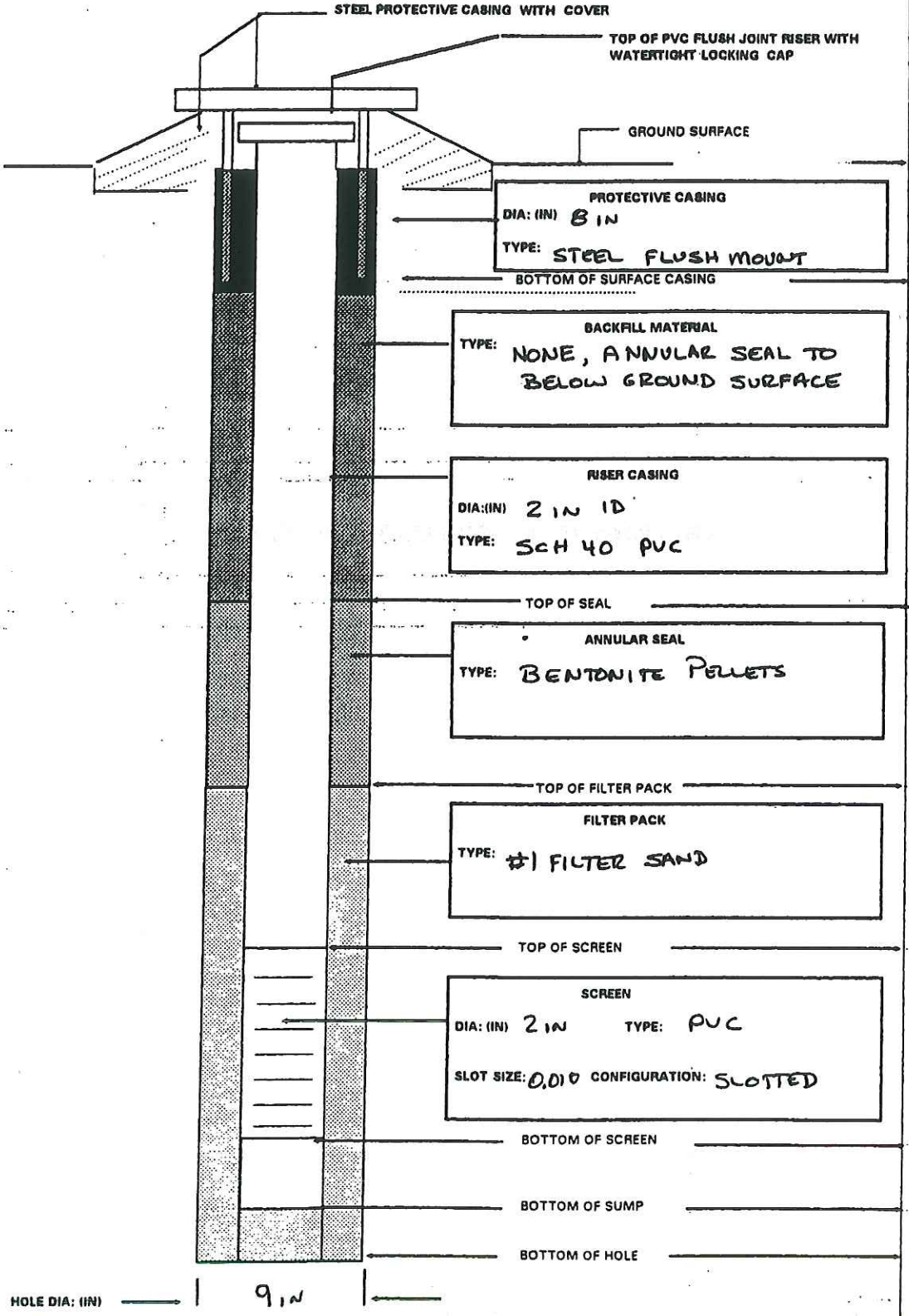
WELL NUMBER: AF-62

BEGIN: 2/5/01 **END:** 2/5/01

COORDINATES: N:
E:

DATUM/UNITS:

REFERENCE POINT: **ELEVATION:** **DATUM/UNITS:**



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APPENDIX VIII

GROUNDWATER AND SURFACE WATER LABORATORY RESULTS

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CAP–PART B GROUNDWATER SAMPLING

SEPTEMBER 1999

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Table VIII-A. Summary of September 1999 Groundwater Analytical Results

Station: Sample ID: Screened Interval (feet BGS): Collection Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-01 AF0122 2.5 – 12.5 26-Sep-99 (µg/L)	AF-02 AF0222 2.0 – 12.0 26-Sep-99 (µg/L)	AF-03 AF0322 2.0 – 12.0 26-Sep-99 (µg/L)	AF-04 AF0422 2.0 – 12.0 26-Sep-99 (µg/L)	AF-05 AF0522 2.0 – 12.0 26-Sep-99 (µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	—	2 U	2 U	2 U	2 U	2 U
1,1,2,2-Tetrachloroethane	—	10.8	2 U	2 U	2 U	2 U	2 U
1,1,2-Trichloroethane	5	41.99	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	—	—	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethene	7	3.2	2 U	2 U	2 U	2 U	2 U
1,2-Dichloroethane	5	98.6	2 U	2 U	2 U	2 U	2 U
1,2-Dichloroethene	—	—	2 U	2 U	2 U	2 U	2 U
1,2-Dichloropropane	—	—	2 U	2 U	2 U	2 U	2 U
1,3-*cis*-Dichloropropene	—	1,700	2 U	2 U	2 U	2 U	2 U
1,3-*trans*-Dichloropropene	—	1,700	2 U	2 U	2 U	2 U	2 U
2-Butanone	—	—	5 R	5 R	5 U	5 U	5 U
2-Hexanone	—	—	5 U	5 UJ	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	5 U	11.1 J	5 U	8.9 U	10.6 U
Benzene	5	71.28	2 U	8.4 =	2.2 =	2 U	11.8 =
Bromodichloromethane	—	—	5 U	5 U	5 U	5 U	5 U
Bromoform	—	360	2 U	2 U	2 U	2 U	2 U
Bromomethane	—	—	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide	—	—	5 U	5 U	5 UJ	5 UJ	5 U
Carbon Tetrachloride	5	4.42	2 U	2 U	2 U	2 U	2 U
Chlorobenzene	100	21,000	2 U	2 U	2 U	2 U	2 U
Chloroethane	—	—	2 U	2 U	2 U	2 U	2 U
Chloroform	—	470.8	2 U	2 U	2 U	2 U	2 U
Chloromethane	—	—	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	—	22	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	700	28,718	2 U	2 U	1.6 J	2 U	9.5 =
Methylene Chloride	—	—	1.2 J	0.54 J	2 U	2 U	2 U
Styrene	100	—	2 U	2 U	2 U	2 U	2 U
Tetrachloroethene	5	8.85	2 U	2 U	2 U	2 U	2 U
Toluene	1,000	200,000	2 U	0.65 J	2 U	2 U	3 =
Trichloroethene	5	80.7	2 U	2 U	2 U	2 U	2 U
Vinyl Chloride	2	525	2 U	2 U	2 U	2 U	2 U
Xylenes, Total	10,000	—	6 U	6 U	0.96 J	6 U	46.5 =

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

Laboratory Qualifiers

U Indicates the compound was not detected at the concentration reported.

UJ Indicates the compound was not detected above an approximated sample quantitation limit.

J Indicates the value for the compound is an estimated value.

= Indicates the compound was detected at the concentration reported.

R Indicates the result was rejected during the data validation process.

Table VIII-A. Summary of September 1999 Groundwater Analytical Results (continued)

Station: Sample ID: Screened Interval (feet BGS): Collection Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-07 AF0722 2.5 – 12.5 26-Sep-99 (µg/L)	AF-08 AF0822 2.5 – 12.5 26-Sep-99 (µg/L)	AF-09 AF0922 2.0 – 12.0 26-Sep-99 (µg/L)	AF-11 AF1122 1.0 – 11.0 26-Sep-99 (µg/L)	AF-12 AF1222 2.5 – 12.5 26-Sep-99 (µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	—	10 U	2 U	2 U	2 U	4 U
1,1,2,2-Tetrachloroethane	—	10.8	10 U	2 U	2 U	2 U	4 U
1,1,2-Trichloroethane	5	41.99	10 U	2 U	2 U	2 U	4 U
1,1-Dichloroethane	—	—	10 U	2 U	2 U	2 U	4 U
1,1-Dichloroethene	7	3.2	10 U	2 U	2 U	2 U	4 U
1,2-Dichloroethane	5	98.6	10 U	2 U	2 U	2 U	4 U
1,2-Dichloroethene	—	—	10 U	2 U	3.9 =	2 U	4 U
1,2-Dichloropropane	—	—	10 U	2 U	2 U	2 U	4 U
1,3-*cis*-Dichloropropene	—	1,700	10 U	2 U	2 U	2 U	4 U
1,3-*trans*-Dichloropropene	—	1,700	10 U	2 U	2 U	2 U	4 U
2-Butanone	—	—	25 U	5 U	5 R	5 R	10 R
2-Hexanone	—	—	40.2 =	5 U	5 U	5 U	10 UJ
4-Methyl-2-pentanone	—	—	25 U	5 U	5 U	5 U	10 U
Acetone	—	—	25 U	5 U	5 R	5 U	10 R
Benzene	5	71.28	9,130 =	2 U	11.8 =	2 U	23.4 =
Bromodichloromethane	—	—	25 U	5 U	5 U	5 U	10 U
Bromoform	—	360	10 U	2 U	2 U	2 U	4 U
Bromomethane	—	—	10 U	2 U	2 U	2 U	4 U
Carbon Disulfide	—	—	25 UJ	1.1 J	5 U	5 U	10 U
Carbon Tetrachloride	5	4.42	10 U	2 U	2 U	2 U	4 U
Chlorobenzene	100	21,000	10 U	2 U	2 U	2 U	4 U
Chloroethane	—	—	10 U	2 U	2 U	2 U	4 U
Chloroform	—	470.8	10 U	2 U	2 U	2 U	4 U
Chloromethane	—	—	10 U	2 U	2 U	2 U	4 U
Dibromochloromethane	—	22	10 U	2 U	2 U	2 U	4 U
Ethylbenzene	700	28,718	493 =	2 U	27.7 =	2 U	54.8 =
Methylene Chloride	—	—	13.1 U	2 U	3.9 U	2 U	2 J
Styrene	100	—	10 U	2 U	2 U	2 U	4 U
Tetrachloroethene	5	8.85	10 U	2 U	2 U	2 U	4 U
Toluene	1,000	200,000	24.8 =	2 U	2 U	2 U	4 U
Trichloroethene	5	80.7	10 U	2 U	2 U	2 U	4 U
Vinyl Chloride	2	525	10 U	2 U	2 U	2 U	4 U
Xylenes, Total	10,000	—	246 =	6 U	1.4 J	6 U	8.5 J

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

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Table VIII-A. Summary of September 1999 Groundwater Analytical Results (continued)

Station: Sample ID: Screened Interval (feet BGS): Collection Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-13 AF1322 2.5 – 12.5 26-Sep-99 (µg/L)	AF-14 AF1422 1.4 – 11.4 26-Sep-99 (µg/L)	AF-15 AF1522 1.5 – 11.5 26-Sep-99 (µg/L)	AF-16 AF1622 1.5 – 11.5 26-Sep-99 (µg/L)	AF-17 AF1722 2.5 – 12.5 26-Sep-99 (µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	—	2 U	2 U	2 U	2 U	2 U
1,1,2,2-Tetrachloroethane	—	10.8	2 U	2 U	2 U	2 U	2 U
1,1,2-Trichloroethane	5	41.99	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	—	—	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethene	7	3.2	2 U	2 U	2 U	2 U	2 U
1,2-Dichloroethane	5	98.6	2 U	2 U	2 U	2 U	2 U
1,2-Dichloroethene	—	—	1.5 J	2 U	2 U	2 U	19.9 =
1,2-Dichloropropane	—	—	2 U	2 U	2 U	2 U	2 U
1,3-*cis*-Dichloropropene	—	1,700	2 U	2 U	2 U	2 U	2 U
1,3-*trans*-Dichloropropene	—	1,700	2 U	2 U	2 U	2 U	2 U
2-Butanone	—	—	5 U	5 U	5 R	5 U	5 U
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	5 U	7.8 U	5 R	5.2 U	5 U
Benzene	5	71.28	2 U	2 U	2 U	2 U	14 =
Bromodichloromethane	—	—	5 U	5 U	5 U	5 U	5 U
Bromoform	—	360	2 U	2 U	2 U	2 U	2 U
Bromomethane	—	—	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide	—	—	5 U	2 J	5 U	5 UJ	5 UJ
Carbon Tetrachloride	5	4.42	2 U	2 U	2 U	2 U	2 U
Chlorobenzene	100	21,000	2 U	2 U	2 U	2 U	2 U
Chloroethane	—	—	2 U	2 U	2 U	2 U	2 U
Chloroform	—	470.8	2 U	2 U	2 U	2 U	2 U
Chloromethane	—	—	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	—	22	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	700	28,718	2 U	2 U	2 U	2 U	2 U
Methylene Chloride	—	—	2 U	2 U	2 U	2 U	2 U
Styrene	100	—	2 U	2 U	2 U	2 U	2 U
Tetrachloroethene	5	8.85	2 U	2 U	2 U	2 U	2 U
Toluene	1,000	200,000	2 U	2 U	2 U	2 U	2 U
Trichloroethene	5	80.7	2 U	2 U	2 U	2 U	112 =
Vinyl Chloride	2	525	2 U	2 U	2 U	2 U	2 U
Xylenes, Total	10,000	—	6 U	6 U	6 U	6 U	6 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

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Table VIII-A. Summary of September 1999 Groundwater Analytical Results (continued)

Station: Sample ID: Screened Interval (feet BGS): Collection Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-18 AF1822 1.5 – 11.5 26-Sep-99 (µg/L)	AF-19 AF1922 1.5 – 11.5 26-Sep-99 (µg/L)	AF-20 AF2022 3.0 – 13.0 26-Sep-99 (µg/L)	AF-23 AF2322 3.0 – 13.0 26-Sep-99 (µg/L)	AF-24 AF2422 2.0 – 12.0 26-Sep-99 (µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	—	2 U	2 U	2 U	2 U	2 U
1,1,2,2-Tetrachloroethane	—	10.8	2 U	2 U	2 U	2 U	2 U
1,1,2-Trichloroethane	5	41.99	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	—	—	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethene	7	3.2	2 U	2 U	2 U	2 U	2 U
1,2-Dichloroethane	5	98.6	2 U	2 U	2 U	2 U	2 U
1,2-Dichloroethene	—	—	13.2 =	8.3 =	1.7 J	5.3 =	2 U
1,2-Dichloropropane	—	—	2 U	2 U	2 U	2 U	2 U
1,3-*cis*-Dichloropropene	—	1,700	2 U	2 U	2 U	2 U	2 U
1,3-*trans*-Dichloropropene	—	1,700	2 U	2 U	2 U	2 U	2 U
2-Butanone	—	—	5 R	5 R	5 R	5.9 J	5 U
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	5 R	5 R	5 R	5 U	5 U
Benzene	5	71.28	10.3 =	3.5 =	2.1 =	1.1 J	2 U
Bromodichloromethane	—	—	5 U	5 U	5 U	5 U	5 U
Bromoform	—	360	2 U	2 U	2 U	2 U	2 U
Bromomethane	—	—	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	5 UJ
Carbon Tetrachloride	5	4.42	2 U	2 U	2 U	2 U	2 U
Chlorobenzene	100	21,000	2 U	2 U	2 U	2 U	2 U
Chloroethane	—	—	2 U	2 U	2 U	2 U	2 U
Chloroform	—	470.8	2 U	2 U	2 U	2 U	2 U
Chloromethane	—	—	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	—	22	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	700	28,718	2 U	2 U	2 U	2 U	2 U
Methylene Chloride	—	—	4.2 U	2.3 U	4.5 U	2 U	2 U
Styrene	100	—	2 U	2 U	2 U	2 U	2 U
Tetrachloroethene	5	8.85	2 U	2 U	2 U	2 U	2 U
Toluene	1,000	200,000	2 U	2 U	2 U	2 U	2 U
Trichloroethene	5	80.7	1.6 J	2.6 =	2 U	1.6 J	2 U
Vinyl Chloride	2	525	2 U	2 U	2 U	2 U	2 U
Xylenes, Total	10,000	—	6 U	6 U	6 U	6 U	6 U

NOTES:

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Table VIII-A. Summary of September 1999 Groundwater Analytical Results (continued)

Station: Sample ID: Screened Interval (feet BGS): Collection Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-25 AF2522 0.5 – 10.5 26-Sep-99 (µg/L)	AF-26 AF2622 2.0 – 12.0 26-Sep-99 (µg/L)	AF-27 AF2722 1.0 – 11.0 26-Sep-99 (µg/L)	AF-28 AF2822 2.0 – 12.0 26-Sep-99 (µg/L)	AF-29 AF2922 2.0 – 12.0 26-Sep-99 (µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	—	2 U	4 U	20 U	2 U	2 U
1,1,2,2-Tetrachloroethane	—	10.8	2 U	4 U	20 U	2 U	2 U
1,1,2-Trichloroethane	5	41.99	2 U	4 U	20 U	2 U	2 U
1,1-Dichloroethane	—	—	2 U	4 U	20 U	2 U	2 U
1,1-Dichloroethene	7	3.2	0.66 J	4 U	20 U	0.67 J	2 U
1,2-Dichloroethane	5	98.6	2 U	4 U	20 U	2 U	2 U
1,2-Dichloroethene	—	—	40.2 =	27.9 =	49.3 =	41.9 =	9.5 =
1,2-Dichloropropane	—	—	2 U	4 U	20 U	2 U	2 U
1,3-*cis*-Dichloropropene	—	1,700	2 U	4 U	20 U	2 U	2 U
1,3-*trans*-Dichloropropene	—	1,700	2 U	4 U	20 U	2 U	2 U
2-Butanone	—	—	5 U	10 R	50 R	5 U	5 R
2-Hexanone	—	—	5 U	10 U	50 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	10 U	50 U	5 U	5 U
Acetone	—	—	5 U	10 U	50 U	5 U	5 U
Benzene	5	71.28	4.8 =	16.6 =	5.1 J	3.9 =	53.6 =
Bromodichloromethane	—	—	5 U	10 U	50 U	5 U	5 U
Bromoform	—	360	2 U	4 U	20 U	2 U	2 U
Bromomethane	—	—	2 U	4 U	20 U	2 U	2 U
Carbon Disulfide	—	—	5 U	10 U	50 U	5 UJ	5 U
Carbon Tetrachloride	5	4.42	2 U	4 U	20 U	2 U	2 U
Chlorobenzene	100	21,000	2 U	4 U	20 U	2 U	2 U
Chloroethane	—	—	2 U	4 U	20 U	2 U	2 U
Chloroform	—	470.8	2 U	4 U	20 U	2 U	2 U
Chloromethane	—	—	2 U	4 U	20 U	2 U	2 U
Dibromochloromethane	—	22	2 U	4 U	20 U	2 U	2 U
Ethylbenzene	700	28,718	0.59 J	4 U	20 U	2 U	2 U
Methylene Chloride	—	—	2 U	1.5 J	12.8 J	2 U	1.2 J
Styrene	100	—	2 U	4 U	20 U	2 U	2 U
Tetrachloroethene	5	8.85	2 U	4 U	20 U	2 U	2 U
Toluene	1,000	200,000	2 U	4 U	20 U	2 U	2 U
Trichloroethene	5	80.7	243 =	116 =	596 =	60.9 =	11 =
Vinyl Chloride	2	525	0.6 J	4 U	20 U	2 U	1.8 J
Xylenes, Total	10,000	—	6 U	12 U	60 U	6 U	6 U

NOTES:

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Table VIII-A. Summary of September 1999 Groundwater Analytical Results (continued)

Station: Sample ID: Screened Interval (feet BGS): Collection Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-30 AF3012 11.0 – 15.0 26-Sep-99 (µg/L)	AF-30 AF3022 16.0 – 20.0 26-Sep-99 (µg/L)	AF-30 AF3032 21.0 – 25.0 26-Sep-99 (µg/L)	AF-30 AF3042 26.0 – 30.0 26-Sep-99 (µg/L)	AF-30 AF3052 31.0 – 35.0 26-Sep-99 (µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	—	2 U	2 U	2 U	2 U	2 U
1,1,2,2-Tetrachloroethane	—	10.8	2 U	2 U	2 U	2 U	2 U
1,1,2-Trichloroethane	5	41.99	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	—	—	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethene	7	3.2	2 U	2 U	0.74 J	2.2 =	0.62 J
1,2-Dichloroethane	5	98.6	2 U	2 U	2 U	2 U	2 U
1,2-Dichloroethene	—	—	3.3 =	24 =	33 =	90.3 =	24.3 =
1,2-Dichloropropane	—	—	2 U	2 U	2 U	2 U	2 U
1,3-*cis*-Dichloropropene	—	1,700	2 U	2 U	2 U	2 U	2 U
1,3-*trans*-Dichloropropene	—	1,700	2 U	2 U	2 U	2 U	2 U
2-Butanone	—	—	5 U	5 U	5 R	5 U	5 R
2-Hexanone	—	—	14.2 =	15.5 =	5 UJ	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	8.4 U	10.8 U	5 R	5 U	5 R
Benzene	5	71.28	7,670 J	2,290 =	37.9 =	16.2 =	11 =
Bromodichloromethane	—	—	5 U	5 U	5 U	5 U	5 U
Bromoform	—	360	2 U	2 U	2 U	2 U	2 U
Bromomethane	—	—	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide	—	—	5 U	5 UJ	5 U	1.1 J	5 U
Carbon Tetrachloride	5	4.42	2 U	2 U	2 U	2 U	2 U
Chlorobenzene	100	21,000	2 U	2 U	2 U	2 U	2 U
Chloroethane	—	—	2 U	2 U	2 U	2 U	2 U
Chloroform	—	470.8	2 U	2 U	2 U	2 U	2 U
Chloromethane	—	—	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	—	22	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	700	28,718	500 J	168 =	2.7 =	1.3 J	0.53 J
Methylene Chloride	—	—	2.2 =	2 U	0.95 J	2 U	4 U
Styrene	100	—	0.52 J	2 U	2 U	2 U	2 U
Tetrachloroethene	5	8.85	2 U	2 U	2 U	2 U	2 U
Toluene	1,000	200,000	19 =	5.5 =	0.55 J	2 U	2 U
Trichloroethene	5	80.7	1.7 J	21.3 =	75.9 =	262 =	116 =
Vinyl Chloride	2	525	2 U	0.88 J	2 U	2 U	2 U
Xylenes, Total	10,000	—	72.7 =	9.6 =	1.8 J	6 U	0.51 J

NOTES:

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Table VIII-A. Summary of September 1999 Groundwater Analytical Results (continued)

Station: Sample ID: Screened Interval (feet BGS): Collection Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-30 AF3062 36.0 – 40.0 26-Sep-99 (µg/L)	AF-30 AF3072 41.0 – 45.0 26-Sep-99 (µg/L)	AF-30 AF3082 46.0 – 50.0 26-Sep-99 (µg/L)	AF-31 AF3112 6.0 – 10.0 25-Sep-99 (µg/L)	AF-31 AF3122 11.0 – 15.0 25-Sep-99 (µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	—	2 U	2 U	2 U	10 U	2 U
1,1,2,2-Tetrachloroethane	—	10.8	2 U	2 U	2 U	10 U	2 U
1,1,2-Trichloroethane	5	41.99	2 U	2 U	2 U	10 U	2 U
1,1-Dichloroethane	—	—	2 U	2 U	2 U	10 U	2 U
1,1-Dichloroethene	7	3.2	2 U	2 U	2 U	10 U	2 U
1,2-Dichloroethane	5	98.6	2 U	2 U	2 U	10 U	2 U
1,2-Dichloroethene	—	—	11.3 =	8.7 =	2 U	17.9 =	10.7 =
1,2-Dichloropropane	—	—	2 U	2 U	2 U	10 U	2 U
1,3-*cis*-Dichloropropene	—	1,700	2 U	2 U	2 U	10 U	2 U
1,3-*trans*-Dichloropropene	—	1,700	2 U	2 U	2 U	10 U	2 U
2-Butanone	—	—	5 R	5 R	5 R	25 R	5 R
2-Hexanone	—	—	5 U	5 U	5 U	25 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	25 U	5 U
Acetone	—	—	5 U	5 R	5 R	25 R	5 U
Benzene	5	71.28	6.4 =	5.5 =	6.8 =	11.1 =	0.99 J
Bromodichloromethane	—	—	5 U	5 U	5 U	25 U	5 U
Bromoform	—	360	2 U	2 U	2 U	10 U	2 U
Bromomethane	—	—	2 U	2 U	2 U	10 U	2 U
Carbon Disulfide	—	—	5 U	5 U	1.3 J	25 U	5 U
Carbon Tetrachloride	5	4.42	2 U	2 U	2 U	10 U	2 U
Chlorobenzene	100	21,000	2 U	2 U	2 U	10 U	2 U
Chloroethane	—	—	2 U	2 U	2 U	10 U	2 U
Chloroform	—	470.8	2 U	2 U	2 U	10 U	2 U
Chloromethane	—	—	2 U	2 U	2 U	10 U	2 U
Dibromochloromethane	—	22	2 U	2 U	2 U	10 U	2 U
Ethylbenzene	700	28,718	0.67 J	5.5 =	1.8 J	10 U	2 U
Methylene Chloride	—	—	3.4 U	2 U	2.9 U	14.4 U	2.4 U
Styrene	100	—	2 U	2 U	2 U	10 U	2 U
Tetrachloroethene	5	8.85	2 U	2 U	2 U	10 U	2 U
Toluene	1,000	200,000	2 U	0.78 J	0.5 J	10 U	2 U
Trichloroethene	5	80.7	66.5 =	66.2 =	0.91 J	168 =	110 =
Vinyl Chloride	2	525	2 U	2 U	2 U	10 U	2 U
Xylenes, Total	10,000	—	0.67 J	9.3 =	2.9 J	30 U	6 U

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Table VIII-A. Summary of September 1999 Groundwater Analytical Results (continued)

Station: Sample ID: Screened Interval (feet BGS): Collection Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-31 AF3132 16.0 – 20.0 25-Sep-99 (µg/L)	AF-31 AF3142 21.0 – 25.0 25-Sep-99 (µg/L)	AF-31 AF3152 26.0 – 30.0 25-Sep-99 (µg/L)	AF-31 AF3162 31.0 – 35.0 25-Sep-99 (µg/L)	AF-31 AF3172 36.0 – 40.0 25-Sep-99 (µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	—	2 U	2 U	2 U	2 U	2 U
1,1,2,2-Tetrachloroethane	—	10.8	2 U	2 U	2 U	2 U	2 U
1,1,2-Trichloroethane	5	41.99	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	—	—	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethene	7	3.2	2 U	2 U	2 U	2 U	2 U
1,2-Dichloroethane	5	98.6	2 U	2 U	2 U	2 U	2 U
1,2-Dichloroethene	—	—	2 U	16.4 =	2 U	2 U	2 U
1,2-Dichloropropane	—	—	2 U	2 U	2 U	2 U	2 U
1,3-*cis*-Dichloropropene	—	1,700	2 U	2 U	2 U	2 U	2 U
1,3-*trans*-Dichloropropene	—	1,700	2 U	2 U	2 U	2 U	2 U
2-Butanone	—	—	5 R	5 R	5 R	1.9 J	1.3 J
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	5 R	5 R	5 U	5 U	5 U
Benzene	5	71.28	2 U	2 U	2 U	2 U	2 U
Bromodichloromethane	—	—	5 U	5 U	5 U	5 U	5 U
Bromoform	—	360	2 U	2 U	2 U	2 U	2 U
Bromomethane	—	—	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	2 U	2 U	2 U	2 U	2 U
Chlorobenzene	100	21,000	2 U	2 U	2 U	2 U	2 U
Chloroethane	—	—	2 U	2 U	2 U	2 U	2 U
Chloroform	—	470.8	2 U	2 U	2 U	2 U	2 U
Chloromethane	—	—	0.68 J	2 U	0.73 J	2 U	2 U
Dibromochloromethane	—	22	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	700	28,718	2 U	2 U	2 U	2 U	2 U
Methylene Chloride	—	—	2.3 U	3 =	2 U	2 U	2.6 U
Styrene	100	—	2 U	2 U	2 U	2 U	2 U
Tetrachloroethene	5	8.85	2 U	2 U	2 U	2 U	2 U
Toluene	1,000	200,000	2 U	2 U	2 U	2 U	2 U
Trichloroethene	5	80.7	2.6 =	43.7 =	1.3 J	1 J	0.76 J
Vinyl Chloride	2	525	2 U	2 U	2 U	2 U	2 U
Xylenes, Total	10,000	—	6 U	6 U	6 U	6 U	6 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

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R Indicates the result was rejected during the data validation process.

Table VIII-A. Summary of September 1999 Groundwater Analytical Results (continued)

Station: Sample ID: Screened Interval (feet BGS): Collection Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-31 AF3182 41.0 – 45.0 25-Sep-99 (µg/L)	AF-31 AF3192 46.0 – 50.0 25-Sep-99 (µg/L)	AF-32 AF3212 11.0 – 15.0 25-Sep-99 (µg/L)	AF-32 AF3222 16.0 – 20.0 25-Sep-99 (µg/L)	AF-32 AF3232 21.0 – 25.0 25-Sep-99 (µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	—	2 U	2 U	2 U	2 U	2 U
1,1,2,2-Tetrachloroethane	—	10.8	2 U	2 U	2 U	2 U	2 U
1,1,2-Trichloroethane	5	41.99	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	—	—	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethene	7	3.2	2 U	2 U	2 U	2 U	2 U
1,2-Dichloroethane	5	98.6	2 U	2 U	2 U	2 U	2 U
1,2-Dichloroethene	—	—	2 U	2 U	6.4 =	2 U	2 U
1,2-Dichloropropane	—	—	2 U	2 U	2 U	2 U	2 U
1,3-*cis*-Dichloropropene	—	1,700	2 U	2 U	2 U	2 U	2 U
1,3-*trans*-Dichloropropene	—	1,700	2 U	2 U	2 U	2 U	2 U
2-Butanone	—	—	5 R	5 R	5 R	0.93 J	5 R
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	5 U	5 R	5 R	5 U	5 R
Benzene	5	71.28	2 U	2 U	2.1 =	2 U	2 U
Bromodichloromethane	—	—	5 U	5 U	5 U	5 U	5 U
Bromoform	—	360	2 U	2 U	2 U	2 U	2 U
Bromomethane	—	—	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	2 U	2 U	2 U	2 U	2 U
Chlorobenzene	100	21,000	2 U	2 U	2 U	2 U	2 U
Chloroethane	—	—	2 U	2 U	2 U	2 U	2 U
Chloroform	—	470.8	2 U	2 U	2 U	2 U	2 U
Chloromethane	—	—	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	—	22	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	700	28,718	2 U	2 U	2 U	2 U	2 U
Methylene Chloride	—	—	2 U	2.9 U	3.4 U	2.1 U	2.9 =
Styrene	100	—	2 U	2 U	2 U	2 U	2 U
Tetrachloroethene	5	8.85	2 U	2 U	2 U	2 U	2 U
Toluene	1,000	200,000	2 U	2 U	2 U	0.52 J	2 U
Trichloroethene	5	80.7	2 U	0.56 J	26.3 =	2 U	2 U
Vinyl Chloride	2	525	2 U	2 U	2 U	2 U	2 U
Xylenes, Total	10,000	—	6 U	6 U	6 U	6 U	6 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

Laboratory Qualifiers

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R Indicates the result was rejected during the data validation process.

Table VIII-A. Summary of September 1999 Groundwater Analytical Results (continued)

Station: Sample ID: Screened Interval (feet BGS): Collection Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-32 AF3242 26.0 – 30.0 25-Sep-99 (µg/L)	AF-32 AF3252 31.0 – 35.0 25-Sep-99 (µg/L)	AF-32 AF3262 36.0 – 40.0 25-Sep-99 (µg/L)	AF-32 AF3272 41.0 – 45.0 25-Sep-99 (µg/L)	AF-32 AF3282 46.0 – 50.0 25-Sep-99 (µg/L)	AF-33 AF3312 2.3 – 11.8 25-Sep-99 (µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	2 U	2 U	2 U	2 U	2 U	2 U
1,1,2,2-Tetrachloroethane	—	10.8	2 U	2 U	2 U	2 U	2 U	2 U
1,1,2-Trichloroethane	5	41.99	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	—	—	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethene	7	3.2	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichloroethane	5	98.6	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichloroethene	—	—	2 U	2 U	2 U	2 U	2 U	6.4 =
1,2-Dichloropropane	—	—	2 U	2 U	2 U	2 U	2 U	2 U
1,3-*cis*-Dichloropropene	—	1,700	2 U	2 U	2 U	2 U	2 U	2 U
1,3-*trans*-Dichloropropene	—	1,700	2 U	2 U	2 U	2 U	2 U	2 U
2-Butanone	—	—	5 R	5 R	5 R	5 R	5 R	5 R
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	5 R	5 R	5 R	5 U	5 R	5 R
Benzene	5	71.28	2 U	2 U	2 U	2 U	2 U	2 U
Bromodichloromethane	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	—	360	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	—	—	2 U	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide	—	—	5 U	5 U	0.56 J	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	2 U	2 U	2 U	2 U	2 U	2 U
Chlorobenzene	100	21,000	2 U	2 U	2 U	2 U	2 U	2 U
Chloroethane	—	—	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform	—	470.8	2 U	2 U	2 U	2 U	2 U	2 U
Chloromethane	—	—	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	—	22	2 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	700	28,718	2 U	2 U	2 U	2 U	2 U	2 U
Methylene Chloride	—	—	2.8 U	2.6 U	5.4 U	2.7 U	3 U	2.1 =
Styrene	100	—	2 U	2 U	2 U	2 U	2 U	2 U
Tetrachloroethene	5	8.85	2 U	2 U	2 U	2 U	2 U	2 U
Toluene	1,000	200,000	2 U	2 U	2 U	2 U	2 U	2 U
Trichloroethene	5	80.7	2 U	2 U	2 U	2 U	2 U	45.8 =
Vinyl Chloride	2	525	2 U	2 U	2 U	2 U	2 U	2 U
Xylenes, Total	10,000	—	6 U	6 U	6 U	6 U	6 U	6 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

Laboratory Qualifiers

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R Indicates the result was rejected during the data validation process.

Table VIII-A. Summary of September 1999 Groundwater Analytical Results (continued)

Station: Sample ID: Screened Interval (feet BGS): Collection Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-34 AF3412 1.4 – 10.9 25-Sep-99 (µg/L)	AF-35 AF3512 1.2 – 10.7 25-Sep-99 (µg/L)	AF-36 AF3612 1.4 – 10.9 25-Sep-99 (µg/L)	AF-37 AF3712 4.4 – 14.3 25-Sep-99 (µg/L)	AF-38 AF3812 4.1 – 14.1 25-Sep-99 (µg/L)	AF-39 AF3912 4.4 – 14.3 25-Sep-99 (µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	NRC	2 U	2 U	2 U	2 U	2 U	2 R
1,1,2,2-Tetrachloroethane		10.8	2 U	2 U	2 U	2 U	2 U	2 U
1,1,2-Trichloroethane	5	41.99	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane		NRC	3.4 =	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethene	7	3.2	4.8 =	2 U	2 U	0.6 J	2 U	2 U
1,2-Dichloroethane	5	98.6	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichloroethene		NRC	10.8 =	8.8 =	17.3 =	26.4 =	3.8 =	4.3 =
1,2-Dichloropropane		NRC	2 U	2 U	2 U	2 U	2 U	2 U
1,3-*cis*-Dichloropropene		1,700	2 U	2 U	2 U	2 U	2 U	2 U
1,3-*trans*-Dichloropropene		1,700	2 U	2 U	2 U	2 U	2 U	2 U
2-Butanone		NRC	5 R	5 R	5 R	5 R	5 R	5 U
2-Hexanone		NRC	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone		NRC	5 U	5 U	5 U	5 U	5 U	5 U
Acetone		NRC	5 R	5 U	5 R	5 U	5 U	5 U
Benzene	5	71.28	2 U	2.1 =	2.4 =	4.2 =	2 =	0.92 J
Bromodichloromethane		NRC	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform		360	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane		NRC	2 U	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide		NRC	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	2 U	2 U	2 U	2 U	2 U	2 U
Chlorobenzene	100	21,000	2 U	2 U	2 U	2 U	2 U	2 U
Chloroethane		NRC	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform		470.8	2 U	2 U	2 U	2 U	2 U	2 U
Chloromethane		NRC	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane		22	2 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	700	28,718	2 U	2 U	2 U	0.63 J	1.6 J	2 U
Methylene Chloride		NRC	3.6 =	2.4 U	2.6 =	2.7 U	2 U	2.4 U
Styrene	100	NRC	2 U	2 U	2 U	2 U	2 U	2 U
Tetrachloroethene	5	8.85	2 U	2 U	2 U	2 U	2 U	2 U
Toluene	1,000	200,000	2 U	2 U	2 U	0.69 J	2 =	2 U
Trichloroethene	5	80.7	95.5 =	23 =	38 =	346 =	6.8 =	2 U
Vinyl Chloride	2	525	2 U	2 U	2 U	2 U	2 U	2 U
Xylenes, Total	10,000	NRC	6 U	6 U	6 U	3.4 J	9.4 =	6 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

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Laboratory analytical data sheets for the groundwater samples collected in September 1999 during the Corrective Action Plan (CAP)–Part B investigation were provided in the CAP–Part B Report dated February 2000.

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ADDITIONAL DEEP WELL INSTALLATION AND SAMPLING

JANUARY/FEBRUARY 2000

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Table VIII-B. Summary of February 2000 Groundwater Analytical Results

Well ID:		In-Stream	AF-40	AF-41	AF-42
Sample ID	Federal	Water	AF4012	AF4112	AF4212
Screened Interval (feet BGS):	SWDA	Quality	28.5 – 33.0	28.5 – 33.0	28.5 – 33.0
Sample Date:	MCLs[a]	Standards[b]	02-Feb-00	02-Feb-00	02-Feb-00
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS					
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	1 U	0.94 J	1 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U
1,2-Dichloroethene	—	—	15.4 =	35.6 =	2 U
1,2-Dichloropropane	—	—	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U
2-Butanone	—	—	5 U	5 U	5 U
2-Hexanone	—	—	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U
Acetone	—	—	5 U	5 U	5 U
Benzene	5	71.28	21.3 =	0.2 J	1 U
Bromodichloromethane	—	—	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U
Ethylbenzene	700	28,718	3.2 =	1 U	1 U
Methylene Chloride	—	—	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U
Toluene	1,000	200,000	0.6 J	1 U	0.3 J
Trichloroethene	5	80.7	53.3 =	158 =	1 U
Vinyl Chloride	2	525	1 U	1 U	1 U
Xylenes, Total	10,000	—	8.8 =	3 U	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] GA EPD water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

Laboratory Qualifiers

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4032

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HAALTM03W

Matrix: (soil/water) WATER Lab Sample ID: 27497001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q410

Level: (low/med) LOW Date Received: 06/24/00

% Moisture: not dec. _____ Date Analyzed: 07/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.6	
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	63.3	
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.3	
79-01-6	Trichloroethylene	353 ~~293~~	ED
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	0.57	J
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

MMP 8/1/00

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4132

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HA~~B~~CLTM03W

Matrix: (soil/water) WATER Lab Sample ID: 27497002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q417

Level: (low/med) LOW Date Received: 06/24/00

% Moisture: not dec. _____ Date Analyzed: 07/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

USE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	3.0	
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	110	
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	636 ~~432~~	~~E~~ D
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

MMP 8/1/00

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32

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4232

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HALTM03W

Matrix: (soil/water) WATER Lab Sample ID: 27497003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q506

Level: (low/med) LOW Date Received: 06/24/00

% Moisture: not dec. _____ Date Analyzed: 07/07/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.81	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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DATA VALIDA...

SAIC An Employee-Owned Company
Science Applications International Corporation
Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

CHAIN OF CUSTODY RECORD

COC NO.: HLTM14

PROJECT NAME: HAAF Long Term Monitoring

PROJECT NUMBER: 01-1624-04-2725-200

PROJECT MANAGER: Patty Stoll

Sampler (Signature): Laura Lumley (Printed Name): Laura Lumley

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Raod, Charleston, SC 29417

PHONE NO: (843) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	VOC	No. of Bottles/ Vials	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
OL7200	6/23/00	1320	water	2	2		4		27499
OL2200	6/23/00	1405		2	2		4		
OL1200	6/23/00	1230		2	2		4		
AF4032	6/23/00	1500				2	2		27497
AF4132	6/23/00	1550				2	2		
AF4232	6/23/00	1730				2	2		

6/24/00

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	6/24/00 0930	[signature]	6/24/00 1155
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RELINQUISHED BY: Lynn Reed	6/24/00 0930	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY: Lynn Reed	6/24/00 11:55	RECEIVED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 16

Cooler ID: #476

Cooler Temperature: 4.2

FEDEX NUMBER:

2000 06 3-39

FIRST SEMIANNUAL SAMPLING EVENT

JUNE 2000

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Table VIII-C. Summary of June 2000 Groundwater Analytical Results

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-40 AF4032 28.5 – 33.0 23-Jun-00 (µg/L)	AF-41 AF4132 28.5 – 33.0 23-Jun-00 (µg/L)	AF-42 AF4232 28.5 – 33.0 23-Jun-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS					
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	1.6 =	3 =	1 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U
1,2-Dichloroethene	—	—	63.3 =	110 =	2 U
1,2-Dichloropropane	—	—	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U
2-Butanone	—	—	5 U	5 U	5 U
2-Hexanone	—	—	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U
Acetone	—	—	5 U	5 U	5 U
Benzene	5	71.28	1.3 =	1 U	1 U
Bromodichloromethane	—	—	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U
Ethylbenzene	700	28,718	0.57 J	1 U	1 U
Methylene Chloride	—	—	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U
Toluene	1,000	200,000	1 U	1 U	0.81 J
Trichloroethene	5	80.7	353 =	636 =	1 U
Vinyl Chloride	2	525	1 U	1 U	1 U
Xylenes, Total	10,000	—	3 U	3 U	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

Laboratory Qualifiers

U Indicates the compound was not detected at the concentration reported.

UJ Indicates the compound was not detected above an approximated sample quantitation limit.

J Indicates the value for the compound is an estimated value.

= Indicates the compound was detected at the concentration reported.

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4012

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: H2526B002W

Matrix: (soil/water) WATER Lab Sample ID: 21343001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2V547

Level: (low/med) LOW Date Received: 02/03/00

% Moisture: not dec. _____ Date Analyzed: 02/12/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~2.2~~	BJ	U FD1, FD6
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5 ~~1.0~~	BJ	U FD1, FD6
75-34-3	1,1-Dichloroethane	1.0	U	U
78-93-3	2-Butanone	5.0	U	U
540-59-0	1,2-Dichloroethylene(total)	15.4		=
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	21.3		=
79-01-6	Trichloroethylene	53.3		=
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	0.60	J	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	3.2		=
1330-20-7	Xylenes (total)	8.8		=
100-42-5	Styrene	1.0	U	U
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

MMP 3/21/00

FORM I VOA

OLM03.0

DATA VALIDATION COPY

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4112

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: H25263002W

Matrix: (soil/water) WATER Lab Sample ID: 21343002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2V548

Level: (low/med) LOW Date Received: 02/03/00

% Moisture: not dec. _____ Date Analyzed: 02/12/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: 5.9 (uL

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND			Q	
74-87-3	Chloromethane		1.0	U	U
75-01-4	Vinyl chloride		1.0	U	
74-83-9	Bromomethane		1.0	U	
75-00-3	Chloroethane		1.0	U	
75-35-4	1,1-Dichloroethylene		0.94	J	
67-64-1	Acetone		5 ~~1.6~~	JB	U F01,F06
75-15-0	Carbon disulfide		5.0	U	U
75-09-2	Methylene chloride		5.0	U	
75-34-3	1,1-Dichloroethane		1.0	U	
78-93-3	2-Butanone		5.0	U	
540-59-0	1,2-Dichloroethylene(total)		35.6		
67-66-3	Chloroform		1.0	U	
71-55-6	1,1,1-Trichloroethane		1.0	U	
56-23-5	Carbon tetrachloride		1.0	U	
107-06-2	1,2-Dichloroethane		1.0	U	
71-43-2	Benzene		0.20	J	
79-01-6	Trichloroethylene	158	~~153~~	~~U~~ D	
78-87-5	1,2-Dichloropropane		1.0	U	
75-27-4	Bromodichloromethane		1.0	U	
10061-01-5	cis-1,3-Dichloropropylene		1.0	U	
108-10-1	4-Methyl-2-pentanone		5.0	U	
108-88-3	Toluene		1.0	U	
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	
79-00-5	1,1,2-Trichloroethane		1.0	U	
591-78-6	2-Hexanone		5.0	U	
127-18-4	Tetrachloroethylene		1.0	U	
124-48-1	Dibromochloromethane		1.0	U	
108-90-7	Chlorobenzene		1.0	U	
100-41-4	Ethylbenzene		1.0	U	
1330-20-7	Xylenes (total)		3.0	U	
100-42-5	Styrene		1.0	U	
75-25-2	Bromoform		1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	

MMD 3/21/00

FORM I VOA

DATA VALID COPY

OLM03.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4212

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: H2526B002W

Matrix: (soil/water) WATER Lab Sample ID: 21343003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2W138

Level: (low/med) LOW Date Received: 02/03/00

% Moisture: not dec. _____ Date Analyzed: 02/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~1.1~~	JB	U F01, F1
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	0.30	J	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

MMP 3/21/00

FORM I VOA OLM03.0

DATA VALIDATION COPY

SAIC An Employee Owned Company
Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

CHAIN OF CUSTODY RECORD

COC NO.: GH0018

PROJECT NAME: HAAF USTs 25 & 26

PROJECT NUMBER: 01-1624-04-1958-210

PROJECT MANAGER: Patty Stoll

Sampler (Signature) Laura Lumley (Printed Name) Laura Lumley

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Raod Charleston, SC 29417

PHONE NO: (803) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOC	TCLP BTEX	TCLP Lead	No. of Bottles/ Vials	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AF4012	2/2/00	1137	water	2			2		21343
AF4112	2/2/00	1032	↓	2			2		
AF4212	2/2/00	1307	↓	2			2		

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	2/3/00 1045	Patricia Nowlin	2-3-00 14:00
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RECEIVED BY: Catherine Brien	2/3/00 1045	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY: Catherine Brien	2/3/00	RECEIVED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 6

Cooler ID: #105

Cooler Temperature: 3°C

FEDEX NUMBER:

SUPPLEMENTAL GROUNDWATER SAMPLING TO SUPPORT GEOPHYSICAL SURVEY

SEPTEMBER 2000

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Table VIII-D. Summary of September 2000 Groundwater Analytical Results

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-01 AF0142 2.5 – 12.5 28-Sep-00 (µg/L)	AF-02 AF0242 2.0 – 12.0 28-Sep-00 (µg/L)	AF-03 AF0342 2.0 – 12.0 28-Sep-00 (µg/L)	AF-04 AF0442 2.0 – 12.0 28-Sep-00 (µg/L)	AF-05 AF0542 2.0 – 12.0 28-Sep-00 (µg/L)	AF-07 AF0742 2.5 – 12.5 28-Sep-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	1 U	1 U	100 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	1 U	1 U	100 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	1 U	1 U	100 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U	1 U	1 U	100 U
1,1-Dichloroethene	7	3.2	1 U	1 U	1 U	1 U	1 U	100 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U	1 U	1 U	100 U
1,2-Dichloroethene	—	—	2 U	2 U	2 U	2 U	2 U	200 U
1,2-Dichloropropane	—	—	1 U	1 U	1 U	1 U	1 U	100 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	100 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	100 U
2-Butanone	—	—	5 U	5 U	5 U	5 U	5 U	500 U
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U	500 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U	500 U
Acetone	—	—	6.7 =	8 =	18 =	9.1 =	11.7 =	500 U
Benzene	5	71.28	1 U	0.82 J	1 U	1 U	4.7 =	9,920 =
Bromodichloromethane	—	—	1 U	1 U	1 U	1 U	1 U	100 U
Bromoform	—	360	1 U	1 U	1 U	1 U	1 U	100 U
Bromomethane	—	—	1 U	1 U	1 U	1 U	1 U	100 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	5 U	500 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	1 U	1 U	100 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	1 U	1 U	100 U
Chloroethane	—	—	1 U	1 U	1 U	1 U	1 U	100 U
Chloroform	—	470.8	1 U	1 U	1 U	1 U	1 U	100 U
Chloromethane	—	—	1 U	1 U	1 U	1 U	1 U	100 U
Dibromochloromethane	—	22	1 U	1 U	1 U	1 U	1 U	100 U
Ethylbenzene	700	28,718	1 U	1 U	1 U	1 U	4.7 =	645 =
Methylene Chloride	—	—	5 U	5 U	5 U	5 U	5 U	500 U
Styrene	100	—	1 U	1 U	1 U	1 U	1 U	100 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U	1 U	1 U	100 U
Toluene	1,000	200,000	1 U	1 U	1 U	1 U	0.82 J	39.2 J
Trichloroethene	5	80.7	1 U	1 U	1 U	1 U	1 U	100 U
Vinyl Chloride	2	525	1 U	1 U	1 U	1 U	1 U	100 U
Xylenes, Total	10,000	—	3 U	3 U	3 U	3 U	20.9 =	300 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

Laboratory Qualifiers

U Indicates the compound was not detected at the concentration reported.

UJ Indicates the compound was not detected above an approximated sample quantitation limit.

J Indicates the value for the compound is an estimated value.

= Indicates the compound was detected at the concentration reported.

Table VIII-D. Summary of September 2000 Groundwater Analytical Results (continued)

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-08 AF0842 2.5 – 12.5 28-Sep-00 (µg /L)	AF-09 AF0942 2.0 – 12.0 28-Sep-00 (µg /L)	AF-11 AF1142 1.0 – 11.0 28-Sep-00 (µg /L)	AF-12 AF1242 2.5 – 12.5 28-Sep-00 (µg /L)	AF-13 AF1342 2.5 – 12.5 28-Sep-00 (µg /L)	AF-14 AF1442 1.4 – 11.4 28-Sep-00 (µg /L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene	—	—	2 U	3.4 =	2 U	2 U	1.2 J	2 U
1,2-Dichloropropane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	6.8 =	7.4 =	5 U	8.2 =	7.2 =	8.3 =
Benzene	5	71.28	0.2 J	7 =	1 U	33.2 =	1 U	1 U
Bromodichloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	28,718	1 U	16.7 =	1 U	94.1 =	0.17 J	0.064 J
Methylene Chloride	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	200,000	1 U	0.36 J	1 U	0.29 J	1 U	1 U
Trichloroethene	5	80.7	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2	525	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	10,000	—	3 U	3 U	3 U	3.2 =	1.2 J	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

Laboratory Qualifiers

U Indicates the compound was not detected at the concentration reported.

UJ Indicates the compound was not detected above an approximated sample quantitation limit.

J Indicates the value for the compound is an estimated value.

= Indicates the compound was detected at the concentration reported.

Table VIII-D. Summary of September 2000 Groundwater Analytical Results (continued)

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-15 AF1542 1.5 – 11.5 28-Sep-00 (µg/L)	AF-16 AF1642 1.5 – 11.5 28-Sep-00 (µg/L)	AF-18 AF1842 1.5 – 11.5 28-Sep-00 (µg/L)	AF-19 AF1942 1.5 – 11.5 28-Sep-00 (µg/L)	AF-20 AF2042 3.0 – 13.0 27-Sep-00 (µg/L)	AF-23 AF2342 3.0 – 13.0 27-Sep-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene	—	—	2 U	2 U	5.6 =	0.36 J	2.3 =	8.5 =
1,2-Dichloropropane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	8.2 =	6.5 =	11.2 =	7.4 =	7.7 =	6.6 =
Benzene	5	71.28	0.19 J	1 U	5.8 =	0.24 J	0.55 J	1.6 =
Bromodichloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	28,718	1 U	1 U	0.11 J	1 U	1 U	1 U
Methylene Chloride	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	200,000	1 U	1 U	0.7 J	0.99 J	1 U	1 U
Trichloroethene	5	80.7	1 U	1 U	1.4 =	1 U	1 U	0.33 J
Vinyl Chloride	2	525	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	10,000	—	3 U	3 U	3 U	3 U	3 U	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

Laboratory Qualifiers

U Indicates the compound was not detected at the concentration reported.

UJ Indicates the compound was not detected above an approximated sample quantitation limit.

J Indicates the value for the compound is an estimated value.

= Indicates the compound was detected at the concentration reported.

Table VIII-D. Summary of September 2000 Groundwater Analytical Results (continued)

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-24 AF2442 2.0 – 12.0 28-Sep-00 (µg/L)	AF-25 AF2542 0.5 – 10.5 28-Sep-00 (µg/L)	AF-26 AF2642 2.0 – 12.0 28-Sep-00 (µg/L)	AF-27 AF2742 1.0 – 11.0 28-Sep-00 (µg/L)	AF-28 AF2842 2.0 – 12.0 28-Sep-00 (µg/L)	AF-29 AF2942 2.0 – 12.0 28-Sep-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene	—	—	2 U	34 =	21.8 =	30.7 =	42.6 =	2.4 =
1,2-Dichloropropane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	5 U	5 U	5 U	5 U	5 U	12.4 U
Benzene	5	71.28	1.0 U	1.6 =	11.2 =	1.9 =	8.6 =	351 =
Bromodichloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	28,718	1 U	1 U	1 U	1 U	1 U	54.1 =
Methylene Chloride	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	200,000	1 U	1 U	1.9 =	1 U	1.2 =	2.8 =
Trichloroethene	5	80.7	1 U	197 =	102 J	179 =	56.8 =	2.6 =
Vinyl Chloride	2	525	1 U	1 U	1 U	1 U	1 U	0.77 J
Xylenes, Total	10,000	—	3 U	3 U	3 U	3 U	3 U	5.1 =

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

Laboratory Qualifiers

U Indicates the compound was not detected at the concentration reported.

UJ Indicates the compound was not detected above an approximated sample quantitation limit.

J Indicates the value for the compound is an estimated value.

= Indicates the compound was detected at the concentration reported.

Table VIII-D. Summary of September 2000 Groundwater Analytical Results

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-33 AF3342 2.3 – 11.8 28-Sep-00 (µg/L)	AF-34 AF3442 1.4 – 10.9 28-Sep-00 (µg/L)	AF-35 AF3542 1.2 – 10.7 28-Sep-00 (µg/L)	AF-36 AF3642 1.4 – 10.9 28-Sep-00 (µg/L)	AF-37 AF3742 4.4 – 14.3 28-Sep-00 (µg/L)	AF-38 AF3842 4.1 – 14.1 28-Sep-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	2.8 =	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	1 U	3.9 =	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene	—	—	8.1 =	13 =	9.6 =	3.3 =	17.2 =	0.39 J
1,2-Dichloropropane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	—	—	5 U	5 U	5 U	5 U	5 U	1 U
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	5 U	5 U	5 U	6.8 U	5 U	6.8 U
Benzene	5	71.28	1 U	1 U	0.38 J	0.83 J	2.7 =	0.19 J
Bromodichloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	28,718	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	200,000	1 U	0.47 J	1 U	0.78 J	1.9 =	1.4 =
Trichloroethene	5	80.7	34.4 =	105 J	27.6 =	10.3 =	226 =	1 U
Vinyl Chloride	2	525	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	10,000	—	3 U	3 U	3 U	3 U	3 U	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

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Table VIII-D. Summary of September 2000 Groundwater Analytical Results (continued)

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-40 AF4042 28.5 – 33.0 28-Sep-00 (µg/L)	AF-41 AF4142 28.5 – 33.0 28-Sep-00 (µg/L)	AF-42 AF4242 28.5 – 33.0 28-Sep-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS					
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	1 U	1 U	1 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U
1,2-Dichloroethene	—	—	14.6 =	1.7 J	2 U
1,2-Dichloropropane	—	—	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U
2-Butanone	—	—	5 U	5 U	5 U
2-Hexanone	—	—	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U
Acetone	—	—	5 U	5.2 U	5 U
Benzene	5	71.28	1.8 =	1 U	1 U
Bromodichloromethane	—	—	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U
Ethylbenzene	700	28,718	0.45 J	1 U	1 U
Methylene Chloride	—	—	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U
Toluene	1,000	200,000	1 U	1 U	1 U
Trichloroethene	5	80.7	42.9 =	1.2 =	1 U
Vinyl Chloride	2	525	0.76 J	1 U	1 U
Xylenes, Total	10,000	—	3 U	3 U	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0142

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D438

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	6.7	
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0242

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D439

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	8.0		=
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	0.82	J	J
79-01-6	Trichloroethylene	1.0	U	U
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0 ~~0.053~~	JB	U FD1, FDC
1330-20-7	Xylenes (total)	3.0	U	U
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0342

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D440

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	u
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	18.0		=
75-15-0	Carbon disulfide	5.0	U	u
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0 ~~0.18~~	JB	U FO1, FO6
1330-20-7	Xylenes (total)	3.0 ~~0.31~~	JB	U FO1, FO6
100-42-5	Styrene	1.0	U	u
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0442

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D441

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	9.1	
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0542

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D442

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	11.7		=
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	4.7		=
79-01-6	Trichloroethylene	1.0	U	U
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	0.82	J	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	4.7	B	= F01, F05
1330-20-7	Xylenes (total)	20.9	B	= F01, F02
100-42-5	Styrene	1.0	U	U
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0742

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D443

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 100.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	100	U	U
75-01-4	Vinyl chloride	100	U	
74-83-9	Bromomethane	100	U	
75-00-3	Chloroethane	100	U	
75-35-4	1,1-Dichloroethylene	100	U	
67-64-1	Acetone	500	U	
75-15-0	Carbon disulfide	500	U	
75-09-2	Methylene chloride	500	U	
75-34-3	1,1-Dichloroethane	100	U	
78-93-3	2-Butanone	500	U	
540-59-0	1,2-Dichloroethylene(total)	200	U	
67-66-3	Chloroform	100	U	
71-55-6	1,1,1-Trichloroethane	100	U	
56-23-5	Carbon tetrachloride	100	U	
107-06-2	1,2-Dichloroethane	100	U	
71-43-2	Benzene	9920		=
79-01-6	Trichloroethylene	100	U	U
78-87-5	1,2-Dichloropropane	100	U	
75-27-4	Bromodichloromethane	100	U	
10061-01-5	cis-1,3-Dichloropropylene	100	U	
108-10-1	4-Methyl-2-pentanone	500	U	
108-88-3	Toluene	39.2	J	J
10061-02-6	trans-1,3-Dichloropropylene	100	U	U
79-00-5	1,1,2-Trichloroethane	100	U	
591-78-6	2-Hexanone	500	U	
127-18-4	Tetrachloroethylene	100	U	
124-48-1	Dibromochloromethane	100	U	
108-90-7	Chlorobenzene	100	U	
100-41-4	Ethylbenzene	645	B	= F01, F08
1330-20-7	Xylenes (total)	300 ~~65.1~~	JB	U F01, F06
100-42-5	Styrene	100	U	U
75-25-2	Bromoform	100	U	
79-34-5	1,1,2,2-Tetrachloroethane	100	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0842

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D444

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	6.8		
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	0.20	J	J
79-01-6	Trichloroethylene	1.0	U	U
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0 ~~0.056~~	JB	U F01, F0
1330-20-7	Xylenes (total)	3.0	U	U
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0942

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D445

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	7.4		=
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	3.4		=
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	7.0		=
79-01-6	Trichloroethylene	1.0	U	U
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	0.36	J	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	16.7	B	= F01, F03
1330-20-7	Xylenes (total)	3.0	U	U
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1142

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998012

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D446

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
74-87-3	Chloromethane		1.0	U	U
75-01-4	Vinyl chloride		1.0	U	
74-83-9	Bromomethane		1.0	U	
75-00-3	Chloroethane		1.0	U	
75-35-4	1,1-Dichloroethylene		1.0	U	
67-64-1	Acetone		5.0	U	
75-15-0	Carbon disulfide		5.0	U	
75-09-2	Methylene chloride		5.0	U	
75-34-3	1,1-Dichloroethane		1.0	U	
78-93-3	2-Butanone		5.0	U	
540-59-0	1,2-Dichloroethylene (total)		2.0	U	
67-66-3	Chloroform		1.0	U	
71-55-6	1,1,1-Trichloroethane		1.0	U	
56-23-5	Carbon tetrachloride		1.0	U	
107-06-2	1,2-Dichloroethane		1.0	U	
71-43-2	Benzene		1.0	U	
79-01-6	Trichloroethylene		1.0	U	
78-87-5	1,2-Dichloropropane		1.0	U	
75-27-4	Bromodichloromethane		1.0	U	
10061-01-5	cis-1,3-Dichloropropylene		1.0	U	
108-10-1	4-Methyl-2-pentanone		5.0	U	
108-88-3	Toluene		1.0	U	
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	
79-00-5	1,1,2-Trichloroethane		1.0	U	
591-78-6	2-Hexanone		5.0	U	
127-18-4	Tetrachloroethylene		1.0	U	
124-48-1	Dibromochloromethane		1.0	U	
108-90-7	Chlorobenzene		1.0	U	
100-41-4	Ethylbenzene	1.0	~~0.17~~	JB	U FO1, FO1
1330-20-7	Xylenes (total)		3.0	U	U
100-42-5	Styrene		1.0	U	
75-25-2	Bromoform		1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1242

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998013

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D447

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	8.2		=
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	33.2		=
79-01-6	Trichloroethylene	1.0	U	U
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	0.29	J	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	94.1	B	= F01, F08
1330-20-7	Xylenes (total)	3.2	B	= F01, F0
100-42-5	Styrene	1.0	U	U
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1342

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998014

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D509

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	7.2	
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	1.2	J
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	0.17	J
1330-20-7	Xylenes (total)	1.2	J
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1442

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998015

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D510

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	8.3	
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene (total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	0.064	J
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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DATA VAL

1A
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EPA SAMPLE NO.

AF1542

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998016

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D511

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	8.2	
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	0.19	J
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
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EPA SAMPLE NO.

AF1642

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998017

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D512

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	6.5	
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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EPA SAMPLE NO.

AF1842

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998018

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D513

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	11.2	
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	5.6	
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	5.8	
79-01-6	Trichloroethylene	1.4	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.70	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	0.11	J
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
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EPA SAMPLE NO.

AF1942

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998019

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D514

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	7.4	
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	0.36	J
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	0.24	J
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.99	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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EPA SAMPLE NO.

AF2042

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D435

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	7.7		
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.3		U
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	0.55	J	J
79-01-6	Trichloroethylene	1.0	U	U
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0 ~~0.13~~	JB	U F01, F06
1330-20-7	Xylenes (total)	3.0 ~~0.42~~	JB	U F01, F06
100-42-5	Styrene	1.0	U	U
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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EPA SAMPLE NO.

AF2342

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D436

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	6.6		U
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	8.5		U
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.6		U
79-01-6	Trichloroethylene	0.33	J	
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0 ~~0.073~~	JB	U F01, F0L
1330-20-7	Xylenes (total)	3.0	U	U
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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EPA SAMPLE NO.

AF2442

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998020

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D515

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2542

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31999

Matrix: (soil/water) WATER Lab Sample ID: 31999001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5E107

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/09/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

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CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~1.6~~	J	U F04,F06
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	34.0		=
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.6		=
79-01-6	Trichloroethylene	197 ~~198~~	~~E~~ D	=
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2542DL

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31999

Matrix: (soil/water) WATER Lab Sample ID: 31999001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5E210

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/10/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

DO NOT USE

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10.0	U
75-01-4	Vinyl chloride	10.0	U
74-83-9	Bromomethane	10.0	U
75-00-3	Chloroethane	10.0	U
75-35-4	1,1-Dichloroethylene	10.0	U
67-64-1	Acetone	50.0	U
75-15-0	Carbon disulfide	50.0	U
75-09-2	Methylene chloride	50.0	U
75-34-3	1,1-Dichloroethane	10.0	U
78-93-3	2-Butanone	50.0	U
540-59-0	1,2-Dichloroethylene(total)	33.2	D
67-66-3	Chloroform	10.0	U
71-55-6	1,1,1-Trichloroethane	10.0	U
56-23-5	Carbon tetrachloride	10.0	U
107-06-2	1,2-Dichloroethane	10.0	U
71-43-2	Benzene	1.9	DJ
79-01-6	Trichloroethylene	197	D
78-87-5	1,2-Dichloropropane	10.0	U
75-27-4	Bromodichloromethane	10.0	U
10061-01-5	cis-1,3-Dichloropropylene	10.0	U
108-10-1	4-Methyl-2-pentanone	50.0	U
108-88-3	Toluene	10.0	U
10061-02-6	trans-1,3-Dichloropropylene	10.0	U
79-00-5	1,1,2-Trichloroethane	10.0	U
591-78-6	2-Hexanone	50.0	U
127-18-4	Tetrachloroethylene	10.0	U
124-48-1	Dibromochloromethane	10.0	U
108-90-7	Chlorobenzene	10.0	U
100-41-4	Ethylbenzene	10.0	U
1330-20-7	Xylenes (total)	30.0	U
100-42-5	Styrene	10.0	U
75-25-2	Bromoform	10.0	U
79-34-5	1,1,2,2-Tetrachloroethane	10.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2642

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31999

Matrix: (soil/water) WATER Lab Sample ID: 31999002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5E209

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/10/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	21.8		=
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	11.2		=
79-01-6	Trichloroethylene	102	E	J ND3
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.9		=
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2742

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31999

Matrix: (soil/water) WATER Lab Sample ID: 31999003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5E109

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/09/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

USE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	30.7		
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.9		
79-01-6	Trichloroethylene	179 ~~166~~	~~E~~ D	
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2842

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31999

Matrix: (soil/water) WATER Lab Sample ID: 31999004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5E208

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/10/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	u
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	42.6		=
67-66-3	Chloroform	1.0	U	u
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	8.6		=
79-01-6	Trichloroethylene	56.8		=
78-87-5	1,2-Dichloropropane	1.0	U	u
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.2		=
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	u
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2942

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31999

Matrix: (soil/water) WATER Lab Sample ID: 31999005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5E111

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/09/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

USE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	0.77	J	J
74-83-9	Bromomethane	1.0	U	U
75-00-3	Chloroethane	1.0	U	↓
75-35-4	1,1-Dichloroethylene	1.0	U	↓
67-64-1	Acetone	12.4		U FO4, FO-
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	↓
75-34-3	1,1-Dichloroethane	1.0	U	↓
78-93-3	2-Butanone	5.0	U	↓
540-59-0	1,2-Dichloroethylene(total)	2.4		=
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	↓
56-23-5	Carbon tetrachloride	1.0	U	↓
107-06-2	1,2-Dichloroethane	1.0	U	↓
71-43-2	Benzene	351 ~~329~~	~~E~~ D	=
79-01-6	Trichloroethylene	2.6		=
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	↓
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	↓
108-10-1	4-Methyl-2-pentanone	5.0	U	↓
108-88-3	Toluene	2.8		=
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	↓
591-78-6	2-Hexanone	5.0	U	↓
127-18-4	Tetrachloroethylene	1.0	U	↓
124-48-1	Dibromochloromethane	1.0	U	↓
108-90-7	Chlorobenzene	1.0	U	↓
100-41-4	Ethylbenzene	54.1		=
1330-20-7	Xylenes (total)	5.1		=
100-42-5	Styrene	1.0	U	U
75-25-2	Bromoform	1.0	U	↓
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	↓

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3342

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31999

Matrix: (soil/water) WATER Lab Sample ID: 31999006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5E207

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/10/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	8.1	
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	34.4	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3442

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31999

Matrix: (soil/water) WATER Lab Sample ID: 31999007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5E113

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/09/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	3.9		=
67-64-1	Acetone	5.0		U F04, F06
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	U
75-34-3	1,1-Dichloroethane	2.8		=
78-93-3	2-Butanone	5.0	U	U
540-59-0	1,2-Dichloroethylene(total)	13.0		=
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	105	E	J N03
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	0.47	J	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3542

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31999

Matrix: (soil/water) WATER Lab Sample ID: 31999008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5E114

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/09/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	u
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~4.7~~	J	u FOY
75-15-0	Carbon disulfide	5.0	U	u
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	9.6		=
67-66-3	Chloroform	1.0	U	u
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	0.38	J	J
79-01-6	Trichloroethylene	27.6		=
78-87-5	1,2-Dichloropropane	1.0	U	u
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3642

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31999

Matrix: (soil/water) WATER Lab Sample ID: 31999009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5E115

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/09/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	6.8	
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene (total)	3.3	
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	0.83	J
79-01-6	Trichloroethylene	10.3	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.78	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3742

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31999

Matrix: (soil/water) WATER Lab Sample ID: 31999010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5E116

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/09/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

USE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~3.2~~	J	U FOY, F-L
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	17.2		=
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	2.7		=
79-01-6	Trichloroethylene	226 ~~193~~	~~E~~ D	=
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.9		=
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3742DL

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31999

Matrix: (soil/water) WATER Lab Sample ID: 31999010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5E213

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/10/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

DO NOT USE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-35-4	1,1-Dichloroethylene	5.0	U
67-64-1	Acetone	25.0	U
75-15-0	Carbon disulfide	25.0	U
75-09-2	Methylene chloride	25.0	U
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	2-Butanone	25.0	U
540-59-0	1,2-Dichloroethylene(total)	17.4	D
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	3.5	DJ
79-01-6	Trichloroethylene	226	D
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropylene	5.0	U
108-10-1	4-Methyl-2-pentanone	25.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropylene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
591-78-6	2-Hexanone	25.0	U
127-18-4	Tetrachloroethylene	5.0	U
124-48-1	Dibromochloromethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylenes (total)	15.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3842

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31999

Matrix: (soil/water) WATER Lab Sample ID: 31999011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5E117

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/09/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	6.8		U FD4, F[illegible]
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	0.39	J	J
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	0.19	J	J
79-01-6	Trichloroethylene	1.0	U	U
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.4		=
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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EPA SAMPLE NO.

AF4042

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31999

Matrix: (soil/water) WATER Lab Sample ID: 31999012

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5E118

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/09/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	0.76	J	J
74-83-9	Bromomethane	1.0	U	U
75-00-3	Chloroethane	1.0	U	U
75-35-4	1,1-Dichloroethylene	1.0	U	U
67-64-1	Acetone	5 ~~2.6~~	J	U FO4, FO6
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	U
75-34-3	1,1-Dichloroethane	1.0	U	U
78-93-3	2-Butanone	5.0	U	U
540-59-0	1,2-Dichloroethylene(total)	14.6		=
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	U
56-23-5	Carbon tetrachloride	1.0	U	U
107-06-2	1,2-Dichloroethane	1.0	U	U
71-43-2	Benzene	1.8		=
79-01-6	Trichloroethylene	42.9		=
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	U
108-10-1	4-Methyl-2-pentanone	5.0	U	U
108-88-3	Toluene	1.0	U	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	U
591-78-6	2-Hexanone	5.0	U	U
127-18-4	Tetrachloroethylene	1.0	U	U
124-48-1	Dibromochloromethane	1.0	U	U
108-90-7	Chlorobenzene	1.0	U	U
100-41-4	Ethylbenzene	0.45	J	J
1330-20-7	Xylenes (total)	3.0	U	U
100-42-5	Styrene	1.0	U	U
75-25-2	Bromoform	1.0	U	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4142

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31999

Matrix: (soil/water) WATER Lab Sample ID: 31999013

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5E119

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/09/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.2		U FOH, F
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	1.7	J	J
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.2		=
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4242

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31999

Matrix: (soil/water) WATER Lab Sample ID: 31999014

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5E120

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/09/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~3.5~~	J	U FO4, FO
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HP0036

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31999

Matrix: (soil/water) WATER Lab Sample ID: 31999015

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5E121

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/09/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	2.8	J
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HP0035

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 31998

Matrix: (soil/water) WATER Lab Sample ID: 31998003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D437

Level: (low/med) LOW Date Received: 09/29/00

% Moisture: not dec. _____ Date Analyzed: 10/06/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
74-87-3	Chloromethane		1.0	U	U
75-01-4	Vinyl chloride		1.0	U	
74-83-9	Bromomethane		1.0	U	
75-00-3	Chloroethane		1.0	U	
75-35-4	1,1-Dichloroethylene		1.0	U	
67-64-1	Acetone		5.0	U	
75-15-0	Carbon disulfide		5.0	U	
75-09-2	Methylene chloride		5.0	U	
75-34-3	1,1-Dichloroethane		1.0	U	
78-93-3	2-Butanone		5.0	U	
540-59-0	1,2-Dichloroethylene (total)		2.0	U	
67-66-3	Chloroform		1.0	U	
71-55-6	1,1,1-Trichloroethane		1.0	U	
56-23-5	Carbon tetrachloride		1.0	U	
107-06-2	1,2-Dichloroethane		1.0	U	
71-43-2	Benzene		1.0	U	
79-01-6	Trichloroethylene		1.0	U	
78-87-5	1,2-Dichloropropane		1.0	U	
75-27-4	Bromodichloromethane		1.0	U	
10061-01-5	cis-1,3-Dichloropropylene		1.0	U	
108-10-1	4-Methyl-2-pentanone		5.0	U	
108-88-3	Toluene		1.0	U	
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	
79-00-5	1,1,2-Trichloroethane		1.0	U	
591-78-6	2-Hexanone		5.0	U	
127-18-4	Tetrachloroethylene		1.0	U	
124-48-1	Dibromochloromethane		1.0	U	
108-90-7	Chlorobenzene		1.0	U	
100-41-4	Ethylbenzene	1.0	0.061	JB	U F01, F06
1330-20-7	Xylenes (total)		3.0	U	U
100-42-5	Styrene		1.0	U	
75-25-2	Bromoform		1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	

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800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

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CHAIN OF CUSTODY RECORD

COC NO.: H25ØØ1

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-1624-04-2725-210

PROJECT MANAGER: Patty Stoll

Sampler (Signature): Laura Lumley (Printed Name): Laura Lumley

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29407

PHONE NO: (843) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOC	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AFZØ42	9/27/00	1723	water	2	2		31998001
AFZ342	9/27/00	1715		2	2		002
HPØØ35	9/27/00	0740		2	2		003
AFØ142	9/28/00	1153		2	2		004
AFØ242	9/28/00	1315		2	2		005
AFØ342	9/28/00	1235		2	2		006
AFØ442	9/28/00	1245		2	2		007
AFØ542	9/28/00	1205		2	2		008
AFØ742	9/28/00	1355		2	2		009
AFØ842	9/28/00	1230		2	2		010
AF0942	9/28/00	1323		2	2		011
AF1142	9/28/00	1345		2	2		012
AF1242	9/28/00	1325		2	2		013

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	9/29/00	Gustavus Randolph	9/29/00
COMPANY NAME: SAIC	1035	COMPANY NAME: GEL	1330
RECEIVED BY: Raymond Reed	Date/Time 9/29/00	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL	1035	COMPANY NAME:	
RELINQUISHED BY: Raymond Reed	Date/Time 9/29/00	RECEIVED BY:	Date/Time
COMPANY NAME: GEL	1320	COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS:

Cooler ID: #285

Cooler Temperature: 4.2

FEDEX NUMBER:

SAIC An Employee Owned Company
Science Applications International Corporation
300 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

2 of 3

CHAIN OF CUSTODY RECORD

COC NO.: H25001

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-1624-04-2725-210

PROJECT MANAGER: Patty Stoll

Sampler (Signature): Laura Lumley (Printed Name): Laura Lumley

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29407

PHONE NO: (843) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOC	No. of Bottles/ Vials	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AF1342	9/28/00	1307	water	2	2		31998014
AF1442	9/28/00	1247		2	2		015
AF1542	9/28/00	1205		2	2		016
AF1642	9/28/00	1130		2	2		017
AF1842	9/28/00	1205		2	2		018
AF1942	9/28/00	1050		2	2		019
AF2442	9/28/00	1340		2	2		020
AF2542	9/28/00	1015		2	2		31999001
AF2642	9/28/00	0956		2	2		002
AF2742	9/28/00	1015		2	2		003
AF2842	9/28/00	1051		2	2		004
AF2942	9/28/00	1115		2	2		005
AF3342	9/28/00	1120		2	2		006

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	9/29/00 1035	Winston Sandifer	9/29/00 1330
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RECEIVED BY: Raymond Reed	Date/Time 9/29/00 1035	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY: Raymond Reed	Date/Time 9/29/00 1330	RECEIVED BY:	Date/Time
COMPANY NAME: G.E.L.		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS:

Cooler ID: #285

Cooler Temperature: 4.2

FEDEX NUMBER:

SAIC An Employee Owned Company
Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

3 of 3

CHAIN OF CUSTODY RECORD

COC NO.: H25 ØØ1

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-1624-04-2725-210

PROJECT MANAGER: Patty Stoll

Sampler (Signature) (Printed Name) Laura Lumley

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29407

PHONE NO: (843) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOC	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AF3442	9/28/00	1010	water	2	2		31999007
AF3542	9/28/00	1040		2	2		008
AF3642	9/28/00	0935		2	2		009
AF3742	9/28/00	0915		2	2		010
AF3842	9/28/00	0935		2	2		011
AF4042	9/28/00	1315		2	2		012
AF4142	9/28/00	1225		2	2		013
AF4242	9/28/00	1130		2	2		014
HPØØ36	9/28/00	0740		2	2		015

9/29/00

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	9/29/00 1035	Gretchen Kendall	9/29/00 1330
COMPANY NAME: SAIC		COMPANY NAME: REL	
RECEIVED BY: Rain Reed	9/29/00 1035	RELINQUISHED BY:	
COMPANY NAME: REL		COMPANY NAME:	
RELINQUISHED BY: [illegible]	9/29/00 13:30	RECEIVED BY:	
COMPANY NAME: [illegible]		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 70

Cooler ID: # 265

Cooler Temperature: 4.2

FEDEX NUMBER:

VERTICAL PROFILE SAMPLING

NOVEMBER/DECEMBER 2000

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Table VIII-E. Summary of November/December 2000 Groundwater Analytical Results

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-43 AF4312 4.0 – 9.0 30-Nov-00 (µg/L)	AF-43 AF4322 9.0 – 14.0 30-Nov-00 (µg/L)	AF-43 AF4332 14.0 – 19.0 30-Nov-00 (µg/L)	AF-43 AF4342 19.0 – 24.0 30-Nov-00 (µg/L)	AF-43 AF4352 24.0 – 29.0 30-Nov-00 (µg/L)	AF-43 AF4362 29.0 – 34.0 30-Nov-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1.3 =
1,1-Dichloroethene	7	3.2	1 U	1 U	0.51 J	2.3 =	5.4 =	12.8 =
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene	—	—	2 U	0.46 J	5.3 =	20.2 =	103 =	116 =
1,2-Dichloropropane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	—	—	5 U	1.2 J	5 U	5 U	5 U	5 U
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	11 =	3.6 J	1.6 J	1.8 J	2 J	1.8 J
Benzene	5	71.28	1 U	1 U	1 U	0.68 J	1 U	1 U
Bromodichloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	28,718	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	200,000	1 U	1 U	1 U	1 U	0.27 J	1 U
Trichloroethene	5	80.7	1 U	1.2 =	304 =	2,600 =	2,140 =	2,030 =
Vinyl Chloride	2	525	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	10,000	—	3 U	5 U	3 U	3 U	3 U	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

Laboratory Qualifiers

U Indicates the compound was not detected at the concentration reported.

UJ Indicates the compound was not detected above an approximated sample quantitation limit.

J Indicates the value for the compound is an estimated value.

= Indicates the compound was detected at the concentration reported.

Table VIII-E. Summary of November/December 2000 Groundwater Analytical Results (continued)

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-43 AF4372 34.0 – 39.0 30-Nov-00 (µg/L)	AF-43 AF4382 39.0 – 44.0 30-Nov-00 (µg/L)	AF-43 AF4392 44.0 – 49.0 30-Nov-00 (µg/L)	AF-44 AF4412 4.0 – 9.0 01-Dec-00 (µg/L)	AF-44 AF4422 9.0 – 14.0 01-Dec-00 (µg/L)	AF-44 AF4432 14.0 – 19.0 01-Dec-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	—	—	0.9 J	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	7.2 =	0.1 J	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene	—	—	68.2 =	9.8 =	5.4 =	7 =	2.8 =	2 U
1,2-Dichloropropane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	2.9 J	2 J	5 U	5 U	5 U	5 U
Benzene	5	71.28	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	28,718	1 U	1 U	0.062 J	1 U	0.072 J	1 U
Methylene Chloride	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	200,000	1 U	1 U	0.45 J	1 U	0.29 J	1 U
Trichloroethene	5	80.7	883 =	213 J	71.2 =	14.3 =	80.1 =	13 =
Vinyl Chloride	2	525	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	10,000	—	3 U	3 U	0.32 J	3 U	0.46 J	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

Laboratory Qualifiers

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J Indicates the value for the compound is an estimated value.

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Table VIII-E. Summary of November/December 2000 Groundwater Analytical Results (continued)

Well ID:			AF-44	AF-44	AF-44	AF-44	AF-44	AF-44
Sample ID		In-Stream	AF4442	AF4452	AF4462	AF4472	AF4482	AF4492
Screened Interval (feet	Federal	Water	19.0 – 24.0	24.0 – 29.0	29.0 – 34.0	34.0 – 39.0	39.0 – 44.0	44.0 – 49.0
BGS):	SWDA	Quality	01-Dec-00	01-Dec-00	01-Dec-00	01-Dec-00	01-Dec-00	01-Dec-00
Sample Date:	MCLs[a]	Standards[b]	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Units:	(µg/L)	(µg/L)						
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	1 U	1 U	1 U	3.2 =	0.84 J	1 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene	—	—	5.6 =	7 =	1.1 J	104 =	38.6 =	9.2 =
1,2-Dichloropropane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	—	—	5 U	5 U	5 U	5 U	2.4 J	1.4 J
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U	2.2 J
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	5 U	5 U	5 U	1.8 J	4.3 J	4.5 J
Benzene	5	71.28	1 U	1 U	1 U	0.16 J	0.31 J	1 U
Bromodichloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	28,718	1 U	1 U	1 U	1 U	0.11 J	1 U
Methylene Chloride	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	200,000	0.31 J	0.3 J	0.38 J	1 U	0.48 J	1 U
Trichloroethene	5	80.7	54.9 =	33.5 =	0.83 J	790 =	346 =	60.8 =
Vinyl Chloride	2	525	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	10,000	—	3 U	3 U	3 U	3 U	3 U	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

Laboratory Qualifiers

U Indicates the compound was not detected at the concentration reported.

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= Indicates the compound was detected at the concentration reported.

Table VIII-E. Summary of November/December 2000 Groundwater Analytical Results (continued)

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-45 AF4512 4.0 – 9.0 01-Dec-00 (µg/L)	AF-45 AF4522 9.0 – 14.0 01-Dec-00 (µg/L)	AF-45 AF4532 14.0 – 19.0 01-Dec-00 (µg/L)	AF-45 AF4542 19.0 – 24.0 01-Dec-00 (µg/L)	AF-45 AF4552 24.0 - 29.0 01-Dec-00 (µg/L)	AF-45 AF4562 29.0 – 34.0 01-Dec-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	1 U	0.17 J	1 U	0.63 J	3.8 =	4.7 =
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene	—	—	10.3 =	7.6 =	1.5 J	67.5 =	279 =	206 =
1,2-Dichloropropane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	5	71.28	1.8 =	4.2 =	0.99 J	0.33 J	0.24 J	0.19 J
Bromodichloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	—	—	0.41 J	0.59 J	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	28,718	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	200,000	0.39 J	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	80.7	1.9 =	47.2 =	18.3 =	428 =	1,510 =	1,490 =
Vinyl Chloride	2	525	1 U	1 U	1 U	1 U	0.27 J	0.24 J
Xylenes, Total	10,000	—	3 U	3 U	3 U	3 U	3 U	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

Laboratory Qualifiers

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UJ Indicates the compound was not detected above an approximated sample quantitation limit.

J Indicates the value for the compound is an estimated value.

= Indicates the compound was detected at the concentration reported.

Table VIII-E. Summary of November/December 2000 Groundwater Analytical Results (continued)

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-45 AF4572 34.0 – 39.0 02-Dec-00 (µg/L)	AF-45 AF4582 39.0 – 44.0 02-Dec-00 (µg/L)	AF-45 AF4592 44.0 – 49.0 02-Dec-00 (µg/L)	AF-46 AF4612 6.0 – 10.0 02-Dec-00 (µg/L)	AF-46 AF4622 11.0 – 15.0 02-Dec-00 (µg/L)	AF-46 AF4632 16.0 – 20.0 02-Dec-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	2 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	2 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	2 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	—	—	2 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	2 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5	98.6	2 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene	—	—	15.2 =	5.9 =	2 U	0.73 J	1.4 J	2 U
1,2-Dichloropropane	—	—	2 U	1 U	1 U	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	2 U	1 U	1 U	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	2 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	—	—	10 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	—	—	10 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	10 U	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	10 U	5 U	5 U	5 U	5 U	5 U
Benzene	5	71.28	2 U	1 U	1 U	0.22 J	0.65 J	0.3 J
Bromodichloromethane	—	—	2 U	1 U	1 U	1 U	1 U	1 U
Bromoform	—	360	2 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	—	—	2 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	—	—	10 U	5 U	5 U	5 U	0.84 J	5 U
Carbon Tetrachloride	5	4.42	2 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	100	21,000	2 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	—	—	2 U	1 U	1 U	1 U	1 U	1 U
Chloroform	—	470.8	2 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	—	—	2 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	—	22	2 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	28,718	2 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	—	—	10 U	5 U	5 U	5 U	5 U	5 U
Styrene	100	—	2 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	8.85	2 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	200,000	0.66 J	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	80.7	181 =	48.4 =	0.59 J	1 U	3.9 =	2.6 =
Vinyl Chloride	2	525	2 U	1 U	1 U	1. U	1 U	1 U
Xylenes, Total	10,000	—	6 U	3 U	3 U	3 U	3 U	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

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Table VIII-E. Summary of November/December 2000 Groundwater Analytical Results (continued)

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-46 AF4642 21.0 – 25.0 02-Dec-00 (µg/L)	AF-46 AF4652 26.0 – 30.0 02-Dec-00 (µg/L)	AF-46 AF4662 31.0 – 35.0 02-Dec-00 (µg/L)	AF-46 AF4672 36.0 – 40.0 02-Dec-00 (µg/L)	AF-46 AF4682 41.0 – 45.0 02-Dec-00 (µg/L)	AF-46 AF4692 46.0 – 50.0 02-Dec-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene	—	—	1.4 J	2.3 =	0.46 J	2 U	2 U	2 U
1,2-Dichloropropane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	5	71.28	0.63 J	0.16 J	1 U	1 U	1 U	1 U
Bromodichloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	28,718	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	200,000	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	80.7	4.6 =	1.2 =	1 U	1 U	0.61 J	1 U
Vinyl Chloride	2	525	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	10,000	—	3 U	3 U	3 U	3 U	3 U	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

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Table VIII-E. Summary of November/December 2000 Groundwater Analytical Results (continued)

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-47 AF4722 11.0 – 15.0 02-Dec-00 (µg/L)	AF-47 AF4732 16.0 – 20.0 02-Dec-00 (µg/L)	AF-47 AF4742 21.0 – 25.0 02-Dec-00 (µg/L)	AF-47 AF4752 26.0 – 30.0 02-Dec-00 (µg/L)	AF-47 AF4762 31.0 – 35.0 03-Dec-00 (µg/L)	AF-47 AF4772 36.0 – 40.0 03-Dec-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5	98.6	1 U	0.51 J	1 U	1 U	1 U	1 U
1,2-Dichloroethene	—	—	0.84 J	2 U	2 U	2 U	2 U	2 U
1,2-Dichloropropane	—	—	0.3 J	1 U	1 U	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	5	71.28	1.2 =	0.21 J	1 U	1 U	1 U	1 U
Bromodichloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	28,718	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	200,000	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	80.7	3 =	0.27 J	1 U	1 U	1 U	1 U
Vinyl Chloride	2	525	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	10,000	—	5 U	3 U	3 U	3 U	3 U	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

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Table VIII-E. Summary of November/December 2000 Groundwater Analytical Results (continued)

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-47 AF4782 41.0 – 45.0 03-Dec-00 (µg/L)	AF-47 AF4792 46.0 – 50.0 03-Dec-00 (µg/L)	AF-48 AF4812 5.0 – 10.0 04-Dec-00 (µg/L)	AF-48 AF4822 10.0 – 15.0 04-Dec-00 (µg/L)	AF-48 AF4832 15.0 – 20.0 04-Dec-00 (µg/L)	AF-48 AF4842 20.0 – 25.0 04-Dec-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene	—	—	2 U	2 U	6.7 =	9.6 =	2 U	2 U
1,2-Dichloropropane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	5 U	5 U	2.4 J	5 U	5 U	5 U
Benzene	5	71.28	1 U	1 U	0.88 J	0.63 J	1 U	1 U
Bromodichloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	28,718	1 U	1 U	1.6 =	0.14 J	1 U	1 U
Methylene Chloride	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	200,000	1.1 U	1 U	8.9 =	1.6 U	1.4 U	1 U
Trichloroethene	5	80.7	1 U	1 U	5.9 =	155 =	1 U	1 U
Vinyl Chloride	2	525	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	10,000	—	3 U	3 U	7.3 =	0.42 J	0.4 J	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

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Table VIII-E. Summary of November/December 2000 Groundwater Analytical Results (continued)

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-48 AF4852 25.0 – 30.0 04-Dec-00 (µg/L)	AF-48 AF4862 30.0 – 35.0 04-Dec-00 (µg/L)	AF-48 AF4872 35.0 – 40.0 04-Dec-00 (µg/L)	AF-48 AF4882 40.0 – 45.0 04-Dec-00 (µg/L)	AF-48 AF4892 45.0 – 50.0 04-Dec-00 (µg/L)	AF-49 AF4912 6.0 – 10.0 03-Dec-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene	—	—	2 U	2 U	2 U	2 U	2 U	1.4 J
1,2-Dichloropropane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,3-cis-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
1,3-trans-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	—	—	5 U	5 U	5 U	5 U	5 U	2.4 J
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	5 U	5 U	5 U	5 U	5 U	9.8 U
Benzene	5	71.28	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	5 U	0.63 J
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	28,718	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	200,000	1 U	1 U	1.1 U	1 U	1 U	1 U
Trichloroethene	5	80.7	1 U	1 U	1 U	1 U	1 U	0.48 J
Vinyl Chloride	2	525	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	10,000	—	3 U	3 U	3 U	3 U	3 U	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

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Table VIII-E. Summary of November/December 2000 Groundwater Analytical Results (continued)

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-49 AF4922 11.0 – 15.0 03-Dec-00 (µg/L)	AF-49 AF4932 16.0 – 20.0 03-Dec-00 (µg/L)	AF-49 AF4942 21.0 – 25.0 03-Dec-00 (µg/L)	AF-49 AF4952 26.0 – 30.0 03-Dec-00 (µg/L)	AF-49 AF4962 31.0 – 35.0 03-Dec-00 (µg/L)	AF-49 AF4972 36.0 – 40.0 03-Dec-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene	—	—	1.9 J	2 U	2 U	2 U	2 U	2 U
1,2-Dichloropropane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	5	71.28	0.21 J	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	—	—	0.98 J	0.66 J	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U	1 U	1 U	0.38 J
Dibromochloromethane	—	22	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	28,718	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	200,000	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	80.7	0.78 J	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2	525	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	10,000	—	3 U	3 U	3 U	3 U	3 U	3 U

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Table VIII-E. Summary of November/December 2000 Groundwater Analytical Results (continued)

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-49 AF4982 41.0 – 45.0 03-Dec-00 (µg/L)	AF-49 AF4992 46.0 – 50.0 03-Dec-00 (µg/L)	AF-50 AF5012 4.0 – 9.0 02-Dec-00 (µg/L)	AF-50 AF5022 9.0 – 14.0 02-Dec-00 (µg/L)	AF-50 AF5032 14.0 – 19.0 02-Dec-00 (µg/L)	AF-50 AF5042 19.0 – 24.0 03-Dec-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene	—	—	2 U	2 U	4 =	4.4 =	0.21 J	2 U
1,2-Dichloropropane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	—	—	5 U	5 U	5 U	5 U	5 U	1.6 J
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	2 J	2.6 J	1.8 J	2 J	5 U	5 U
Benzene	5	71.28	1 U	1 U	9.5 =	0.86 J	1 U	1 U
Bromodichloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	28,718	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	8.85	0.58 J	0.69 J	1 U	1 U	1 U	1 U
Toluene	1,000	200,000	3.9 =	3.7 =	1 U	1 U	1 U	1 U
Trichloroethene	5	80.7	1 U	1 U	6.5 =	13.4 =	1 U	1 U
Vinyl Chloride	2	525	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	10,000	—	3 U	3 U	3 U	3 U	3 U	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

Laboratory Qualifiers

U Indicates the compound was not detected at the concentration reported.

UJ Indicates the compound was not detected above an approximated sample quantitation limit.

J Indicates the value for the compound is an estimated value.

= Indicates the compound was detected at the concentration reported.

Table VIII-E. Summary of November/December 2000 Groundwater Analytical Results (continued)

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-50 AF5052 24.0 – 29.0 03-Dec-00 (µg/L)	AF-50 AF5062 29.0 – 34.0 03-Dec-00 (µg/L)	AF-50 AF5072 34.0 – 39.0 03-Dec-00 (µg/L)	AF-50 AF5082 39.0 – 44.0 03-Dec-00 (µg/L)	AF-50 AF5092 44.0 – 49.0 03-Dec-00 (µg/L)	AF-51 AF5112 5.0 – 10.0 03-Dec-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene	—	—	2 U	2 U	2 U	2 U	2 U	3.4 =
1,2-Dichloropropane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	5	71.28	1 U	1 U	1 U	1 U	1 U	1.3 =
Bromodichloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	28,718	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	200,000	1 U	1 U	1 U	1 U	1 U	0.27 J
Trichloroethene	5	80.7	1 U	1 U	1 U	1 U	1 U	25.6 =
Vinyl Chloride	2	525	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	10,000	—	3 U	3 U	3 U	3 U	3 U	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

Laboratory Qualifiers

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UJ Indicates the compound was not detected above an approximated sample quantitation limit.

J Indicates the value for the compound is an estimated value.

= Indicates the compound was detected at the concentration reported.

Table VIII-E. Summary of November/December 2000 Groundwater Analytical Results (continued)

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-51 AF5122 10.0 – 15.0 03-Dec-00 (µg/L)	AF-51 AF5132 15.0 – 20.0 03-Dec-00 (µg/L)	AF-51 AF5142 20.0 – 25.0 03-Dec-00 (µg/L)	AF-51 AF5152 25.0 – 30.0 04-Dec-00 (µg/L)	AF-51 AF5162 30.0 – 35.0 04-Dec-00 (µg/L)	AF-51 AF5172 35.0 – 40.0 04-Dec-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	10.3 =	2.1 =	0.76 J	1 U	1 U
1,1-Dichloroethene	7	3.2	0.64 J	22.5 =	1.9 =	2.3 =	1 U	1 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene	—	—	5.1 =	65.4 =	4 =	11.9 =	0.51 J	2 U
1,2-Dichloropropane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	5	71.28	0.86 J	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	1 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	28,718	1 U	1 U	1 U	1 U	1 U	0.16 J
Methylene Chloride	—	—	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	200,000	1 U	1 U	1 U	1 U	1 U	2.1 U
Trichloroethene	5	80.7	37.3 =	604 =	10.9 =	90.3 =	0.38 J	1 U
Vinyl Chloride	2	525	1 U	0.6 J	1 U	1 U	1 U	1 U
Xylenes, Total	10,000	—	3 U	3 U	3 U	3 U	3 U	0.45 J

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

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Table VIII-E. Summary of November/December 2000 Groundwater Analytical Results (continued)

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-51 AF5182 40.0 – 45.0 04-Dec-00 (µg/L)	AF-51 AF5192 45.0 – 50.0 04-Dec-00 (µg/L)	AF-52 AF5212 4..0 – 9.0 02-Dec-00 (µg/L)	AF-52 AF5222 9.0 – 14.0 02-Dec-00 (µg/L)	AF-52 AF5232 14.0 – 19.0 02-Dec-00 (µg/L)	AF-52 AF5242 19.0 – 24.0 02-Dec-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	1 U	20 U	50 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	1 U	20 U	50 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	1 U	20 U	50 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U	1 U	20 U	50 U
1,1-Dichloroethene	7	3.2	1 U	1 U	1 U	1 U	20 U	16.3 J
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U	1 U	20 U	50 U
1,2-Dichloroethene	—	—	0.97 J	2 U	2 U	2 U	34.5 J	378 =
1,2-Dichloropropane	—	—	1 U	1 U	1 U	1 U	20 U	50 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	20 U	50 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	20 U	50 U
2-Butanone	—	—	5 U	5 U	1.2 J	5 U	100 U	250 U
2-Hexanone	—	—	5 U	5 U	5 U	5 U	100 U	250 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	100 U	250 U
Acetone	—	—	5 U	5 U	8.5 =	1.8 J	100 U	250 U
Benzene	5	71.28	1 U	1 U	0.18 J	1 U	20 U	50 U
Bromodichloromethane	—	—	1 U	1 U	1 U	1 U	20 U	50 U
Bromoform	—	360	1 U	1 U	1 U	1 U	20 U	50 U
Bromomethane	—	—	1 U	1 U	1 U	1 U	20 U	50 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	100 U	250 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	1 U	20 U	50 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	1 U	20 U	50 U
Chloroethane	—	—	1 U	1 U	1 U	1 U	20 U	50 U
Chloroform	—	470.8	1 U	1 U	1 U	1 U	20 U	50 U
Chloromethane	—	—	1 U	1 U	1 U	1 U	20 U	50 U
Dibromochloromethane	—	22	1 U	1 U	1 U	1 U	20 U	50 U
Ethylbenzene	700	28,718	1 U	1 U	1 U	1 U	20 U	50 U
Methylene Chloride	—	—	5 U	5 U	5 U	5 U	100 U	250 U
Styrene	100	—	1 U	1 U	1 U	1 U	20 U	50 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U	1 U	20 U	50 U
Toluene	1,000	200,000	1.3 U	1 U	1 U	1 U	20 U	50 U
Trichloroethene	5	80.7	2.4 =	1 U	1 U	0.33 J	1,780 =	7,730 =
Vinyl Chloride	2	525	1 U	1 U	1 U	1 U	20 U	50 U
Xylenes, Total	10,000	—	3 U	3 U	3 U	3 U	60 U	150 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

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Table VIII-E. Summary of November/December 2000 Groundwater Analytical Results (continued)

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-52 AF5252 24.0 – 29.0 02-Dec-00 (µg/L)	AF-52 AF5262 29.0 – 34.0 02-Dec-00 (µg/L)	AF-52 AF5272 34.0 – 39.0 02-Dec-00 (µg/L)	AF-52 AF5282 39.0 – 44.0 02-Dec-00 (µg/L)	AF-52 AF5292 44.0 – 49.0 02-Dec-00 (µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	—	25 U	1 U	10 U	10 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	25 U	1 U	10 U	10 U	1 U
1,1,2-Trichloroethane	5	41.99	25 U	1 U	10 U	10 U	1 U
1,1-Dichloroethane	—	—	25 U	1 U	10 U	10 U	1 U
1,1-Dichloroethene	7	3.2	15 J	0.61 J	10 U	10 U	1 U
1,2-Dichloroethane	5	98.6	25 U	1 U	10 U	10 U	1 U
1,2-Dichloroethene	—	—	174 =	6 =	65.2 =	42.7 =	0.31 J
1,2-Dichloropropane	—	—	25 U	1 U	10 U	10 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	25 U	1 U	10 U	10 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	25 U	1 U	10 U	10 U	1 U
2-Butanone	—	—	125 U	5 U	50 U	50 U	5 U
2-Hexanone	—	—	125 U	5 U	50 U	50 U	5 U
4-Methyl-2-pentanone	—	—	125 U	5 U	50 U	50 U	5 U
Acetone	—	—	125 U	5 U	50 U	50 U	5 U
Benzene	5	71.28	25 U	1 U	10 U	10 U	1 U
Bromodichloromethane	—	—	25 U	1 U	10 U	10 U	1 U
Bromoform	—	360	25 U	1 U	10 U	10 U	1 U
Bromomethane	—	—	25 U	1 U	10 U	10 U	1 U
Carbon Disulfide	—	—	125 U	5 U	50 U	50 U	5 U
Carbon Tetrachloride	5	4.42	25 U	1 U	10 U	10 U	1 U
Chlorobenzene	100	21,000	25 U	1 U	10 U	10 U	1 U
Chloroethane	—	—	25 U	1 U	10 U	10 U	1 U
Chloroform	—	470.8	25 U	1 U	10 U	10 U	1 U
Chloromethane	—	—	25 U	1 U	10 U	10 U	1 U
Dibromochloromethane	—	22	25 U	1 U	10 U	10 U	1 U
Ethylbenzene	700	28,718	25 U	1 U	10 U	10 U	1 U
Methylene Chloride	—	—	125 U	5 U	50 U	50 U	5 U
Styrene	100	—	25 U	1 U	10 U	10 U	1 U
Tetrachloroethene	5	8.85	25 U	1 U	10 U	10 U	1 U
Toluene	1,000	200,000	25 U	1 U	10 U	10 U	1 U
Trichloroethene	5	80.7	2,120 =	34.1 =	631 =	516 =	2.8 =
Vinyl Chloride	2	525	25 U	1 U	10 U	10 U	1 U
Xylenes, Total	10,000	—	75 U	3 U	30 U	30 U	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4312

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34807

Matrix: (soil/water) WATER Lab Sample ID: 34807001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M505

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/08/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	11.0	
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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FORM I VOA OLM03.0

DATA VALIDATION COPY

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4322

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34807

Matrix: (soil/water) WATER Lab Sample ID: 34807002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M506

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/08/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	3.6	J	J
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	1.2	J	J
540-59-0	1,2-Dichloroethylene(total)	0.46	J	J
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.2		
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4332

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34807

Matrix: (soil/water) WATER Lab Sample ID: 34807003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M507

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/08/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

Use

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
74-87-3	Chloromethane		1.0	U	U
75-01-4	Vinyl chloride		1.0	U	
74-83-9	Bromomethane		1.0	U	
75-00-3	Chloroethane		1.0	U	
75-35-4	1,1-Dichloroethylene		0.51	J	J
67-64-1	Acetone		1.6	J	J
75-15-0	Carbon disulfide		5.0	U	U
75-09-2	Methylene chloride		5.0	U	
75-34-3	1,1-Dichloroethane		1.0	U	
78-93-3	2-Butanone		5.0	U	
540-59-0	1,2-Dichloroethylene(total)		5.3		=
67-66-3	Chloroform		1.0	U	U
71-55-6	1,1,1-Trichloroethane		1.0	U	
56-23-5	Carbon tetrachloride		1.0	U	
107-06-2	1,2-Dichloroethane		1.0	U	
71-43-2	Benzene		1.0	U	
79-01-6	Trichloroethylene	304	~~226~~ ~~E~~	D	=
78-87-5	1,2-Dichloropropane		1.0	U	U
75-27-4	Bromodichloromethane		1.0	U	
10061-01-5	cis-1,3-Dichloropropylene		1.0	U	
108-10-1	4-Methyl-2-pentanone		5.0	U	
108-88-3	Toluene		1.0	U	
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	
79-00-5	1,1,2-Trichloroethane		1.0	U	
591-78-6	2-Hexanone		5.0	U	
127-18-4	Tetrachloroethylene		1.0	U	
124-48-1	Dibromochloromethane		1.0	U	
108-90-7	Chlorobenzene		1.0	U	
100-41-4	Ethylbenzene		1.0	U	
1330-20-7	Xylenes (total)		3.0	U	
100-42-5	Styrene		1.0	U	
75-25-2	Bromoform		1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4342

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34807

Matrix: (soil/water) WATER Lab Sample ID: 34807004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M508

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/08/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

USE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane		1.0	U
75-01-4	Vinyl chloride		1.0	U
74-83-9	Bromomethane		1.0	U
75-00-3	Chloroethane		1.0	U
75-35-4	1,1-Dichloroethylene		2.3	
67-64-1	Acetone		1.8	J
75-15-0	Carbon disulfide		5.0	U
75-09-2	Methylene chloride		5.0	U
75-34-3	1,1-Dichloroethane		1.0	U
78-93-3	2-Butanone		5.0	U
540-59-0	1,2-Dichloroethylene(total)		20.2	
67-66-3	Chloroform		1.0	U
71-55-6	1,1,1-Trichloroethane		1.0	U
56-23-5	Carbon tetrachloride		1.0	U
107-06-2	1,2-Dichloroethane		1.0	U
71-43-2	Benzene		0.68	J
79-01-6	Trichloroethylene	2600	~~1330~~	~~E~~ D
78-87-5	1,2-Dichloropropane		1.0	U
75-27-4	Bromodichloromethane		1.0	U
10061-01-5	cis-1,3-Dichloropropylene		1.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		1.0	U
10061-02-6	trans-1,3-Dichloropropylene		1.0	U
79-00-5	1,1,2-Trichloroethane		1.0	U
591-78-6	2-Hexanone		5.0	U
127-18-4	Tetrachloroethylene		1.0	U
124-48-1	Dibromochloromethane		1.0	U
108-90-7	Chlorobenzene		1.0	U
100-41-4	Ethylbenzene		1.0	U
1330-20-7	Xylenes (total)		3.0	U
100-42-5	Styrene		1.0	U
75-25-2	Bromoform		1.0	U
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4352

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34807

Matrix: (soil/water) WATER Lab Sample ID: 34807005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M509

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/08/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

Use

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
74-87-3	Chloromethane		1.0	U	u
75-01-4	Vinyl chloride		1.0	U	
74-83-9	Bromomethane		1.0	U	
75-00-3	Chloroethane		1.0	U	
75-35-4	1,1-Dichloroethylene		5.4		=
67-64-1	Acetone		2.0	J	J
75-15-0	Carbon disulfide		5.0	U	u
75-09-2	Methylene chloride		5.0	U	
75-34-3	1,1-Dichloroethane		1.0	U	
78-93-3	2-Butanone		5.0	U	
540-59-0	1,2-Dichloroethylene(total)		103		=
67-66-3	Chloroform		1.0	U	u
71-55-6	1,1,1-Trichloroethane		1.0	U	
56-23-5	Carbon tetrachloride		1.0	U	
107-06-2	1,2-Dichloroethane		1.0	U	
71-43-2	Benzene		1.0	U	
79-01-6	Trichloroethylene	2140	~~1270~~	~~E~~ D	=
78-87-5	1,2-Dichloropropane		1.0	U	u
75-27-4	Bromodichloromethane		1.0	U	
10061-01-5	cis-1,3-Dichloropropylene		1.0	U	
108-10-1	4-Methyl-2-pentanone		5.0	U	
108-88-3	Toluene		0.27	J	J
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	u
79-00-5	1,1,2-Trichloroethane		1.0	U	
591-78-6	2-Hexanone		5.0	U	
127-18-4	Tetrachloroethylene		1.0	U	
124-48-1	Dibromochloromethane		1.0	U	
108-90-7	Chlorobenzene		1.0	U	
100-41-4	Ethylbenzene		1.0	U	
1330-20-7	Xylenes (total)		3.0	U	
100-42-5	Styrene		1.0	U	
75-25-2	Bromoform		1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4362

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34807

Matrix: (soil/water) WATER Lab Sample ID: 34807006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M510

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/08/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

USL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
74-87-3	Chloromethane		1.0	U	U
75-01-4	Vinyl chloride		1.0	U	↓
74-83-9	Bromomethane		1.0	U	↓
75-00-3	Chloroethane		1.0	U	↓
75-35-4	1,1-Dichloroethylene		12.8		=
67-64-1	Acetone		1.8	J	5
75-15-0	Carbon disulfide		5.0	U	4
75-09-2	Methylene chloride		5.0	U	4
75-34-3	1,1-Dichloroethane		1.3		=
78-93-3	2-Butanone		5.0	U	4
540-59-0	1,2-Dichloroethylene(total)		116		=
67-66-3	Chloroform		1.0	U	U
71-55-6	1,1,1-Trichloroethane		1.0	U	↓
56-23-5	Carbon tetrachloride		1.0	U	↓
107-06-2	1,2-Dichloroethane		1.0	U	↓
71-43-2	Benzene		1.0	U	↓
79-01-6	Trichloroethylene	2030	~~1180~~	~~E~~ D	=
78-87-5	1,2-Dichloropropane		1.0	U	U
75-27-4	Bromodichloromethane		1.0	U	↓
10061-01-5	cis-1,3-Dichloropropylene		1.0	U	↓
108-10-1	4-Methyl-2-pentanone		5.0	U	↓
108-88-3	Toluene		1.0	U	↓
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	↓
79-00-5	1,1,2-Trichloroethane		1.0	U	↓
591-78-6	2-Hexanone		5.0	U	↓
127-18-4	Tetrachloroethylene		1.0	U	↓
124-48-1	Dibromochloromethane		1.0	U	↓
108-90-7	Chlorobenzene		1.0	U	↓
100-41-4	Ethylbenzene		1.0	U	↓
1330-20-7	Xylenes (total)		3.0	U	↓
100-42-5	Styrene		1.0	U	↓
75-25-2	Bromoform		1.0	U	↓
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	↓

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4372

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34807

Matrix: (soil/water) WATER Lab Sample ID: 34807007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M511

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/08/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

Use

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	7.2	
67-64-1	Acetone	2.9	J
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	0.90	J
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	68.2	
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	883 ~~870~~	~~E~~ D
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4382

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34807

Matrix: (soil/water) WATER Lab Sample ID: 34807008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M512

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/08/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

Use

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	0.10	J	J
67-64-1	Acetone	2.0	J	J
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	9.8		=
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	213 ~~177~~ ~~E~~ DE	J N03	
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4392

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34807

Matrix: (soil/water) WATER Lab Sample ID: 34807009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M513

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/08/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	5.4		
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	71.2		
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	0.45	J	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	0.062	J	J
1330-20-7	Xylenes (total)	0.32	J	J
100-42-5	Styrene	1.0	U	U
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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6:

DUPLICATE

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4394

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34807

Matrix: (soil/water) WATER Lab Sample ID: 34807010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5N114

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/11/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	2.5	J	J
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	3.2		U
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	40.4		U
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	0.50	J	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	0.060	J	J
1330-20-7	Xylenes (total)	3.0	U	U
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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EPA SAMPLE NO.

AF4412

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34807

Matrix: (soil/water) WATER Lab Sample ID: 34807012

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M516

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/08/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	u
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	7.0		=
67-66-3	Chloroform	1.0	U	u
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	14.3		=
78-87-5	1,2-Dichloropropane	1.0	U	u
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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EPA SAMPLE NO.

AF4422

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34807

Matrix: (soil/water) WATER Lab Sample ID: 34807013

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M517

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/08/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.8	
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	80.1	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.29	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	0.072	J
1330-20-7	Xylenes (total)	0.46	J
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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EPA SAMPLE NO.

AF4432

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34807

Matrix: (soil/water) WATER Lab Sample ID: 34807014

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M518

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/08/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	13.0	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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EPA SAMPLE NO.

AF4442

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34807

Matrix: (soil/water) WATER Lab Sample ID: 34807015

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M519

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/08/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	5.6	
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	54.9	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.31	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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EPA SAMPLE NO.

AF4452

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34807

Matrix: (soil/water) WATER Lab Sample ID: 34807016

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M520

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/08/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	7.0	
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	33.5	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.30	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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EPA SAMPLE NO.

AF4462

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34807

Matrix: (soil/water) WATER Lab Sample ID: 34807017

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M521

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/08/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	1.1	J
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	0.83	J
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.38	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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EPA SAMPLE NO.

AF4472

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34807

Matrix: (soil/water) WATER Lab Sample ID: 34807018

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M522

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/08/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

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CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
74-87-3	Chloromethane		1.0	U	U
75-01-4	Vinyl chloride		1.0	U	
74-83-9	Bromomethane		1.0	U	
75-00-3	Chloroethane		1.0	U	
75-35-4	1,1-Dichloroethylene		3.2		=
67-64-1	Acetone		1.8	J	J
75-15-0	Carbon disulfide		5.0	U	U
75-09-2	Methylene chloride		5.0	U	
75-34-3	1,1-Dichloroethane		1.0	U	
78-93-3	2-Butanone		5.0	U	
540-59-0	1,2-Dichloroethylene (total)		104		=
67-66-3	Chloroform		1.0	U	U
71-55-6	1,1,1-Trichloroethane		1.0	U	
56-23-5	Carbon tetrachloride		1.0	U	
107-06-2	1,2-Dichloroethane		1.0	U	
71-43-2	Benzene		0.16	J	J
79-01-6	Trichloroethylene	790	~~781~~	~~E~~ D	=
78-87-5	1,2-Dichloropropane		1.0	U	U
75-27-4	Bromodichloromethane		1.0	U	
10061-01-5	cis-1,3-Dichloropropylene		1.0	U	
108-10-1	4-Methyl-2-pentanone		5.0	U	
108-88-3	Toluene		1.0	U	
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	
79-00-5	1,1,2-Trichloroethane		1.0	U	
591-78-6	2-Hexanone		5.0	U	
127-18-4	Tetrachloroethylene		1.0	U	
124-48-1	Dibromochloromethane		1.0	U	
108-90-7	Chlorobenzene		1.0	U	
100-41-4	Ethylbenzene		1.0	U	
1330-20-7	Xylenes (total)		3.0	U	
100-42-5	Styrene		1.0	U	
75-25-2	Bromoform		1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	

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EPA SAMPLE NO.

AF4482

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34807

Matrix: (soil/water) WATER Lab Sample ID: 34807019

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M523

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/08/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

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CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane		1.0	U
75-01-4	Vinyl chloride		1.0	U
74-83-9	Bromomethane		1.0	U
75-00-3	Chloroethane		1.0	U
75-35-4	1,1-Dichloroethylene		0.84	J
67-64-1	Acetone		4.3	J
75-15-0	Carbon disulfide		5.0	U
75-09-2	Methylene chloride		5.0	U
75-34-3	1,1-Dichloroethane		1.0	U
78-93-3	2-Butanone		2.4	J
540-59-0	1,2-Dichloroethylene(total)		38.6	
67-66-3	Chloroform		1.0	U
71-55-6	1,1,1-Trichloroethane		1.0	U
56-23-5	Carbon tetrachloride		1.0	U
107-06-2	1,2-Dichloroethane		1.0	U
71-43-2	Benzene		0.31	J
79-01-6	Trichloroethylene	346	~~264~~	~~E~~ D
78-87-5	1,2-Dichloropropane		1.0	U
75-27-4	Bromodichloromethane		1.0	U
10061-01-5	cis-1,3-Dichloropropylene		1.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		0.48	J
10061-02-6	trans-1,3-Dichloropropylene		1.0	U
79-00-5	1,1,2-Trichloroethane		1.0	U
591-78-6	2-Hexanone		5.0	U
127-18-4	Tetrachloroethylene		1.0	U
124-48-1	Dibromochloromethane		1.0	U
108-90-7	Chlorobenzene		1.0	U
100-41-4	Ethylbenzene		0.11	J
1330-20-7	Xylenes (total)		3.0	U
100-42-5	Styrene		1.0	U
75-25-2	Bromoform		1.0	U
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U

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EPA SAMPLE NO.

AF4492

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34807

Matrix: (soil/water) WATER Lab Sample ID: 34807020

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5N117

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/11/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	4.5	J
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	1.4	J
540-59-0	1,2-Dichloroethylene(total)	9.2	
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	60.8	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	2.2	J
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
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EPA SAMPLE NO.

AF4512

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34808

Matrix: (soil/water) WATER Lab Sample ID: 34808001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N208

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/12/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5 ~~2.1~~	JB
75-15-0	Carbon disulfide	0.41	J
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	10.3	
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.8	
79-01-6	Trichloroethylene	1.9	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.39	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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EPA SAMPLE NO.

AF4522

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34808

Matrix: (soil/water) WATER Lab Sample ID: 34808002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N116

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/11/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	0.17	J	J
67-64-1	Acetone	5 ~~1.8~~	JB	U F01,F06
75-15-0	Carbon disulfide	0.59	J	J
75-09-2	Methylene chloride	5.0	U	U
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	7.6		
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	4.2		
79-01-6	Trichloroethylene	47.2		
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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EPA SAMPLE NO.

AF4532

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34808

Matrix: (soil/water) WATER Lab Sample ID: 34808003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N117

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/11/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5 ~~1.6~~	JB
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	1.5	J
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	0.99	J
79-01-6	Trichloroethylene	18.3	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4542

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34808

Matrix: (soil/water) WATER Lab Sample ID: 34808004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N118

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/11/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

USE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	0.63	J	J
67-64-1	Acetone	5 ~~1.4~~	JB	U F01,F0
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene (total)	67.5		=
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	0.33	J	J
79-01-6	Trichloroethylene	428 ~~436~~	~~E~~D	=
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4552

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34808

Matrix: (soil/water) WATER Lab Sample ID: 34808005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N119

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/11/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

Use

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	0.27	J
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	3.8	
67-64-1	Acetone	5 ~~1.2~~	JB
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	279 ~~273~~	~~E~~ D
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	0.24	J
79-01-6	Trichloroethylene	1510 ~~1440~~	~~E~~ D
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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DATA VALIDATION

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DUPLICATE

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4554

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34808

Matrix: (soil/water) WATER Lab Sample ID: 34808006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N120

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/11/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

USE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
74-87-3	Chloromethane		1.0	U	U
75-01-4	Vinyl chloride		0.37	J	J
74-83-9	Bromomethane		1.0	U	U
75-00-3	Chloroethane		1.0	U	U
75-35-4	1,1-Dichloroethylene		4.4		=
67-64-1	Acetone	5	~~1.2~~	JB	U FO1,FO2
75-15-0	Carbon disulfide		5.0	U	U
75-09-2	Methylene chloride		5.0	U	↓
75-34-3	1,1-Dichloroethane		1.0	U	↓
78-93-3	2-Butanone		5.0	U	↓
540-59-0	1,2-Dichloroethylene(total)	270	~~288~~	~~E~~ D	=
67-66-3	Chloroform		1.0	U	U
71-55-6	1,1,1-Trichloroethane		1.0	U	↓
56-23-5	Carbon tetrachloride		1.0	U	↓
107-06-2	1,2-Dichloroethane		1.0	U	↓
71-43-2	Benzene		0.25	J	J
79-01-6	Trichloroethylene	1320	~~1610~~	~~E~~ D	=
78-87-5	1,2-Dichloropropane		1.0	U	U
75-27-4	Bromodichloromethane		1.0	U	↓
10061-01-5	cis-1,3-Dichloropropylene		1.0	U	↓
108-10-1	4-Methyl-2-pentanone		5.0	U	↓
108-88-3	Toluene		1.0	U	↓
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	↓
79-00-5	1,1,2-Trichloroethane		1.0	U	↓
591-78-6	2-Hexanone		5.0	U	↓
127-18-4	Tetrachloroethylene		1.0	U	↓
124-48-1	Dibromochloromethane		1.0	U	↓
108-90-7	Chlorobenzene		1.0	U	↓
100-41-4	Ethylbenzene		1.0	U	↓
1330-20-7	Xylenes (total)		3.0	U	↓
100-42-5	Styrene		1.0	U	↓
75-25-2	Bromoform		1.0	U	↓
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	↓

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4562

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34808

Matrix: (soil/water) WATER Lab Sample ID: 34808007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N121

Level: (low/med) LOW Date Received: 12/02/00

% Moisture: not dec. _____ Date Analyzed: 12/11/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

USL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	0.24	J	J
74-83-9	Bromomethane	1.0	U	U
75-00-3	Chloroethane	1.0	U	U
75-35-4	1,1-Dichloroethylene	4.7		=
67-64-1	Acetone	5 ~~1.1~~	JB	U F F06
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	206 ~~205~~	~~E~~ D	=
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	0.19	J	J
79-01-6	Trichloroethylene	1490 ~~1580~~	~~E~~ D	=
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4572

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34884

Matrix: (soil/water) WATER Lab Sample ID: 34884013

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1N612

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/16/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	2.0	U
75-01-4	Vinyl chloride	2.0	U
74-83-9	Bromomethane	2.0	U
75-00-3	Chloroethane	2.0	U
75-35-4	1,1-Dichloroethylene	2.0	U
67-64-1	Acetone	10.0	U
75-15-0	Carbon disulfide	10.0	U
75-09-2	Methylene chloride	10.0	U
75-34-3	1,1-Dichloroethane	2.0	U
78-93-3	2-Butanone	10.0	U
540-59-0	1,2-Dichloroethylene(total)	15.2	
67-66-3	Chloroform	2.0	U
71-55-6	1,1,1-Trichloroethane	2.0	U
56-23-5	Carbon tetrachloride	2.0	U
107-06-2	1,2-Dichloroethane	2.0	U
71-43-2	Benzene	2.0	U
79-01-6	Trichloroethylene	181	
78-87-5	1,2-Dichloropropane	2.0	U
75-27-4	Bromodichloromethane	2.0	U
10061-01-5	cis-1,3-Dichloropropylene	2.0	U
108-10-1	4-Methyl-2-pentanone	10.0	U
108-88-3	Toluene	0.66	J
10061-02-6	trans-1,3-Dichloropropylene	2.0	U
79-00-5	1,1,2-Trichloroethane	2.0	U
591-78-6	2-Hexanone	10.0	U
127-18-4	Tetrachloroethylene	2.0	U
124-48-1	Dibromochloromethane	2.0	U
108-90-7	Chlorobenzene	2.0	U
100-41-4	Ethylbenzene	2.0	U
1330-20-7	Xylenes (total)	6.0	U
100-42-5	Styrene	2.0	U
75-25-2	Bromoform	2.0	U
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4582

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34884

Matrix: (soil/water) WATER Lab Sample ID: 34884014

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1N538

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/16/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	5.9		=
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	48.4		=
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.44~~	JB	U F01,F0
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4592

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34884

Matrix: (soil/water) WATER Lab Sample ID: 34884015

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1N539

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/16/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
74-87-3	Chloromethane		1.0	U	U
75-01-4	Vinyl chloride		1.0	U	
74-83-9	Bromomethane		1.0	U	
75-00-3	Chloroethane		1.0	U	
75-35-4	1,1-Dichloroethylene		1.0	U	
67-64-1	Acetone		5.0	U	
75-15-0	Carbon disulfide		5.0	U	
75-09-2	Methylene chloride		5.0	U	
75-34-3	1,1-Dichloroethane		1.0	U	
78-93-3	2-Butanone		5.0	U	
540-59-0	1,2-Dichloroethylene(total)		2.0	U	
67-66-3	Chloroform		1.0	U	
71-55-6	1,1,1-Trichloroethane		1.0	U	
56-23-5	Carbon tetrachloride		1.0	U	
107-06-2	1,2-Dichloroethane		1.0	U	
71-43-2	Benzene		1.0	U	
79-01-6	Trichloroethylene		0.59	J	J
78-87-5	1,2-Dichloropropane		1.0	U	U
75-27-4	Bromodichloromethane		1.0	U	
10061-01-5	cis-1,3-Dichloropropylene		1.0	U	
108-10-1	4-Methyl-2-pentanone		5.0	U	
108-88-3	Toluene	1.0	~~0.39~~	JB	U FO1, FO6
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	U
79-00-5	1,1,2-Trichloroethane		1.0	U	
591-78-6	2-Hexanone		5.0	U	
127-18-4	Tetrachloroethylene		1.0	U	
124-48-1	Dibromochloromethane		1.0	U	
108-90-7	Chlorobenzene		1.0	U	
100-41-4	Ethylbenzene		1.0	U	
1330-20-7	Xylenes (total)		3.0	U	
100-42-5	Styrene		1.0	U	
75-25-2	Bromoform		1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4612

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N240

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/12/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	0.73	J	J
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	0.22	J	J
79-01-6	Trichloroethylene	1.0	U	U
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4622

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883012

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N241

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/12/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.84	J
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	1.4	J
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	0.65	J
79-01-6	Trichloroethylene	3.9	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4632

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883013

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N242

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/12/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	0.30	J
79-01-6	Trichloroethylene	2.6	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4642

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883014

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N243

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/13/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	1.4	J
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	0.63	J
79-01-6	Trichloroethylene	4.6	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4652

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883015

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N244

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/13/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.3	
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	0.16	J
79-01-6	Trichloroethylene	1.2	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4662

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883016

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N245

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/13/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	0.46	J	4
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4672

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883017

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N246

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/13/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4674

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883018

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N247

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/13/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4682

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883019

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N248

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/13/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	0.61	J	J
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4692

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883020

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N249

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/13/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4722

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N235

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/12/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	0.84	J
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.2	
79-01-6	Trichloroethylene	3.0	
78-87-5	1,2-Dichloropropane	0.30	J
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4732

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N234

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/12/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	0.51	J
71-43-2	Benzene	0.21	J
79-01-6	Trichloroethylene	0.27	J
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4742

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N233

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/12/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4752

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N232

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/12/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4762

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N231

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/12/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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DATA VALIDATION

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4772

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N230

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/12/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	2.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4782

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34881

Matrix: (soil/water) WATER Lab Sample ID: 34881020

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N339

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/14/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~2.0~~	JB	U F01, F07
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.1	B	U F01, F07
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4792

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34881

Matrix: (soil/water) WATER Lab Sample ID: 34881019

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N338

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/14/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~1.9~~	JB	U F01,F06
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.75~~	JB	U F01,F06
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4812

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34929

Matrix: (soil/water) WATER Lab Sample ID: 34929001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N508

Level: (low/med) LOW Date Received: 12/05/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	2.4	J	J
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	6.7		=
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	0.88	J	J
79-01-6	Trichloroethylene	5.9		=
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	8.9	B	= F01, F02
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.6		=
1330-20-7	Xylenes (total)	7.3		=
100-42-5	Styrene	1.0	U	U
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4822

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34929

Matrix: (soil/water) WATER Lab Sample ID: 34929002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N509

Level: (low/med) LOW Date Received: 12/05/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

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CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	9.6		=
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	0.63	J	J
79-01-6	Trichloroethylene	155 ~~132~~ ~~E~~ D		=
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.6	B	U F01, F07
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	0.14	J	J
1330-20-7	Xylenes (total)	0.42	J	J
100-42-5	Styrene	1.0	U	U
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4832

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34929

Matrix: (soil/water) WATER Lab Sample ID: 34929003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N510

Level: (low/med) LOW Date Received: 12/05/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.4	B	U FD1, FD→
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	0.40	J	J
100-42-5	Styrene	1.0	U	U
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4842

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34929

Matrix: (soil/water) WATER Lab Sample ID: 34929004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N511

Level: (low/med) LOW Date Received: 12/05/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene (total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	B	U FO1, FO6
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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DUPLICATE

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4844

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34929

Matrix: (soil/water) WATER Lab Sample ID: 34929005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N512

Level: (low/med) LOW Date Received: 12/05/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	B	U F01, F06
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4852

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34929

Matrix: (soil/water) WATER Lab Sample ID: 34929006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N513

Level: (low/med) LOW Date Received: 12/05/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	B	U F01,F06
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4862

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34929

Matrix: (soil/water) WATER Lab Sample ID: 34929007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N514

Level: (low/med) LOW Date Received: 12/05/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	B	U FD1,FD2
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4872

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34929

Matrix: (soil/water) WATER Lab Sample ID: 34929008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N515

Level: (low/med) LOW Date Received: 12/05/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.1	B	U F01,F07
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4882

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34929

Matrix: (soil/water) WATER Lab Sample ID: 34929009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N516

Level: (low/med) LOW Date Received: 12/05/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
74-87-3	Chloromethane		1.0	U	U
75-01-4	Vinyl chloride		1.0	U	
74-83-9	Bromomethane		1.0	U	
75-00-3	Chloroethane		1.0	U	
75-35-4	1,1-Dichloroethylene		1.0	U	
67-64-1	Acetone		5.0	U	
75-15-0	Carbon disulfide		5.0	U	
75-09-2	Methylene chloride		5.0	U	
75-34-3	1,1-Dichloroethane		1.0	U	
78-93-3	2-Butanone		5.0	U	
540-59-0	1,2-Dichloroethylene(total)		2.0	U	
67-66-3	Chloroform		1.0	U	
71-55-6	1,1,1-Trichloroethane		1.0	U	
56-23-5	Carbon tetrachloride		1.0	U	
107-06-2	1,2-Dichloroethane		1.0	U	
71-43-2	Benzene		1.0	U	
79-01-6	Trichloroethylene		1.0	U	
78-87-5	1,2-Dichloropropane		1.0	U	
75-27-4	Bromodichloromethane		1.0	U	
10061-01-5	cis-1,3-Dichloropropylene		1.0	U	
108-10-1	4-Methyl-2-pentanone		5.0	U	
108-88-3	Toluene	1.0	~~0.76~~	JB	U F01,F0C
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	U
79-00-5	1,1,2-Trichloroethane		1.0	U	
591-78-6	2-Hexanone		5.0	U	
127-18-4	Tetrachloroethylene		1.0	U	
124-48-1	Dibromochloromethane		1.0	U	
108-90-7	Chlorobenzene		1.0	U	
100-41-4	Ethylbenzene		1.0	U	
1330-20-7	Xylenes (total)		3.0	U	
100-42-5	Styrene		1.0	U	
75-25-2	Bromoform		1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4892

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34929

Matrix: (soil/water) WATER Lab Sample ID: 34929010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N517

Level: (low/med) LOW Date Received: 12/05/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.88~~	JB	U FO1,FO6
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4912

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34881

Matrix: (soil/water) WATER Lab Sample ID: 34881010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N509

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	9.8	B	U F01,F
75-15-0	Carbon disulfide	0.63	J	U
75-09-2	Methylene chloride	5.0	U	U
75-34-3	1,1-Dichloroethane	1.0	U	U
78-93-3	2-Butanone	2.4	J	U
540-59-0	1,2-Dichloroethylene(total)	1.4	J	U
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	0.48	J	U
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.87~~	JB	U F01,F06
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4922

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34881

Matrix: (soil/water) WATER Lab Sample ID: 34881009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N508

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~4.6~~	JB	U F01,F06
75-15-0	Carbon disulfide	0.98	J	J
75-09-2	Methylene chloride	5.0	U	U
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	1.9	J	J
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	0.21	J	J
79-01-6	Trichloroethylene	0.78	J	J
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.57~~	JB	U F01,F06
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4932

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34881

Matrix: (soil/water) WATER Lab Sample ID: 34881008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N412

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/14/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~2.6~~	JB	U F01,F
75-15-0	Carbon disulfide	0.66	J	J
75-09-2	Methylene chloride	5.0	U	U
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.60~~	JB	U F01,F06
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4942

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34881

Matrix: (soil/water) WATER Lab Sample ID: 34881007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N411

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/14/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.58~~	JB	U F01, F06
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4952

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34881

Matrix: (soil/water) WATER Lab Sample ID: 34881006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N410

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/14/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~2.4~~	JB	U F01
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.63~~	JB	U F01,F06
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4962

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34881

Matrix: (soil/water) WATER Lab Sample ID: 34881005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N409

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/14/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~1.8~~	JB	U F01,F02
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.50~~	JB	U F01,F02
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4972

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34881

Matrix: (soil/water) WATER Lab Sample ID: 34881003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N407

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/14/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
74-87-3	Chloromethane		0.38	J	J C05
75-01-4	Vinyl chloride		1.0	U	U
74-83-9	Bromomethane		1.0	U	
75-00-3	Chloroethane		1.0	U	
75-35-4	1,1-Dichloroethylene		1.0	U	
67-64-1	Acetone	5	~~2.1~~	JB	U FQ 6
75-15-0	Carbon disulfide		5.0	U	U
75-09-2	Methylene chloride		5.0	U	
75-34-3	1,1-Dichloroethane		1.0	U	
78-93-3	2-Butanone		5.0	U	
540-59-0	1,2-Dichloroethylene(total)		2.0	U	
67-66-3	Chloroform		1.0	U	
71-55-6	1,1,1-Trichloroethane		1.0	U	
56-23-5	Carbon tetrachloride		1.0	U	
107-06-2	1,2-Dichloroethane		1.0	U	
71-43-2	Benzene		1.0	U	
79-01-6	Trichloroethylene		1.0	U	
78-87-5	1,2-Dichloropropane		1.0	U	
75-27-4	Bromodichloromethane		1.0	U	
10061-01-5	cis-1,3-Dichloropropylene		1.0	U	
108-10-1	4-Methyl-2-pentanone		5.0	U	
108-88-3	Toluene	1.0	~~0.46~~	JB	U FQ1,FQ6
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	U
79-00-5	1,1,2-Trichloroethane		1.0	U	
591-78-6	2-Hexanone		5.0	U	
127-18-4	Tetrachloroethylene		1.0	U	
124-48-1	Dibromochloromethane		1.0	U	
108-90-7	Chlorobenzene		1.0	U	
100-41-4	Ethylbenzene		1.0	U	
1330-20-7	Xylenes (total)		3.0	U	
100-42-5	Styrene		1.0	U	
75-25-2	Bromoform		1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4982

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34881

Matrix: (soil/water) WATER Lab Sample ID: 34881002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N314

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/13/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	2.0	J	J CB5
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	3.9		
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	0.58	J	J
124-48-1	Dibromochloromethane	1.0	U	U
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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DUPLICATE

EPA SAMPLE NO.

AF4984

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34881

Matrix: (soil/water) WATER Lab Sample ID: 34881004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N408

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/14/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~2.6~~	JB	U F01,F01
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.52~~	JB	U F01,F06
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4992

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34881

Matrix: (soil/water) WATER Lab Sample ID: 34881001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N313

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/13/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	2.6	J	J CD5
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	3.7		
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	0.69	J	J
124-48-1	Dibromochloromethane	1.0	U	U
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5012

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34884

Matrix: (soil/water) WATER Lab Sample ID: 34884001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1N516

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
74-87-3	Chloromethane		1.0	U	u
75-01-4	Vinyl chloride		1.0	U	
74-83-9	Bromomethane		1.0	U	
75-00-3	Chloroethane		1.0	U	
75-35-4	1,1-Dichloroethylene		1.0	U	
67-64-1	Acetone		1.8	J	J
75-15-0	Carbon disulfide		5.0	U	u
75-09-2	Methylene chloride		5.0	U	
75-34-3	1,1-Dichloroethane		1.0	U	
78-93-3	2-Butanone		5.0	U	
540-59-0	1,2-Dichloroethylene(total)		4.0		=
67-66-3	Chloroform		1.0	U	u
71-55-6	1,1,1-Trichloroethane		1.0	U	
56-23-5	Carbon tetrachloride		1.0	U	
107-06-2	1,2-Dichloroethane		1.0	U	
71-43-2	Benzene		9.5		=
79-01-6	Trichloroethylene		6.5		=
78-87-5	1,2-Dichloropropane		1.0	U	u
75-27-4	Bromodichloromethane		1.0	U	
10061-01-5	cis-1,3-Dichloropropylene		1.0	U	
108-10-1	4-Methyl-2-pentanone		5.0	U	
108-88-3	Toluene	1.0	~~0.44~~	JB	U FB1,FB6
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	u
79-00-5	1,1,2-Trichloroethane		1.0	U	
591-78-6	2-Hexanone		5.0	U	
127-18-4	Tetrachloroethylene		1.0	U	
124-48-1	Dibromochloromethane		1.0	U	
108-90-7	Chlorobenzene		1.0	U	
100-41-4	Ethylbenzene		1.0	U	
1330-20-7	Xylenes (total)		3.0	U	
100-42-5	Styrene		1.0	U	
75-25-2	Bromoform		1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5022

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34884

Matrix: (soil/water) WATER Lab Sample ID: 34884002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1N517

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	2.0	J	J
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	4.4		=
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	0.86	J	J
79-01-6	Trichloroethylene	13.4		=
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.52~~	JB	U FD1,FD2
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5032

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34884

Matrix: (soil/water) WATER Lab Sample ID: 34884016

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1N540

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/16/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	0.21	J	J
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.31~~	JB	U FD1,FD6
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5042

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34881

Matrix: (soil/water) WATER Lab Sample ID: 34881017

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N337

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/14/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~1.8~~	JB	U F01,F06
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	1.6	J	J
540-59-0	1,2-Dichloroethylene(total)	2.0	U	U
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.90~~	JB	U F01,F06
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5052

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34881

Matrix: (soil/water) WATER Lab Sample ID: 34881016

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N610

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/16/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~2.7~~	JB	U FO1, FO2
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.48~~	JB	U FO1, FO2
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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DUPLICATE

EPA SAMPLE NO.

AF5054

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34881

Matrix: (soil/water) WATER Lab Sample ID: 34881015

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N609

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/16/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~2.5~~	JB	U FO1,FO6
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.52~~	JB	U FO1,FO6
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5062

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34881

Matrix: (soil/water) WATER Lab Sample ID: 34881014

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N513

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~4.2~~	JB	U F01,
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.76~~	JB	U F01, F0
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5072

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34881

Matrix: (soil/water) WATER Lab Sample ID: 34881013

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N512

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~3.9~~	JB	U F01,F06
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.69~~	JB	U, F01,F06
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5082

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34881

Matrix: (soil/water) WATER Lab Sample ID: 34881012

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N511

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~4.6~~	JB	U F
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.48~~	JB	U FO1, FO1
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5092

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34881

Matrix: (soil/water) WATER Lab Sample ID: 34881011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2N608

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/16/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~2.5~~	JB	U FO1,FO6
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.57~~	JB	U FO1,FO6
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5112

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N236

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/12/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	3.4	
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.3	
79-01-6	Trichloroethylene	25.6	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.27	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5122

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N237

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/12/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	0.64	J
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	5.1	
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	0.86	J
79-01-6	Trichloroethylene	37.3	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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DATA VALIDATION 0097

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5132

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N238

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/12/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

Use

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	0.60	J	J
74-83-9	Bromomethane	1.0	U	U
75-00-3	Chloroethane	1.0	U	U
75-35-4	1,1-Dichloroethylene	22.5		=
67-64-1	Acetone	5.0	U	U
75-15-0	Carbon disulfide	5.0	U	↓
75-09-2	Methylene chloride	5.0	U	↓
75-34-3	1,1-Dichloroethane	10.3		=
78-93-3	2-Butanone	5.0	U	U
540-59-0	1,2-Dichloroethylene(total)	65.4		=
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	↓
56-23-5	Carbon tetrachloride	1.0	U	↓
107-06-2	1,2-Dichloroethane	1.0	U	↓
71-43-2	Benzene	1.0	U	↓
79-01-6	Trichloroethylene	604 ~~507~~	~~E~~ D	=
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	↓
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	↓
108-10-1	4-Methyl-2-pentanone	5.0	U	↓
108-88-3	Toluene	1.0	U	↓
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	↓
79-00-5	1,1,2-Trichloroethane	1.0	U	↓
591-78-6	2-Hexanone	5.0	U	↓
127-18-4	Tetrachloroethylene	1.0	U	↓
124-48-1	Dibromochloromethane	1.0	U	↓
108-90-7	Chlorobenzene	1.0	U	↓
100-41-4	Ethylbenzene	1.0	U	↓
1330-20-7	Xylenes (total)	3.0	U	↓
100-42-5	Styrene	1.0	U	↓
75-25-2	Bromoform	1.0	U	↓
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	↓

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EPA SAMPLE NO.

AF5142

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34883

Matrix: (soil/water) WATER Lab Sample ID: 34883010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N239

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/12/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.9	
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	2.1	
78-93-3	2-Butanone	5.0	U
540-59-0	1,2-Dichloroethylene(total)	4.0	
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	10.9	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5152

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34929

Matrix: (soil/water) WATER Lab Sample ID: 34929011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N518

Level: (low/med) LOW Date Received: 12/05/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	2.3		
67-64-1	Acetone	5.0	U	U
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	0.76	J	
78-93-3	2-Butanone	5.0	U	U
540-59-0	1,2-Dichloroethylene(total)	11.9		
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	90.3		
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.75~~	JB	U FO1,FO2
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5162

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34929

Matrix: (soil/water) WATER Lab Sample ID: 34929012

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N519

Level: (low/med) LOW Date Received: 12/05/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	0.51	J	J
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	0.38	J	J
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.83~~	JB	U FO1,FO6
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5172

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34929

Matrix: (soil/water) WATER Lab Sample ID: 34929013

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N520

Level: (low/med) LOW Date Received: 12/05/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	2.1	B	U FO1,FO
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	0.16	J	J
1330-20-7	Xylenes (total)	0.45	J	J
100-42-5	Styrene	1.0	U	U
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5182

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34929

Matrix: (soil/water) WATER Lab Sample ID: 34929014

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N521

Level: (low/med) LOW Date Received: 12/05/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	0.97	J	J
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	2.4		
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.3	B	U F01, F07
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5192

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34929

Matrix: (soil/water) WATER Lab Sample ID: 34929015

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8N522

Level: (low/med) LOW Date Received: 12/05/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.74~~	JB	U F01,F06
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5212

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34884

Matrix: (soil/water) WATER Lab Sample ID: 34884003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1N518

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
74-87-3	Chloromethane		1.0	U	u
75-01-4	Vinyl chloride		1.0	U	
74-83-9	Bromomethane		1.0	U	
75-00-3	Chloroethane		1.0	U	
75-35-4	1,1-Dichloroethylene		1.0	U	
67-64-1	Acetone		8.5		u
75-15-0	Carbon disulfide		5.0	U	u
75-09-2	Methylene chloride		5.0	U	
75-34-3	1,1-Dichloroethane		1.0	U	
78-93-3	2-Butanone		1.2	J	u
540-59-0	1,2-Dichloroethylene(total)		2.0	U	u
67-66-3	Chloroform		1.0	U	
71-55-6	1,1,1-Trichloroethane		1.0	U	
56-23-5	Carbon tetrachloride		1.0	U	
107-06-2	1,2-Dichloroethane		1.0	U	
71-43-2	Benzene		0.18	J	u
79-01-6	Trichloroethylene		1.0	U	u
78-87-5	1,2-Dichloropropane		1.0	U	
75-27-4	Bromodichloromethane		1.0	U	
10061-01-5	cis-1,3-Dichloropropylene		1.0	U	
108-10-1	4-Methyl-2-pentanone		5.0	U	
108-88-3	Toluene	1.0	~~0.45~~	JB	U FDL,FDL
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	u
79-00-5	1,1,2-Trichloroethane		1.0	U	
591-78-6	2-Hexanone		5.0	U	
127-18-4	Tetrachloroethylene		1.0	U	
124-48-1	Dibromochloromethane		1.0	U	
108-90-7	Chlorobenzene		1.0	U	
100-41-4	Ethylbenzene		1.0	U	
1330-20-7	Xylenes (total)		3.0	U	
100-42-5	Styrene		1.0	U	
75-25-2	Bromoform		1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	

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EPA SAMPLE NO.

AF5222

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34884

Matrix: (soil/water) WATER Lab Sample ID: 34884004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1N519

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	1.8	J	J
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	2.0	U	
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	0.33	J	J
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.45~~	JB	U FD1,FD6
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5232

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34884

Matrix: (soil/water) WATER Lab Sample ID: 34884005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1N520

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	20.0	U	U
75-01-4	Vinyl chloride	20.0	U	
74-83-9	Bromomethane	20.0	U	
75-00-3	Chloroethane	20.0	U	
75-35-4	1,1-Dichloroethylene	20.0	U	
67-64-1	Acetone	100	U	
75-15-0	Carbon disulfide	100	U	
75-09-2	Methylene chloride	100	U	
75-34-3	1,1-Dichloroethane	20.0	U	
78-93-3	2-Butanone	100	U	
540-59-0	1,2-Dichloroethylene(total)	34.5	J	J
67-66-3	Chloroform	20.0	U	U
71-55-6	1,1,1-Trichloroethane	20.0	U	
56-23-5	Carbon tetrachloride	20.0	U	
107-06-2	1,2-Dichloroethane	20.0	U	
71-43-2	Benzene	20.0	U	
79-01-6	Trichloroethylene	1780		=
78-87-5	1,2-Dichloropropane	20.0	U	U
75-27-4	Bromodichloromethane	20.0	U	
10061-01-5	cis-1,3-Dichloropropylene	20.0	U	
108-10-1	4-Methyl-2-pentanone	100	U	
108-88-3	Toluene	20 ~~6.3~~	JB	U FO1,FO6
10061-02-6	trans-1,3-Dichloropropylene	20.0	U	U
79-00-5	1,1,2-Trichloroethane	20.0	U	
591-78-6	2-Hexanone	100	U	
127-18-4	Tetrachloroethylene	20.0	U	
124-48-1	Dibromochloromethane	20.0	U	
108-90-7	Chlorobenzene	20.0	U	
100-41-4	Ethylbenzene	20.0	U	
1330-20-7	Xylenes (total)	60.0	U	
100-42-5	Styrene	20.0	U	
75-25-2	Bromoform	20.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	20.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5242

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34884

Matrix: (soil/water) WATER Lab Sample ID: 34884006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1N521

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 50.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

Use

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	50.0	U	u
75-01-4	Vinyl chloride	50.0	U	
74-83-9	Bromomethane	50.0	U	
75-00-3	Chloroethane	50.0	U	
75-35-4	1,1-Dichloroethylene	16.3	J	J
67-64-1	Acetone	250	U	u
75-15-0	Carbon disulfide	250	U	
75-09-2	Methylene chloride	250	U	
75-34-3	1,1-Dichloroethane	50.0	U	
78-93-3	2-Butanone	250	U	
540-59-0	1,2-Dichloroethylene(total)	378		=
67-66-3	Chloroform	50.0	U	u
71-55-6	1,1,1-Trichloroethane	50.0	U	
56-23-5	Carbon tetrachloride	50.0	U	
107-06-2	1,2-Dichloroethane	50.0	U	
71-43-2	Benzene	50.0	U	
79-01-6	Trichloroethylene	7730 ~~7830~~ ~~E~~ D		=
78-87-5	1,2-Dichloropropane	50.0	U	u
75-27-4	Bromodichloromethane	50.0	U	
10061-01-5	cis-1,3-Dichloropropylene	50.0	U	
108-10-1	4-Methyl-2-pentanone	250	U	
108-88-3	Toluene	50 ~~13.2~~	JB	u FD1, FD6
10061-02-6	trans-1,3-Dichloropropylene	50.0	U	u
79-00-5	1,1,2-Trichloroethane	50.0	U	
591-78-6	2-Hexanone	250	U	
127-18-4	Tetrachloroethylene	50.0	U	
124-48-1	Dibromochloromethane	50.0	U	
108-90-7	Chlorobenzene	50.0	U	
100-41-4	Ethylbenzene	50.0	U	
1330-20-7	Xylenes (total)	150	U	
100-42-5	Styrene	50.0	U	
75-25-2	Bromoform	50.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	50.0	U	

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EPA SAMPLE NO.

AF5252

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34884

Matrix: (soil/water) WATER Lab Sample ID: 34884007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1N611

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/16/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 25.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	25.0	U
75-01-4	Vinyl chloride	25.0	U
74-83-9	Bromomethane	25.0	U
75-00-3	Chloroethane	25.0	U
75-35-4	1,1-Dichloroethylene	15.0	J
67-64-1	Acetone	125	U
75-15-0	Carbon disulfide	125	U
75-09-2	Methylene chloride	125	U
75-34-3	1,1-Dichloroethane	25.0	U
78-93-3	2-Butanone	125	U
540-59-0	1,2-Dichloroethylene(total)	174	
67-66-3	Chloroform	25.0	U
71-55-6	1,1,1-Trichloroethane	25.0	U
56-23-5	Carbon tetrachloride	25.0	U
107-06-2	1,2-Dichloroethane	25.0	U
71-43-2	Benzene	25.0	U
79-01-6	Trichloroethylene	2120	
78-87-5	1,2-Dichloropropane	25.0	U
75-27-4	Bromodichloromethane	25.0	U
10061-01-5	cis-1,3-Dichloropropylene	25.0	U
108-10-1	4-Methyl-2-pentanone	125	U
108-88-3	Toluene	25.0	U
10061-02-6	trans-1,3-Dichloropropylene	25.0	U
79-00-5	1,1,2-Trichloroethane	25.0	U
591-78-6	2-Hexanone	125	U
127-18-4	Tetrachloroethylene	25.0	U
124-48-1	Dibromochloromethane	25.0	U
108-90-7	Chlorobenzene	25.0	U
100-41-4	Ethylbenzene	25.0	U
1330-20-7	Xylenes (total)	75.0	U
100-42-5	Styrene	25.0	U
75-25-2	Bromoform	25.0	U
79-34-5	1,1,2,2-Tetrachloroethane	25.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5262

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34884

Matrix: (soil/water) WATER Lab Sample ID: 34884008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1N523

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/15/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
74-87-3	Chloromethane		1.0	U	U
75-01-4	Vinyl chloride		1.0	U	
74-83-9	Bromomethane		1.0	U	
75-00-3	Chloroethane		1.0	U	
75-35-4	1,1-Dichloroethylene		0.61	J	J
67-64-1	Acetone		5.0	U	U
75-15-0	Carbon disulfide		5.0	U	
75-09-2	Methylene chloride		5.0	U	
75-34-3	1,1-Dichloroethane		1.0	U	
78-93-3	2-Butanone		5.0	U	
540-59-0	1,2-Dichloroethylene(total)		6.0		=
67-66-3	Chloroform		1.0	U	U
71-55-6	1,1,1-Trichloroethane		1.0	U	
56-23-5	Carbon tetrachloride		1.0	U	
107-06-2	1,2-Dichloroethane		1.0	U	
71-43-2	Benzene		1.0	U	
79-01-6	Trichloroethylene		34.1		=
78-87-5	1,2-Dichloropropane		1.0	U	U
75-27-4	Bromodichloromethane		1.0	U	
10061-01-5	cis-1,3-Dichloropropylene		1.0	U	
108-10-1	4-Methyl-2-pentanone		5.0	U	
108-88-3	Toluene	1.0	~~0.40~~	JB	U FD1, FD2
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	U
79-00-5	1,1,2-Trichloroethane		1.0	U	
591-78-6	2-Hexanone		5.0	U	
127-18-4	Tetrachloroethylene		1.0	U	
124-48-1	Dibromochloromethane		1.0	U	
108-90-7	Chlorobenzene		1.0	U	
100-41-4	Ethylbenzene		1.0	U	
1330-20-7	Xylenes (total)		3.0	U	
100-42-5	Styrene		1.0	U	
75-25-2	Bromoform		1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5272

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34884

Matrix: (soil/water) WATER Lab Sample ID: 34884009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1N533

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/16/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.0	U
75-01-4	Vinyl chloride	10.0	U
74-83-9	Bromomethane	10.0	U
75-00-3	Chloroethane	10.0	U
75-35-4	1,1-Dichloroethylene	10.0	U
67-64-1	Acetone	50.0	U
75-15-0	Carbon disulfide	50.0	U
75-09-2	Methylene chloride	50.0	U
75-34-3	1,1-Dichloroethane	10.0	U
78-93-3	2-Butanone	50.0	U
540-59-0	1,2-Dichloroethylene(total)	65.2	
67-66-3	Chloroform	10.0	U
71-55-6	1,1,1-Trichloroethane	10.0	U
56-23-5	Carbon tetrachloride	10.0	U
107-06-2	1,2-Dichloroethane	10.0	U
71-43-2	Benzene	10.0	U
79-01-6	Trichloroethylene	631	
78-87-5	1,2-Dichloropropane	10.0	U
75-27-4	Bromodichloromethane	10.0	U
10061-01-5	cis-1,3-Dichloropropylene	10.0	U
108-10-1	4-Methyl-2-pentanone	50.0	U
108-88-3	Toluene	10.0	U
10061-02-6	trans-1,3-Dichloropropylene	10.0	U
79-00-5	1,1,2-Trichloroethane	10.0	U
591-78-6	2-Hexanone	50.0	U
127-18-4	Tetrachloroethylene	10.0	U
124-48-1	Dibromochloromethane	10.0	U
108-90-7	Chlorobenzene	10.0	U
100-41-4	Ethylbenzene	10.0	U
1330-20-7	Xylenes (total)	30.0	U
100-42-5	Styrene	10.0	U
75-25-2	Bromoform	10.0	U
79-34-5	1,1,2,2-Tetrachloroethane	10.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5282

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34884

Matrix: (soil/water) WATER Lab Sample ID: 34884010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1N534

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/16/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.0	U
75-01-4	Vinyl chloride	10.0	U
74-83-9	Bromomethane	10.0	U
75-00-3	Chloroethane	10.0	U
75-35-4	1,1-Dichloroethylene	10.0	U
67-64-1	Acetone	50.0	U
75-15-0	Carbon disulfide	50.0	U
75-09-2	Methylene chloride	50.0	U
75-34-3	1,1-Dichloroethane	10.0	U
78-93-3	2-Butanone	50.0	U
540-59-0	1,2-Dichloroethylene(total)	42.7	
67-66-3	Chloroform	10.0	U
71-55-6	1,1,1-Trichloroethane	10.0	U
56-23-5	Carbon tetrachloride	10.0	U
107-06-2	1,2-Dichloroethane	10.0	U
71-43-2	Benzene	10.0	U
79-01-6	Trichloroethylene	516	
78-87-5	1,2-Dichloropropane	10.0	U
75-27-4	Bromodichloromethane	10.0	U
10061-01-5	cis-1,3-Dichloropropylene	10.0	U
108-10-1	4-Methyl-2-pentanone	50.0	U
108-88-3	Toluene	10.0	U
10061-02-6	trans-1,3-Dichloropropylene	10.0	U
79-00-5	1,1,2-Trichloroethane	10.0	U
591-78-6	2-Hexanone	50.0	U
127-18-4	Tetrachloroethylene	10.0	U
124-48-1	Dibromochloromethane	10.0	U
108-90-7	Chlorobenzene	10.0	U
100-41-4	Ethylbenzene	10.0	U
1330-20-7	Xylenes (total)	30.0	U
100-42-5	Styrene	10.0	U
75-25-2	Bromoform	10.0	U
79-34-5	1,1,2,2-Tetrachloroethane	10.0	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5292

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34884

Matrix: (soil/water) WATER Lab Sample ID: 34884012

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1N536

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/16/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
74-87-3	Chloromethane		1.0	U	U
75-01-4	Vinyl chloride		1.0	U	
74-83-9	Bromomethane		1.0	U	
75-00-3	Chloroethane		1.0	U	
75-35-4	1,1-Dichloroethylene		1.0	U	
67-64-1	Acetone		5.0	U	
75-15-0	Carbon disulfide		5.0	U	
75-09-2	Methylene chloride		5.0	U	
75-34-3	1,1-Dichloroethane		1.0	U	
78-93-3	2-Butanone		5.0	U	
540-59-0	1,2-Dichloroethylene(total)		0.31	J	J
67-66-3	Chloroform		1.0	U	U
71-55-6	1,1,1-Trichloroethane		1.0	U	
56-23-5	Carbon tetrachloride		1.0	U	
107-06-2	1,2-Dichloroethane		1.0	U	
71-43-2	Benzene		1.0	U	
79-01-6	Trichloroethylene		2.8		
78-87-5	1,2-Dichloropropane		1.0	U	U
75-27-4	Bromodichloromethane		1.0	U	
10061-01-5	cis-1,3-Dichloropropylene		1.0	U	
108-10-1	4-Methyl-2-pentanone		5.0	U	
108-88-3	Toluene	1.0	~~0.40~~	JB	U FB1,FB2
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	U
79-00-5	1,1,2-Trichloroethane		1.0	U	
591-78-6	2-Hexanone		5.0	U	
127-18-4	Tetrachloroethylene		1.0	U	
124-48-1	Dibromochloromethane		1.0	U	
108-90-7	Chlorobenzene		1.0	U	
100-41-4	Ethylbenzene		1.0	U	
1330-20-7	Xylenes (total)		3.0	U	
100-42-5	Styrene		1.0	U	
75-25-2	Bromoform		1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	

FORM I VOA OLM03.0

DATA VALIDATION COPY

64

DUPLICATE

EPA SAMPLE NO.

AF5294

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 34884

Matrix: (soil/water) WATER Lab Sample ID: 34884011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1N535

Level: (low/med) LOW Date Received: 12/04/00

% Moisture: not dec. _____ Date Analyzed: 12/16/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5.0	U	
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene(total)	0.32	J	J
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	2.9		
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0 ~~0.37~~	JB	U F01,FC
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

FORM I VOA OLM03.0

DATA VALIDATION COPY

FS

Science Applications International Corporation — An Employee-Owned Company

800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

CHAIN OF CUSTODY RECORD

COC NO.: H2540Z

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-1624-04-1958-200

PROJECT MANAGER: Patty Stoll

Sampler (Signature): Laura Lumley (Printed Name): Laura Lumley

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29407

PHONE NO: (843) 556-8171

REQUESTED PARAMETERS

	Sample ID	Date Collected	Time Collected	Matrix	VOC	TCLP VOC	TCLP Lead	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
01	AF4312	11/30/00	1115	water	2			2		
02	AF4322	11/30/00	1130		2			2		
03	AF4332	11/30/00	1145		2			2		
04	AF4342	11/30/00	1225		2			2		
05	AF4352	11/30/00	1250		2			2		
06	AF4362	11/30/00	1340		2			2		
07	AF4372	11/30/00	1420		2			2		
08	AF4382	11/30/00	1520		2			2		
09	AF4392	11/30/00	1615		2			2		
10	AF4394	11/30/00	1615		2			2		
11	TB2501	11/30/00	0745		2			2		
12	AF4412	12/1/00	0940		2			2		
13	AF4422	12/1/00	0955		2			2		

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	12/2/00 1040	Linda Kimbrow	12-2-00 13:40
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RECEIVED BY: Paul Haines	12/2/00 1040	RELINQUISHED BY:	
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY: Paul Haines	12/2/00 1340	RECEIVED BY:	
COMPANY NAME: GEL		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS:

Cooler ID: # 540

Cooler Temperature: 3°

FEDEX NUMBER:

VIII-197

2000121072

0 2 7 0 1 2

SAIC An Employee Owned Company
Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

CHAIN OF CUSTODY RECORD

COC NO.: H25ØØ2

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-1624-04-1958-200

PROJECT MANAGER: Patty Stoll

Sampler (Signature): Laura Lumley (Printed Name): Laura Lumley

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29407

PHONE NO: (843) 556-8171

REQUESTED PARAMETERS

	Sample ID	Date Collected	Time Collected	Matrix	VOC	TCLP VOC	TCLP Lead	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
14	AF4432	12/1/00	1015	water	2			2		
15	AF4442	12/1/00	1055		2			2		
16	AF4452	12/1/00	1115		2			2		
17	AF4462	12/1/00	1145		2			2		
18	AF4472	12/1/00	1305		2			2		
	AF4482	12/1/00	1355		2			2		
	AF4492	12/1/00	1530		2			2		
	AF4512	12/1/00	1615		2			2		
04	AF4522	12/1/00	1630		2			2		
03	AF4532	12/1/00	1645		2			2		
04	AF4542	12/1/00	1700		2			2		
05	AF4552	12/1/00	1725		2			2		
06	AF4554	12/1/00	1725		2			2		

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	12/2/00 1040	Mike Kinlow	12-2-00 13:40
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RECEIVED BY: Rand Hanes	12/2/00 1040	RELINQUISHED BY:	
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY: Rand Hanes	12/2/00 1340	RECEIVED BY:	
COMPANY NAME: GEL		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS:

Cooler ID: #540

Cooler Temperature: 3.2°

FEDEX NUMBER:

VIII-198

2000/2/0472

3.4.5.7.9

2.4.6.8

Science Applications International Corporation — An Employee-Owned Company

800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

CHAIN OF CUSTODY RECORD

COC NO.: HZ50Ø2

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-1624-04-1958-200

PROJECT MANAGER: Patty Stoll

Sampler (Signature): Laura Lumley (Printed Name): Laura Lumley

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29407

PHONE NO: (843) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOC	TCLP VOC	TCLP Lead	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AF4562	12/1/00	1745	water	2			2		
TB2502	12/1/00	0820	water	2			2		

12/1/00

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	12/2/00 1040	Mark Kinslow	12-2-00 1340
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RECEIVED BY: Ron Hanor	Date/Time 12/2/00 1040	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY: Ron Hanor	Date/Time 12/2/00 1340	RECEIVED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 54

Cooler ID: #540

Cooler Temperature: 3.40

FEDEX NUMBER:

2000120673

34808

SAIC An Employee-Owned Company
Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

1060

CHAIN OF CUSTODY RECORD

COC NO.: H25ØØ3

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-1624-04-1958-200

PROJECT MANAGER: Patty Stoll

Sampler (Signature): Laura Lumley (Printed Name): Laura Lumley

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29407

PHONE NO: (843) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOC	TCLP VOC	TCLP Lead	No. of Bottles/ Vials	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AF499Z	12/3/00	1640	water	2			2		34881 001
AF498Z	12/3/00	1545		2			2		002
AF497Z	12/3/00	1504		2			2		003
AF498Y	12/3/00	1545		2			2		004
AF496Z	12/3/00	1421		2			2		005
AF495Z	12/3/00	1350		2			2		006
AF494Z	12/3/00	1321		2			2		007
AF493Z	12/3/00	1255		2			2		008
AF492Z	12/3/00	1231		2			2		009
AF491Z	12/3/00	1214		2			2		010
AF5Ø9Z	12/3/00	1335		2			2		011
AF5Ø8Z	12/3/00	1205		2			2		012
AF5Ø7Z	12/3/00	1105		2			2		013

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	12/4/00 1515		
COMPANY NAME: SAIC		COMPANY NAME:	
RECEIVED BY:	12-4-00 1515	RELINQUISHED BY:	
COMPANY NAME:		COMPANY NAME:	
RELINQUISHED BY:	12-4-00 1815	RECEIVED BY: Mike Kinslow	12-4-00 1900
COMPANY NAME: GEL		COMPANY NAME: GEL	

TOTAL NUMBER OF CONTAINERS:

Cooler ID: #371

Cooler Temperature: 5°

FEDEX NUMBER:

Page 1 of 1

An Employee-Owned Company
Science Applications International Corporation
600 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

CHAIN OF CUSTODY RECORD

COC NO.: 425003

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-1624-04-1958-200

PROJECT MANAGER: Patty Stoll

Sampler (Signature): Laura Lumley (Printed Name): Laura Lumley

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29407

PHONE NO: (843) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOC	TCLP VOC	TCLP Lead	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AF5062	12/3/00	1020	water	2			2		34881 014
AF5054	12/3/00	0940*		2			2		015
AF5052	12/3/00	0940		2			2		016
AF5042	12/3/00	0910*		2			2		017
TB2504	12/3/00	0740		2			2		018
AF4792	12/3/00	1116		2			2		019
AF4782	12/3/00	1026		2			2		020
AF4772	12/3/00	0953		2			2		34883 001
AF4762	12/3/00	0913		2			2		002
AF4752	12/3/00	1726		2			2		003
AF4742	12/2/00	1656		2			2		004
AF4732	12/2/00	1620		2			2		005
AF4722	12/2/00	1556		2			2		006

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	12/4/00 1515		
COMPANY NAME: SAIC		COMPANY NAME:	
RECEIVED BY: [illegible]	Date/Time 12-4-00 1515	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY: [illegible]	Date/Time 12-4-00 1815	RECEIVED BY: [illegible]	Date/Time 12-4-00 1900
COMPANY NAME: GEL		COMPANY NAME: GEL	

TOTAL NUMBER OF CONTAINERS:

Cooler ID: # 371

Cooler Temperature: 5°

FEDEX NUMBER:

THERE ARE TWO Sample Sample ID
WENT By DATE & TIME AF5054
Should be AF5042

An Employee Owned Company
Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

CHAIN OF CUSTODY RECORD

COC NO.: H25ØØ3

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-1624-04-1958-200

PROJECT MANAGER: Patty Stoll

Sampler (Signature) (Printed Name): Laura Lumley

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29407

PHONE NO: (843) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOC	TCLP VOC	TCLP Lead	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AF511Z	12/3/00	1445	water	2			2		34883007
AF512Z	12/3/00	1505		2			2		008
AF513Z	12/3/00	1525		2			2		009
AF514Z	12/3/00	1555		2			2		010
AF461Z	12/2/00	0905		2			2		011
AF462Z	12/2/00	0925		2			2		012
AF463Z	12/2/00	0950		2			2		013
AF464Z	12/2/00	1021		2			2		014
AF465Z	12/2/00	1057		2			2		015
AF466Z	12/2/00	1135		2			2		016
AF467Z	12/2/00	1206		2			2		017
AF467Z	12/2/00	1225		2			2		018
AF468Z	12/2/00	1318		2			2		019

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	12/4/00 1515		
COMPANY NAME: SAIC		COMPANY NAME:	
RECEIVED BY: [signature]	Date/Time 12-4-00 1515	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY: [signature]	Date/Time 12-4-00 1815	RECEIVED BY: [signature]	Date/Time 12-4-00 1900
COMPANY NAME: GEL		COMPANY NAME: GEL	

TOTAL NUMBER OF CONTAINERS:

Cooler ID: # 371

Cooler Temperature: 5°

FEDEX NUMBER:

VIII-202

2

Science Applications Inter[illegible] Corporation — An Employee-Owned Company

[illegible]00 Oak Ridge Turnpike, [illegible]ge, TN 37831 (423) 481-4600

CHAIN OF CUST[illegible] RECORD

COC NO.: H2543

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-1624-04-1958-200

PROJECT MANAGER: Patty Stoll

Sampler (Signature): Laura Lumley (Printed Name): Laura Lumley

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29407

PHONE NO: (843) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOC	TCLP VOC	TCLP Lead	No. of Bottles/ Vials	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AF4692	12/2/00	1412	water	2			2		34883020
AF5012	12/2/00	1645		2			2		34884 001
AF5022	12/2/00	1705		2			2		002
AF5212	12/2/00	1110		2			2		003
AF5222	12/2/00	1130		2			2		004
AF5232	12/2/00	1145		2			2		005
AF5242	12/2/00	1210		2			2		006
AF5252	12/2/00	1235		2			2		007
AF5262	12/2/00	1310		2			2		008
AF5272	12/2/00	1355		2			2		009
AF5282	12/2/00	1440		2			2		010
AF5294	12/2/00	1520		2			2		011
AF5292	12/2/00	1520		2			2		012

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	12/4/00 1515		
COMPANY NAME: SAIC		COMPANY NAME:	
RECEIVED BY: [illegible]	Date/Time 12-4-00 1515	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY: [illegible]	Date/Time 12-4-00 1815	RECEIVED BY: Mike Kinlow	Date/Time 12-4-00 1900
COMPANY NAME: GEL		COMPANY NAME: GEL	

TOTAL NUMBER OF CONTAINERS:

Cooler ID: # 371

Cooler Temperature: 5°

FEDEX NUMBER:

20001216724

An Employee-Owned Company
Science Applications International Corporation
100 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

CHAIN OF CUSTODY RECORD

COC NO.: H25ØØ3

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-1624-04-1958-200

PROJECT MANAGER: Patty Stoll

Sampler (Signature): Laura Lumley (Printed Name): Laura Lumley

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29407

PHONE NO: (843) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOC	TCLP VOC	TCLP Lead	No. of Bottles/ Vials	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AF4572	12/2/00	0900	water	2			2		34884013
AF4582	12/2/00	0940		2			2		014
AF4592	12/2/00	1020		2			2		015
AF5032	12/2/00	1730		2			2		016
TB25Ø3	12/2/00	0745		2			2		017

Sample 10 of 22

VIII-204

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	12/4/00 1515		
COMPANY NAME: SAIC		COMPANY NAME:	
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time
	12-4-00 1515		
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
	12-4-00 1815		12-4-00 1900
COMPANY NAME: GEL		COMPANY NAME: GEL	

TOTAL NUMBER OF CONTAINERS: 114

Cooler ID: #371

Cooler Temperature: 5°

FEDEX NUMBER:

Science Applications International Corporation — An Employee-Owned Company
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

CHAIN OF CUSTODY RECORD

COC NO.: HZ5ØØ4

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-1624-04-1958-~~200~~ -220

PROJECT MANAGER: Patty Stoll

Sampler (Signature): Laura Lumley (Printed Name): Laura Lumley

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29407

PHONE NO: (843) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOC	TCLP VOC	TCLP Lead	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AF4812	12/4/00	1415	water	2			2		34929 001
AF4822	12/4/00	1435		2			2		002
AF4832	12/4/00	1455		2			2		003
AF4842	12/4/00	1520		2			2		004
AF4844	12/4/00	1520		2			2		005
AF4852	12/4/00	1545		2			2		006
AF4862	12/4/00	1620		2			2		007
AF4872	12/4/00	1655		2			2		008
AF4882	12/4/00	1740		2			2		009
AF4892	12/4/00	1610		2			2		010
AF5152	12/4/00	0930		2			2		011
AF5162	12/4/00	1015		2			2		012
AF5172	12/4/00	1050		2			2		013

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	12/5/00 1215		
COMPANY NAME: SAIC		COMPANY NAME:	
RECEIVED BY: Peter Cocker	Date/Time 12-5-00 1215	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY: Peter Cocker	Date/Time 12-5-00 1515	RECEIVED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS:

Cooler ID: #582

Cooler Temperature: 3°

FEDEX NUMBER:

20001210701

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800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

COC

CHAIN OF CUSTODY RECORD

COC NO.: H25 004

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-1624-04-1958-~~200~~ -220

PROJECT MANAGER: Patty Stoll

Sampler (Signature): Laura Lumley (Printed Name): Laura Lumley

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29407

PHONE NO: (843) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOC	TCLP VOC	TCLP Lead	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AF5182	12/4/00	1125	water	2			2		34929 014
AF5192	12/4/00	1320	↓	2			2		015
TB2505	12/4/00	0740	↓	2			2		016

12/5/00

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	12/5/00		
COMPANY NAME: SAIC	1215	COMPANY NAME:	
RECEIVED BY: [illegible]	Date/Time 12/5/00	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL	1215	COMPANY NAME:	
RELINQUISHED BY: [illegible]	Date/Time 12-5-00	RECEIVED BY:	Date/Time
COMPANY NAME: GEL	1215	COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 32

Cooler ID: #582

Cooler Temperature: 3.40

FEDEX NUMBER:

SECOND SEMIANNUAL SAMPLING EVENT

JANUARY 2001

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Table VIII-F. Summary of January 2001 Groundwater Analytical Results

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-40 AF4052 28.5 – 33.0 07-Jan-01 (µg/L)	AF-41 AF4152 28.5 – 33.0 07-Jan-01 (µg/L)	AF-42 AF4252 28.5 – 33.0 07-Jan-01 (µg/L)
VOLATILE ORGANIC COMPOUNDS					
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	0.41 J	0.82 J	1 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U
1,2-Dichloroethene	—	—	26 =	32.7 =	2 U
1,2-Dichloropropane	—	—	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U
2-Butanone	—	—	5 UJ	5 UJ	5 UJ
2-Hexanone	—	—	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U
Acetone	—	—	5 U	5 U	5 U
Benzene	5	71.28	0.39 J	1 U	1 U
Bromodichloromethane	—	—	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U
Chloroform	—	470.8	1 U	1 U	1 U
Chloromethane	—	—	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U
Ethylbenzene	700	28,718	0.13 J	1 U	1 U
Methylene Chloride	—	—	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U
Toluene	1,000	200,000	1 U	1 U	1 U
Trichloroethene	5	80.7	108 J	176 =	1 U
Vinyl Chloride	2	525	0.67 J	1 U	1 U
Xylenes, Total	10,000	—	0.34 J	3 U	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

Laboratory Qualifiers

U Indicates the compound was not detected at the concentration reported.

UJ Indicates the compound was not detected above an approximated sample quantitation limit.

J Indicates the value for the compound is an estimated value.

= Indicates the compound was detected at the concentration reported.

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4052

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 36251

Matrix: (soil/water) WATER Lab Sample ID: 36251001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R407

Level: (low/med) LOW Date Received: 01/08/01

% Moisture: not dec. _____ Date Analyzed: 01/11/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	0.67	J	J
74-83-9	Bromomethane	1.0	U	U
75-00-3	Chloroethane	1.0	U	U
75-35-4	1,1-Dichloroethylene	0.41	J	J
67-64-1	Acetone	5 ~~3.0~~	JB	U F01,F04
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	↓
75-34-3	1,1-Dichloroethane	1.0	U	↓
78-93-3	2-Butanone	5.0	U	UJ C05
540-59-0	1,2-Dichloroethylene(total)	26.0		
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	↓
56-23-5	Carbon tetrachloride	1.0	U	↓
107-06-2	1,2-Dichloroethane	1.0	U	↓
71-43-2	Benzene	0.39	J	J
79-01-6	Trichloroethylene	108	E	J N03
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	↓
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	↓
108-10-1	4-Methyl-2-pentanone	5.0	U	↓
108-88-3	Toluene	1.0	U	↓
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	↓
79-00-5	1,1,2-Trichloroethane	1.0	U	↓
591-78-6	2-Hexanone	5.0	U	↓
127-18-4	Tetrachloroethylene	1.0	U	↓
124-48-1	Dibromochloromethane	1.0	U	↓
108-90-7	Chlorobenzene	1.0	U	↓
100-41-4	Ethylbenzene	0.13	J	J
1330-20-7	Xylenes (total)	0.34	J	J
100-42-5	Styrene	1.0	U	U
75-25-2	Bromoform	1.0	U	↓
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	↓

FORM I VOA OLM03.0

DATA VALIDATION COPY

2:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4152

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 36251

Matrix: (soil/water) WATER Lab Sample ID: 36251002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R408

Level: (low/med) LOW Date Received: 01/08/01

% Moisture: not dec. _____ Date Analyzed: 01/11/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

USQ

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	0.82	J	J
67-64-1	Acetone	5 ~~2.6~~	JB	U FD1,FD6
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	U CD5
540-59-0	1,2-Dichloroethylene(total)	32.7		=
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	176 ~~137~~ ~~E~~	D	=
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

FORM I VOA OLM03.0

DATA VALIDATION COPY

2

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF4252

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 36251

Matrix: (soil/water) WATER Lab Sample ID: 36251003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R409

Level: (low/med) LOW Date Received: 01/08/01

% Moisture: not dec. _____ Date Analyzed: 01/11/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	5 ~~2.0~~	JB	U F01,F0
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	U CD5
540-59-0	1,2-Dichloroethylene(total)	2.0	U	U
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

FORM I VOA OLM03.0

DATA VALIDATION

2

SAIC An Employee Owned Company
Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-3600

CHAIN OF CUSTODY RECORD

COC NO.: HLTM03

PROJECT NAME: HAAF Long Term Monitoring

PROJECT NUMBER: 01-1624-04-2725-200

PROJECT MANAGER: Patty Stoll

Sampler (Signature): Laura Lumley (Printed Name): Laura Lumley

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Raod, Charleston, SC 29417

PHONE NO: (843) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	VOC	No. of Bottles/ Vials	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AB0262	1/7/01	0950	water	2	2		4		36095 001
AB0462	1/7/01	1045		2	2		4		002
AB0562	1/7/01	1135		2	2		4		003
AB0564	1/7/01	1135		2	2		4		004
AB0662	1/7/01	1340		2	2		4		005
AB0762	1/7/01	1245		2	2		4		006
AF4052	1/7/01	1620				2	2		36257 001
AF4152	1/7/01	1715				2	2		002
AF4252	1/7/01	1450				2	2		003
TBH006	1/7/01	0740				2	2		004

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	1/8/01	[illegible]	1/9/01
COMPANY NAME: SAIC	1215	COMPANY NAME: GEL	1500
RECEIVED BY: [illegible]	Date/Time 1/8-01	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL	1215	COMPANY NAME:	
RELINQUISHED BY: [illegible]	Date/Time 1-8-01	RECEIVED BY:	Date/Time
COMPANY NAME: GEL	1500	COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 32

Cooler ID: #16

Cooler Temperature: 3.6

FEDEX NUMBER:

SAIC An Employee-Owned Company
Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481 4600

CHAIN OF CUSTODY RECORD

COC NO.: HLTMØ5

PROJECT NAME: HAAF Long Term Monitoring

PROJECT NUMBER: 01-1624-04-2725-200

PROJECT MANAGER: Patty Stoll

Sampler (Signature): Laura Lumley (Printed Name): Laura Lumley

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Raod, Charleston, SC 29417

PHONE NO: (843) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	VOC	Oil & Grease	Total Phenols	pH	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AFØ252	1/10/01	1202	water	2						2		36386001
AFØ552	1/10/01	1145		2						2		002
AFØ752	1/10/01	1305		2						2		003
AF1252	1/10/01	1123		2						2		004
TBHØØ8	1/10/01	0740		2						2		005
IDWØ28	1/11/01	0900				2	2	2	1	7	36381001	14 day turn

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	1/11/01 1200	Patrick Dauer	1/12/01 09:30
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RECEIVED BY: 820609381054	Date/Time 1/11/01 1200	RELINQUISHED BY:	Date/Time
COMPANY NAME: FedEx		COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME:		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 17

Cooler ID: #24

Cooler Temperature: 3.2°C

FEDEX NUMBER: 820609381054

IDW sample 14 day turn

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ADDITIONAL WELL INSTALLATION & SAMPLING

FEBRUARY/MARCH 2001

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Table VIII-G. Summary of February/March 2001 Groundwater Analytical Results

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-53 AF5312 20.0 – 30.0 10-Mar-01 (µg/L)	AF-54 AF5412 32.4 – 42.4 10-Mar-01 (µg/L)	AF-55 AF5512 24.0 – 34.0 10-Mar-01 (µg/L)	AF-56 AF5612 19.9 – 29.9 10-Mar-01 (µg/L)	AF-57 AF5712 57.38 – 62.8 09-Mar-01 (µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	5 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	5 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	5 U	1 U
1,1-Dichloroethane	—	—	1 =	1 U	1 U	5 U	1 U
1,1-Dichloroethene	7	3.2	4.6 U	1 U	1 U	5 U	1 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U	5 U	1 U
1,2-Dichloroethene	—	—	88.8 =	53.2 =	154 =	7.9 J	2 U
1,2-Dichloropropane	—	—	1 U	1 U	1 U	5 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U	5 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U	5 U	1 U
2-Butanone	—	—	5 U	5 U	5 U	25 U	5 U
2-Hexanone	—	—	5 U	5 U	5 U	25 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	25 U	5 U
Acetone	—	—	97.3 =	613 J	3,100 J	25 U	220 =
Benzene	5	71.28	0.22 J	1 U	0.35 J	5 U	1 U
Bromodichloromethane	—	—	1 U	1 U	1 U	5 U	1 U
Bromoform	—	360	1 U	1 U	1 U	5 U	1 U
Bromomethane	—	—	1 U	1 U	1 U	5 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U	25 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	5 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	5 U	1 U
Chloroethane	—	—	1 U	1 U	1 U	5 U	1 U
Chloroform	—	470.8	1 U	2.5 =	0.21 J	5 U	4.7 =
Chloromethane	—	—	1 U	1 U	1 U	5 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U	5 U	1 U
Ethylbenzene	700	28,718	1 U	1 U	1 U	5 U	1 U
Methylene Chloride	—	—	5 U	5 U	5 U	25 U	5 U
Styrene	100	—	1 U	1 U	1 U	5 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U	5 U	1 U
Toluene	1,000	200,000	0.27 J	1 U	1 U	5 U	1 U
Trichloroethene	5	80.7	2,410 J	352 =	1,020 =	303 =	0.72 J
Vinyl Chloride	2	525	1 U	1 U	1 U	5 U	1 U
Xylenes, Total	10,000	—	3 U	3 U	3 U	15 U	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

Laboratory Qualifiers

U Indicates the compound was not detected at the concentration reported.

UJ Indicates the compound was not detected above an approximated sample quantitation limit.

J Indicates the value for the compound is an estimated value.

= Indicates the compound was detected at the concentration reported.

Table VIII-G. Summary of March 2001 Groundwater Analytical Results (continued)

Well ID: Sample ID Screened Interval (feet BGS): Sample Date: Units:	Federal SWDA MCLs[a] (µg/L)	In-Stream Water Quality Standards[b] (µg/L)	AF-58 AF5812 2.7 – 12.7 09-Mar-01 (µg/L)	AF-59 AF5912 2.3 – 12.3 10-Mar-01 (µg/L)	AF-60 AF6012 20.0 – 30.0 10-Mar-01 (µg/L)	AF-61 AF6112 20.0 – 30.0 10-Mar-01 (µg/L)	AF-62 AF6212 3.0 – 13.0 10-Mar-01 (µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	—	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	—	10.8	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	41.99	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	—	—	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	3.2	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5	98.6	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene	—	—	8 =	2 U	3.4 =	1.3 J	2 U
1,2-Dichloropropane	—	—	1 U	1 U	1 U	1 U	1 U
1,3-*cis*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U
1,3-*trans*-Dichloropropene	—	1,700	1 U	1 U	1 U	1 U	1 U
2-Butanone	—	—	2.8 J	1 J	5 U	2.3 J	1.9 J
2-Hexanone	—	—	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	—	—	5 U	5 U	5 U	5 U	5 U
Acetone	—	—	1,360 J	2,250 J	33.8 U	356 =	8,630 J
Benzene	5	71.28	0.16 J	0.67 J	0.26 J	1 U	0.15 J
Bromodichloromethane	—	—	1 U	1 U	1 U	1 U	1 U
Bromoform	—	360	1 U	1 U	1 U	1 U	1 U
Bromomethane	—	—	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	—	—	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	4.42	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	100	21,000	1 U	1 U	1 U	1 U	1 U
Chloroethane	—	—	1 U	1 U	1 U	1 U	1 U
Chloroform	—	470.8	1.1 =	0.66 J	1 U	0.39 J	1 =
Chloromethane	—	—	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	—	22	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	28,718	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	—	—	5 U	5 U	5 U	5 U	5 U
Styrene	100	—	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	8.85	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	200,000	0.62 J	1 U	1 U	1 U	0.23 J
Trichloroethene	5	80.7	13 =	1 U	26.1 =	267 =	0.39 J
Vinyl Chloride	2	525	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	10,000	—	0.25 J	3 U	3 U	3 U	3 U

NOTES:

[a] U.S. Environmental Protection Agency maximum contaminant level.

[b] Georgia Environmental Protection Division water quality standards (Chapter 391-03-6.03).

SDWA Safe Drinking Water Act.

Laboratory Qualifiers

U Indicates the compound was not detected at the concentration reported.

UJ Indicates the compound was not detected above an approximated sample quantitation limit.

J Indicates the value for the compound is an estimated value.

= Indicates the compound was detected at the concentration reported.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5312

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 38981

Matrix: (soil/water) WATER Lab Sample ID: 38981001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1A414

Level: (low/med) LOW Date Received: 03/11/01

% Moisture: not dec. _____ Date Analyzed: 03/15/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

USE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	4.6		=
67-64-1	Acetone	97.3		= F04,F08
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene (total)	88.8		=
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
67-66-3	Chloroform	1.0	U	
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	0.22	J	J
79-01-6	Trichloroethylene	~~928~~ 2410	~~E~~ D	J H02,H04
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	0.27	J	J
79-00-5	1,1,2-Trichloroethane	1.0	U	U
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
75-69-4	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

4/11/01

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5412

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 38981

Matrix: (soil/water) WATER Lab Sample ID: 38981002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1A415

Level: (low/med) LOW Date Received: 03/11/01

% Moisture: not dec. _____ Date Analyzed: 03/15/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

USR

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
74-87-3	Chloromethane		1.0	U	u
75-01-4	Vinyl chloride		1.0	U	
74-83-9	Bromomethane		1.0	U	
75-00-3	Chloroethane		1.0	U	
75-35-4	1,1-Dichloroethylene		1.0	U	
67-64-1	Acetone	613	~~524~~	~~E~~ D	J FD4, 8.6
75-15-0	Carbon disulfide		5.0	U	u
75-09-2	Methylene chloride		5.0	U	
75-34-3	1,1-Dichloroethane		1.0	U	
10061-01-5	cis-1,3-Dichloropropylene		1.0	U	
78-93-3	2-Butanone		5.0	U	
540-59-0	1,2-Dichloroethylene (total)	MMP 4/12/01	53.2		=
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	u
67-66-3	Chloroform		2.5		=
71-55-6	1,1,1-Trichloroethane		1.0	U	u
56-23-5	Carbon tetrachloride		1.0	U	
107-06-2	1,2-Dichloroethane		1.0	U	
71-43-2	Benzene		1.0	U	
79-01-6	Trichloroethylene	352	~~304~~	~~E~~ D	=
78-87-5	1,2-Dichloropropane		1.0	U	u
75-27-4	Bromodichloromethane		1.0	U	
108-10-1	4-Methyl-2-pentanone		5.0	U	
108-88-3	Toluene		1.0	U	
79-00-5	1,1,2-Trichloroethane		1.0	U	
591-78-6	2-Hexanone		5.0	U	
127-18-4	Tetrachloroethylene		1.0	U	
124-48-1	Dibromochloromethane		1.0	U	
108-90-7	Chlorobenzene		1.0	U	
100-41-4	Ethylbenzene		1.0	U	
75-69-4	Xylenes (total)		3.0	U	
100-42-5	Styrene		1.0	U	
75-25-2	Bromoform		1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	

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DATA VALIDATION COPY

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5414

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 38981

Matrix: (soil/water) WATER Lab Sample ID: 38981003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1A416

Level: (low/med) LOW Date Received: 03/11/01

% Moisture: not dec. _____ Date Analyzed: 03/15/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

USR

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
74-87-3	Chloromethane		1.0	U	u
75-01-4	Vinyl chloride		1.0	U	
74-83-9	Bromomethane		1.0	U	
75-00-3	Chloroethane		1.0	U	
75-35-4	1,1-Dichloroethylene		1.0	U	
67-64-1	Acetone	554	~~533~~	~~E~~ D	J F04,F03,C
75-15-0	Carbon disulfide		5.0	U	u
75-09-2	Methylene chloride		5.0	U	
75-34-3	1,1-Dichloroethane		1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	MMP	1.0	U	
78-93-3	2-Butanone	4/12/01	5.0	U	
540-59-0	1,2-Dichloroethylene (total)		57.8		=
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	u
67-66-3	Chloroform		2.3		=
71-55-6	1,1,1-Trichloroethane		1.0	U	u
56-23-5	Carbon tetrachloride		1.0	U	
107-06-2	1,2-Dichloroethane		1.0	U	
71-43-2	Benzene		1.0	U	
79-01-6	Trichloroethylene	394	~~237~~	~~E~~ D	=
78-87-5	1,2-Dichloropropane		1.0	U	u
75-27-4	Bromodichloromethane		1.0	U	
108-10-1	4-Methyl-2-pentanone		5.0	U	
108-88-3	Toluene		1.0	U	
79-00-5	1,1,2-Trichloroethane		1.0	U	
591-78-6	2-Hexanone		5.0	U	
127-18-4	Tetrachloroethylene		1.0	U	
124-48-1	Dibromochloromethane		1.0	U	
108-90-7	Chlorobenzene		1.0	U	
100-41-4	Ethylbenzene		1.0	U	
75-69-4	Xylenes (total)		3.0	U	
100-42-5	Styrene		1.0	U	
75-25-2	Bromoform		1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5512

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 38981

Matrix: (soil/water) WATER Lab Sample ID: 38981004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1A417

Level: (low/med) LOW Date Received: 03/11/01

% Moisture: not dec. _____ Date Analyzed: 03/15/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

USE

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND			Q	
74-87-3	Chloromethane		1.0	U	U
75-01-4	Vinyl chloride		1.0	U	
74-83-9	Bromomethane		1.0	U	
75-00-3	Chloroethane		1.0	U	
75-35-4	1,1-Dichloroethylene		1.0	U	
67-64-1	Acetone	3100	~~2340~~	~~E~~ D	J FD4, FD8 CO
75-15-0	Carbon disulfide		5.0	U	U
75-09-2	Methylene chloride		5.0	U	
75-34-3	1,1-Dichloroethane		1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	MMP	1.0	U	
78-93-3	2-Butanone	4/12/01	5.0	U	
540-59-0	1,2-Dichloroethylene (total)		154		=
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	U
67-66-3	Chloroform		0.21	J	J
71-55-6	1,1,1-Trichloroethane		1.0	U	U
56-23-5	Carbon tetrachloride		1.0	U	
107-06-2	1,2-Dichloroethane		1.0	U	
71-43-2	Benzene		0.35	J	J
79-01-6	Trichloroethylene	1020	~~608~~	~~E~~ D	=
78-87-5	1,2-Dichloropropane		1.0	U	U
75-27-4	Bromodichloromethane		1.0	U	
108-10-1	4-Methyl-2-pentanone		5.0	U	
108-88-3	Toluene		1.0	U	
79-00-5	1,1,2-Trichloroethane		1.0	U	
591-78-6	2-Hexanone		5.0	U	
127-18-4	Tetrachloroethylene		1.0	U	
124-48-1	Dibromochloromethane		1.0	U	
108-90-7	Chlorobenzene		1.0	U	
100-41-4	Ethylbenzene		1.0	U	
75-69-4	Xylenes (total)		3.0	U	
100-42-5	Styrene		1.0	U	
75-25-2	Bromoform		1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	

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DATA VALIDATION COPY

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5612

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 38981

Matrix: (soil/water) WATER Lab Sample ID: 38981005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1A510

Level: (low/med) LOW Date Received: 03/11/01

% Moisture: not dec. _____ Date Analyzed: 03/16/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	5.0	U	u
75-01-4	Vinyl chloride	5.0	U	
74-83-9	Bromomethane	5.0	U	
75-00-3	Chloroethane	5.0	U	
75-35-4	1,1-Dichloroethylene	5.0	U	
67-64-1	Acetone	25 ~~22.4~~	J	u FOY,FOC
75-15-0	Carbon disulfide	25.0	U	u
75-09-2	Methylene chloride	25.0	U	
75-34-3	1,1-Dichloroethane	5.0	U	
78-93-3	2-Butanone	25.0	U	
540-59-0	1,2-Dichloroethylene (total)	7.9	J	J
67-66-3	Chloroform	5.0	U	u
71-55-6	1,1,1-Trichloroethane	5.0	U	
56-23-5	Carbon tetrachloride	5.0	U	
107-06-2	1,2-Dichloroethane	5.0	U	
71-43-2	Benzene	5.0	U	
79-01-6	Trichloroethylene	303		=
78-87-5	1,2-Dichloropropane	5.0	U	u
75-27-4	Bromodichloromethane	5.0	U	
10061-01-5	cis-1,3-Dichloropropylene	5.0	U	
108-10-1	4-Methyl-2-pentanone	25.0	U	
108-88-3	Toluene	5.0	U	
10061-02-6	trans-1,3-Dichloropropylene	5.0	U	
79-00-5	1,1,2-Trichloroethane	5.0	U	
591-78-6	2-Hexanone	25.0	U	
127-18-4	Tetrachloroethylene	5.0	U	
124-48-1	Dibromochloromethane	5.0	U	
108-90-7	Chlorobenzene	5.0	U	
100-41-4	Ethylbenzene	5.0	U	
75-69-4	Xylenes (total)	15.0	U	
100-42-5	Styrene	5.0	U	
75-25-2	Bromoform	5.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	

MAP 4/12/01

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5712

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 38981

Matrix: (soil/water) WATER Lab Sample ID: 38981006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1A419

Level: (low/med) LOW Date Received: 03/11/01

% Moisture: not dec. _____ Date Analyzed: 03/15/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	u
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	220		= F
75-15-0	Carbon disulfide	5.0	U	u
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene (total)	2.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
67-66-3	Chloroform	4.7		=
71-55-6	1,1,1-Trichloroethane	1.0	U	u
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	0.72	J	J
78-87-5	1,2-Dichloropropane	1.0	U	u
75-27-4	Bromodichloromethane	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
75-69-4	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5714

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 38981

Matrix: (soil/water) WATER Lab Sample ID: 38981007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1A429

Level: (low/med) LOW Date Received: 03/11/01

% Moisture: not dec. _____ Date Analyzed: 03/15/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	200		= F04, F08
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene (total)	2.0	U	
67-66-3	Chloroform	4.7		=
71-55-6	1,1,1-Trichloroethane	1.0	U	U
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethylene	0.17	J	J
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
75-69-4	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

FORM I VOA OLM03.0

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5812

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 38981

Matrix: (soil/water) WATER Lab Sample ID: 38981008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1A430

Level: (low/med) LOW Date Received: 03/11/01

% Moisture: not dec. _____ Date Analyzed: 03/16/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

USE

CAS NO.	COMPOUND		CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane		1.0	U	U
75-01-4	Vinyl chloride		1.0	U	↓
74-83-9	Bromomethane		1.0	U	↓
75-00-3	Chloroethane		1.0	U	↓
75-35-4	1,1-Dichloroethylene		1.0	U	↓
67-64-1	Acetone	1360	~~1220~~	~~E~~ D	J FO4 ;C
75-15-0	Carbon disulfide		5.0	U	U
75-09-2	Methylene chloride		5.0	U	↓
75-34-3	1,1-Dichloroethane		1.0	U	↓
78-93-3	2-Butanone		2.8	J	J
540-59-0	1,2-Dichloroethylene (total)	MMP 4/12/01	8.0		=
67-66-3	Chloroform		1.1		=
71-55-6	1,1,1-Trichloroethane		1.0	U	U
56-23-5	Carbon tetrachloride		1.0	U	↓
107-06-2	1,2-Dichloroethane		1.0	U	↓
71-43-2	Benzene		0.16	J	J
79-01-6	Trichloroethylene		13.0		=
78-87-5	1,2-Dichloropropane		1.0	U	U
75-27-4	Bromodichloromethane		1.0	U	↓
10061-01-5	cis-1,3-Dichloropropylene		1.0	U	↓
108-10-1	4-Methyl-2-pentanone		5.0	U	↓
108-88-3	Toluene		0.62	J	J
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	U
79-00-5	1,1,2-Trichloroethane		1.0	U	↓
591-78-6	2-Hexanone		5.0	U	↓
127-18-4	Tetrachloroethylene		1.0	U	↓
124-48-1	Dibromochloromethane		1.0	U	↓
108-90-7	Chlorobenzene		1.0	U	↓
100-41-4	Ethylbenzene		1.0	U	↓
75-69-4	Xylenes (total)		0.25	J	J
100-42-5	Styrene		1.0	U	U
75-25-2	Bromoform		1.0	U	↓
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	↓

FORM I VOA OLM03.0

DATA VALIDATION COPY

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF5912

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 38981

Matrix: (soil/water) WATER Lab Sample ID: 38981009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1A431

Level: (low/med) LOW Date Received: 03/11/01

% Moisture: not dec. _____ Date Analyzed: 03/16/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

USE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
74-87-3	Chloromethane		1.0	U	U
75-01-4	Vinyl chloride		1.0	U	
74-83-9	Bromomethane		1.0	U	
75-00-3	Chloroethane		1.0	U	
75-35-4	1,1-Dichloroethylene		1.0	U	
67-64-1	Acetone	2250	~~1810~~	~~E~~ D	J FOY, FOB
75-15-0	Carbon disulfide		5.0	U	U
75-09-2	Methylene chloride		5.0	U	
75-34-3	1,1-Dichloroethane		1.0	U	
78-93-3	2-Butanone	MMP 4/12/01	1.0	J	J
540-59-0	1,2-Dichloroethylene (total)		2.0	U	U
67-66-3	Chloroform		0.66	J	J
71-55-6	1,1,1-Trichloroethane		1.0	U	U
56-23-5	Carbon tetrachloride		1.0	U	
107-06-2	1,2-Dichloroethane		1.0	U	
71-43-2	Benzene		0.67	J	J
79-01-6	Trichloroethylene		1.0	U	U
78-87-5	1,2-Dichloropropane		1.0	U	
75-27-4	Bromodichloromethane		1.0	U	
10061-01-5	cis-1,3-Dichloropropylene		1.0	U	
108-10-1	4-Methyl-2-pentanone		5.0	U	
108-88-3	Toluene		1.0	U	
10061-02-6	trans-1,3-Dichloropropylene		1.0	U	
79-00-5	1,1,2-Trichloroethane		1.0	U	
591-78-6	2-Hexanone		5.0	U	
127-18-4	Tetrachloroethylene		1.0	U	
124-48-1	Dibromochloromethane		1.0	U	
108-90-7	Chlorobenzene		1.0	U	
100-41-4	Ethylbenzene		1.0	U	
75-69-4	Xylenes (total)		3.0	U	
100-42-5	Styrene		1.0	U	
75-25-2	Bromoform		1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	

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5!

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF6012

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 38981

Matrix: (soil/water) WATER Lab Sample ID: 38981010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1A513

Level: (low/med) LOW Date Received: 03/11/01

% Moisture: not dec. _____ Date Analyzed: 03/16/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	33.8		U FOY,FO7
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene (total)	3.4		=
67-66-3	Chloroform	1.0	U	U
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	0.26	J	J
79-01-6	Trichloroethylene	26.1		=
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
75-69-4	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF6014

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 38981

Matrix: (soil/water) WATER Lab Sample ID: 38981011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1A433

Level: (low/med) LOW Date Received: 03/11/01

% Moisture: not dec. _____ Date Analyzed: 03/16/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	1.0	U	u
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	35.2		u FD4,F07
75-15-0	Carbon disulfide	5.0	U	u
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	U	
540-59-0	1,2-Dichloroethylene (total)	3.5		=
67-66-3	Chloroform	1.0	U	u
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	0.25	J	J
79-01-6	Trichloroethylene	24.9		=
78-87-5	1,2-Dichloropropane	1.0	U	u
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
75-69-4	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF6112

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 38981

Matrix: (soil/water) WATER Lab Sample ID: 38981012

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1A434

Level: (low/med) LOW Date Received: 03/11/01

% Moisture: not dec. _____ Date Analyzed: 03/16/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

USL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	356	
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	2.3	J
540-59-0	1,2-Dichloroethylene (total)	1.3	J
67-66-3	Chloroform	0.39	J
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	267 ~~272~~	~~E~~ D
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
75-69-4	Xylenes (total)	3.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

MMP 4/12/01

FD4, FD8

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF6212

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 38981

Matrix: (soil/water) WATER Lab Sample ID: 38981013

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1A435

Level: (low/med) LOW Date Received: 03/11/01

% Moisture: not dec. _____ Date Analyzed: 03/16/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL

USL

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	Q		
74-87-3	Chloromethane	1.0	U	U
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-35-4	1,1-Dichloroethylene	1.0	U	
67-64-1	Acetone	8630 ~~5160~~	~~E~~ D	J FD4,FD8,CC
75-15-0	Carbon disulfide	5.0	U	U
75-09-2	Methylene chloride	5.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	1.9	J	J
540-59-0	1,2-Dichloroethylene (total)	2.0	U	U
67-66-3	Chloroform	1.0		
71-55-6	1,1,1-Trichloroethane	1.0	U	U
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	0.15	J	J
79-01-6	Trichloroethylene	0.39	J	J
78-87-5	1,2-Dichloropropane	1.0	U	U
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropylene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	0.23	J	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U	U
79-00-5	1,1,2-Trichloroethane	1.0	U	
591-78-6	2-Hexanone	5.0	U	
127-18-4	Tetrachloroethylene	1.0	U	
124-48-1	Dibromochloromethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
75-69-4	Xylenes (total)	3.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	

MMP 4/12/01

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SAIC An Employee-Owned Company
Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

CHAIN OF CUSTODY RECORD

COC NO.: H25ØØ7

PROJECT NAME: USTs 25 & 26

PROJECT NUMBER: 01-1624-04-1958-220

PROJECT MANAGER: Patty Stoll

Sampler (Signature) Laura Lumley (Printed Name) Laura Lumley

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29417

PHONE NO: (843) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOC	TCLP VOC	TCLP Lead	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AF531Z	3/10/01	1100	Water	2			2		38981 001
AF541Z	3/10/01	1005		2			2		002
AF541Y	3/10/01	1005		2			2		003
AF551Z	3/10/01	0900		2			2		004
AF561Z	3/10/01	1035		2			2		005
AF571Z	3/9/01	1535		2			2		006
AF571Y	3/9/01	1535		2			2		007
AF561Z	3/9/01	1535		2			2		008
AF591Z	3/10/01	0940		2			2		009
AF601Z	3/10/01	1155		2			2		010
AF601Y	3/10/01	1155		2			2		011
AF611Z	3/10/01	1150		2			2		012
AF621Z	3/10/01	0935		2			2		013

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	3/11/01 1113	[illegible]	3/11/01 1330
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RECEIVED BY: [illegible]	Date/Time 3/11/01 1113	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY: [illegible]	Date/Time 3/11/01 1330	RECEIVED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS:

Cooler ID: #489

Cooler Temperature: 28°C

FEDEX NUMBER:

200103136 47

SAIC An Employee-Owned Company
Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

2 of 2

CHAIN OF CUSTODY RECORD

COC NO.: H25007

PROJECT NAME: USTs 25 & 26

PROJECT NUMBER: 01-1624-04-1958-220

PROJECT MANAGER: Patty Stoll

Sampler (Signature): Laura Lumley (Printed Name): Laura Lumley

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29417

PHONE NO: (843) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOC	TCLP VOC	TCLP Lead	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
TB25006	3/9/01	1500	Water	2			2		38981014

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	3/11/01 1113	[illegible]	3/11/01 1330
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RECEIVED BY: [illegible]	Date/Time 3/11/01 1113	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY: [illegible]	Date/Time 3/11/01 1330	RECEIVED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 28

Cooler ID: # 489

Cooler Temperature: 2.8°C

FEDEX NUMBER:

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APPENDIX IX

CONTAMINATED SOIL DISPOSAL

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Underground Storage Tanks 25 & 26, Facility ID #9-025008, were closed in-place with concrete slurry in 1998. Soil was not excavated during in-place closure activities; thus, soil disposal was not required for the site.

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APPENDIX X

SITE RANKING FORM

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The site ranking form associated with the benzene plume was presented in the Corrective Action Plan (CAP)–Part B Report dated February 2000, and the site ranking score was 5750. The site ranking form associated with the benzene plume is being updated with each semiannual monitoring sampling event being conducted under the Monitoring Only Plan and will be presented in each annual monitoring only report for the site, which is due to the Georgia Environmental Protection Division in July of each year. The site ranking form does not account for the trichloroethene that is present at the site; thus, the form was not updated as part of this document/addendum.

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APPENDIX XI

PUBLIC NOTIFICATION

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AFFIDAVIT OF PUBLICATION
SAVANNAH MORNING NEWS

STATE OF GEORGIA
COUNTY OF CHATHAM

Personally appeared before me, LYNNETTE TUCK, to me known, who being sworn, deposes and says:

That she/he is the CLASSIFIED INSIDE SALES MANAGER of Southeastern Newspaper Corporation, a Georgia corporation, doing business in Chatham County, Ga., under the trade name of Savannah Morning News, a daily newspaper published in said county;

That she/he is authorized to make affidavits of publication on behalf of said published corporation;

That said newspaper is of general circulation in said county and in the area adjacent thereto;

That she/he has reviewed the regular editions of the Savannah Morning News, published on:

4-1, 2001, 4-8, 2001,

_____, 2001, _____, 2001,

and finds that the following advertisement, to-wit:

Don't forget to pick up your copy today!

015 Miscellaneous Notices

PUBLIC NOTICE
Notification of Corrective Action Plan Underground Storage, Tank Releases
Fort Stewart, Ga. and Hunter Army Airfield, Ga.

The Georgia EPD, (GEPD) has required Fort Stewart Directorate of Public Works to prepare Corrective Action Plans Part A or Part B to investigate and/or clean up contamination at the underground storage tank sites at Fort Stewart or Hunter Army Airfield as listed at the end of this notification.

This plans will be submitted to the GEPD on or before September 30, 2001.

If you want to examine a copy of one or more of the plans, please contact: Environmental Branch (Attn: T. Rutland), HQS 3D IN DIV (MECH), Directorate of Public Works, Bldg. 1137, 1550 Frank Cochran Dr., Fort Stewart, Ga. 31314-4927.

A copy will be mailed at a nominal fee.

Comments to the plan(s) will be accepted until October 30, 2001, and should be directed to GEPD at 404-362-2687.

Following is the mailing address: GEPD USTMP, 4244 International Parkway, Suite 104, Atlanta, Ga. 30354.

Hunter Army Airfield Part B Underground Storage Tank Sites:
Site: Facility ID#: Building 117, 9-025113*, 7002 25 and 26, 9-025006, 1342 Former Pumphouse #1, 9-025085, 8060

Fort Stewart Part B Underground Storage Tank Sites:
Site: Facility ID#: Building 276-279, 0-089156, Victory Shoppette

Appeared in each of said editions.
Sworn to and subscribed before me

This 8 day of Apr, 2001

Lynnette Tuck
(Deponent)

Lillie D. Lang
Notary Public, Chatham County, Ga.
LILLIE D. LANG
Notary Public, Chatham County, Ga.
My Commission Expires Apr. 8, 2001

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ATTACHMENT A

GEOPHYSICAL INVESTIGATION REPORT

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Report to Sponsor

Geophysical Investigation of the 260th Motor Pool Site at HAAF, Georgia

By

M.D. Thompson, S.F. Miller and J.M. Cooper

Center for Environmental Restoration Systems
Energy Systems Division
Argonne National Laboratory

for

Melanie Little

Hunter Army Airfield

Savannah, Georgia

Interim Project Report

June 2001

TABLE OF CONTENTS

List of Tables

List of Figures

Geophysical Investigation of the 260th Motor Pool site at HAAF, Georgia

Overview

The 260th Motor Pool site at Hunter Army Airfield (Figure 1) is currently under environmental investigation for sub-surface TCE contamination. Chemical analysis of groundwater monitoring wells indicates that TCE is present at shallow depths (2-4 m) beneath the ground surface in the wooded area southeast of the 260th Motor Pool.

The geology beneath the site consists of coastal plain sediments comprised of interbedded sand and clay layers. Two clay horizons, the Upper Clay Unit (UCU) and the Lower Clay Unit (LCU), have been identified by geophysical methods and may act as potential barriers for the migration and pooling of TCE products beneath the 260th site. The UCU occurs at depths of 7 to 9m below the ground surface and the LCU at depths of 13-22m below ground level.

As part of the investigation, geophysical surveys were conducted at the 260th Motor Pool site to better characterize subsurface geology controlling the migration and entrapment of TCE contaminants (DNAPL). Additional geophysical surveys were also performed to determine whether an uncontrolled burial site was present. Geophysical methods used consisted of electro-magnetic (EM) terrain conductivity surveying, EM metal detection, two-dimensional electrical resistivity imaging (2D-ERI), and borehole electric and natural-gamma logging.

Results from modeling the 2D-ERI data provide gross spatial distributions and trends of electrical properties of the subsurface, which are correlated with the underlying geology. In situ geophysical measurements were also performed using available monitoring wells and direct-push techniques. Both electrical and natural-gamma methods were run which allow discriminating between clay and non-clay intervals. The borehole geophysical surveys clearly indicated the depth and thickness of discrete clay layers at the boring, whereas, the surface geophysical methods are used to extrapolate between borings.

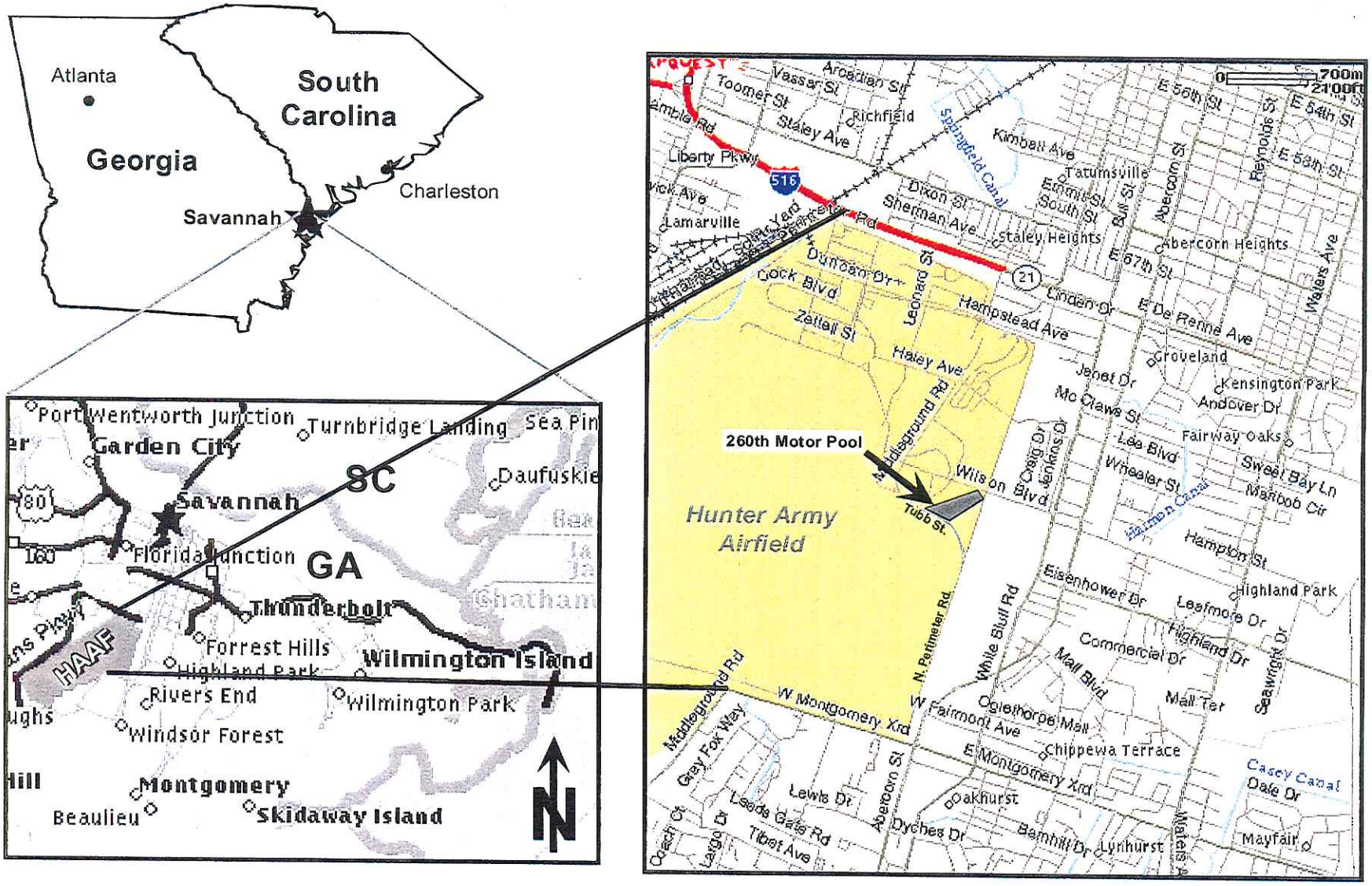

Figure 1. Location map for the 260th Motor Pool and Hunter Army Airfield (HAAF), Savannah, Georgia.

Geology

Stratigraphic units of concern at the 260th Motor Pool include the Pliocene-Holocene Unit and the underlying Miocene Aquiclude (Confining Unit).

Pliocene-Holocene Unit

Holocene deposits are characterized by sand, clay, and lesser amounts of gravel; Pleistocene deposits by arkosic sand and gravel containing discontinuous clay beds; and Pliocene deposits by phosphatic, micaceous and clayey sand. Numerous in-filled channels, some of which extend into and potentially through the Miocene aquiclude, also characterize units within the Pliocene-Holocene series.

Miocene Aquiclude (Confining Unit)

The Miocene Aquiclude is composed of mainly clastic deposits containing low-permeability clays, silts, clayey silts, and sandy or silty clays that act as confining units in the Savannah area. The thickness of the Miocene deposits range in thickness from over 100ft in the Savannah area to being locally absent, or nearly so, off Hilton Head Island and the Beaufort area (Foyle et al, 1999).

Geophysical Surveys

Geophysical surveys were conducted during two rounds, April 2000 and Oct./Nov 2000. This allowed assessing what seasonal effects would occur on the resulting geophysical models, and allowed adjusting survey parameters in attempt to improve the resolution of the resulting models. Surveys consisted of two-dimensional electrical-resistivity imaging (2D-ERI), borehole geophysical logging, electromagnetic (EM) terrain-conductivity mapping, and EM metal detection. The survey locations are shown in Figure 2 with the 2D-ERI profiles denoted as solid red lines, the EM grid as a magenta color, and the borehole geophysical measurement points as solid-blue circles. The 2D-ERI and borehole geophysical surveys were conducted in order to map the vertical distribution and lateral continuity of clay layers underlying the field site. EM terrain-conductivity and metal detection surveys were conducted in the wooded area southeast of the motor pool in order to determine whether an uncontrolled burial site was present. A more thorough description of the instrumentation and geophysical methods is provided in Appendix A.

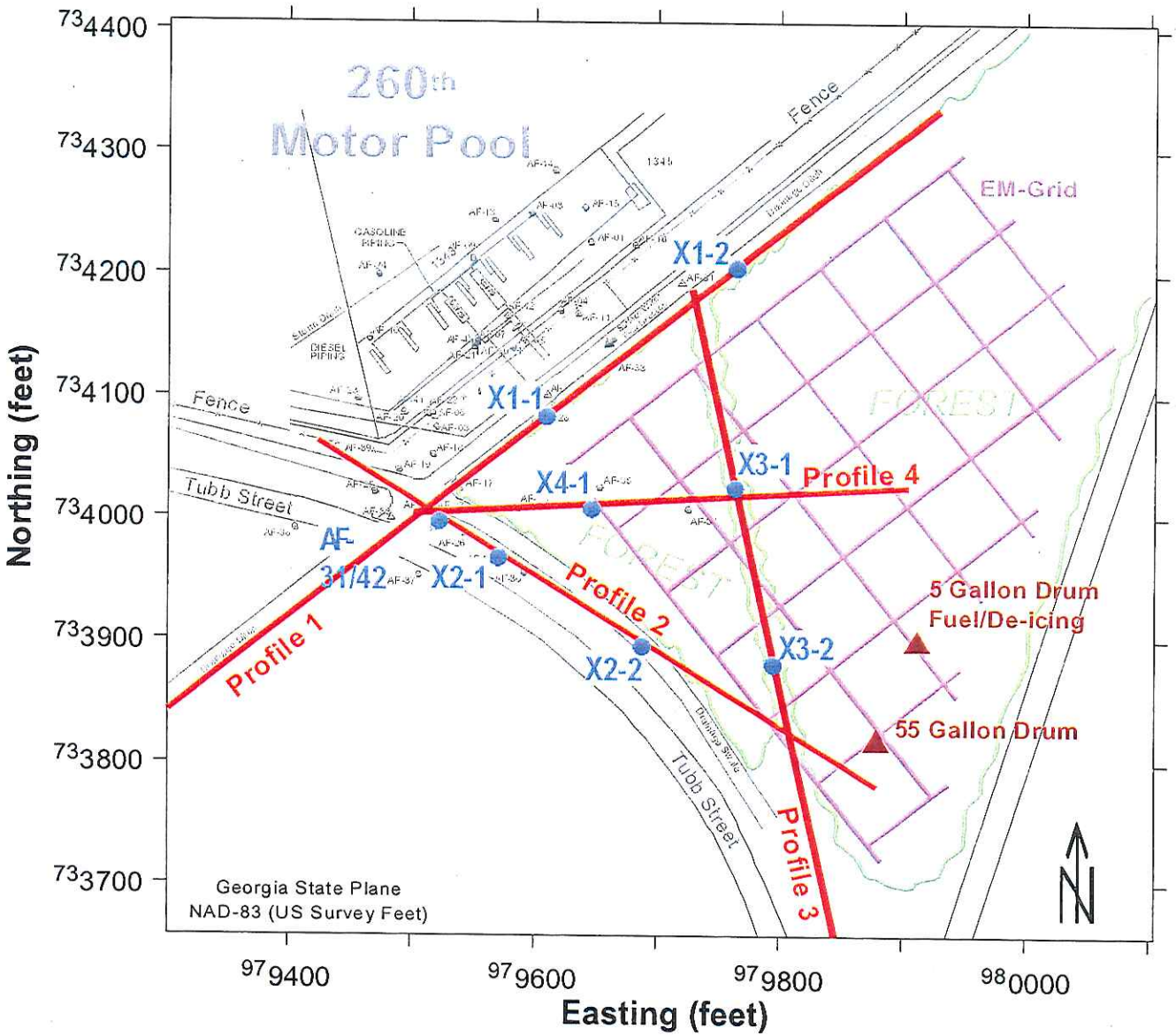

Figure 2. Locations of Geophysical Surveys at the 260th Motor Pool.

2-D Electrical Resistivity Imaging (2D-ERI)

2D electrical-resistivity data were collected along 4 profiles (Figure 2) at the 260th site using an AGI Sting/Swift system (see Appendix A for a more thorough discussion of the methodology and use of this instrument). Each profile was surveyed twice, first in April 2000 during wet soil conditions, then in October/November 2000 in dry soil conditions brought upon by a summer long drought. Only Schlumberger arrays were used because they produced relatively clean data sets with stable inversion models. Details and comparisons of the repeat measurements are discussed below.

Data collected during the second round were generally noisier and of poorer quality than that collected during the initial round (April 2000), and models constructed from the second round of data yield higher modeling errors than the April round. Drier soil conditions are believed to be major cause for the increased noise and model errors. In this case, the electrical-contact between the ground and the electrodes is reduced and the contrast between low- and high-resistivity zones is increased. One major drawback to the increased noise is that a greater degree of modeling artifacts occurs in the form of extreme high and low bulls-eyes. These features are noted where present.

The initial targets for the 2D-ERI investigation were the depth and lateral continuity of the upper and lower clay units (UCU and LCU) underlying the site. The LCU proved too great in depth to be fully resolved using the 2D-ERI method. This is in part due to the near surface conditions and in part due to resolution limits imposed by modeling algorithm (fuzzier solution with depth). A distinct decrease in electrical resistivity, however, occurs at depths where borings adjacent to the profiles indicate the top of the LCU. The UCU is only partially resolved on the 2D-ERI profiles due primarily to its thinness (<2.5 m).

Profile 1 is oriented southwest to northeast and lies south of and parallel to the main drainage ditch adjacent to the 260th Motor Pool fence (See Figure 2). The resulting 2D-ERI models are shown in Figure 3 with the April 2000 data in the top panel, and the second round model results in the lower panel. This convention is observed for each profile. The first round of data collection used an electrode spacing of 6m and 42 total electrodes, which provided a total profile length of 246m. The second round used a 3m-electrode spacing with 56 electrodes, resulting in a 245m

long profile. The decreased electrode spacing for the second round survey was used in an attempt to increase the resolution of the model.

A 15m thick high-resistivity (>100 ohm-m) layer dominates the resulting models constructed for Profile 1 (Figure 3). The top of this high-resistivity zone averages approximately 2m in depth on the southwestern half of the profile and shallows to the NE until it is just below the ground surface (coordinate 138X and greater). The bottom of this layer averages approximately 20m in depth below ground level. Lateral continuity of this layer is lost between profile coordinates 84X and 138X, where zones of lower resistivity break the high-resistivity layer.

Low-resistivities (<40 ohm-m) underlie the high-resistivity layer and are probably caused by clay intervals in the lower clay unit (Miocene). The resolution of the 2D-ERI model at depth does not allow determining a precise interface for the top of these clay units. The actual interface most likely occurs during the transition from high-to-low resistivity, perhaps in the 60-80 ohm-m contour range. In a gross sense, though, the lower clays (Miocene) occur at an average depth of approximately 15-20m below ground level. Undulations upwards of 5m occur at the top of these low-resistivity units, though at this juncture it is unclear whether changing moisture conditions or true changes in the elevation of the clays is occurring.

An almost 10m rise in the clay surface is observed between profile coordinates 102X and 120X on the second round model shown in Figure 3. This coincides with an upward shift and thinning of the high-resistivity zone in this area (the initial round of data suggested a low point in the clay surface at this location). One explanation is that the rise is a modeling artifact produced by the modeling algorithm to handle the noisier data. Note that the overlying high-resistivity zone almost triples in resistivity (~100 to ~300 ohm-m) from the first to the second round. An alternate explanation is that drier soil conditions have enhanced the contrast between sand/silt and clay intervals, and the top of the low-resistivity material coincides with the top of the upper clay unit.

Profile 2 is oriented northwest to southeast, runs sub-parallel to Tubb Street, and the resulting 2D-ERI models are shown in Figure 4 (see Figure 2 for the profile location). Both survey rounds used an electrode spacing of 3m and a total of 56 electrodes, resulting in a profile length of 165m. The initial survey in April, however, used a base array of 28 electrodes and two roll-along extensions of 14 electrodes each to construct the profile, whereas the October survey used a single

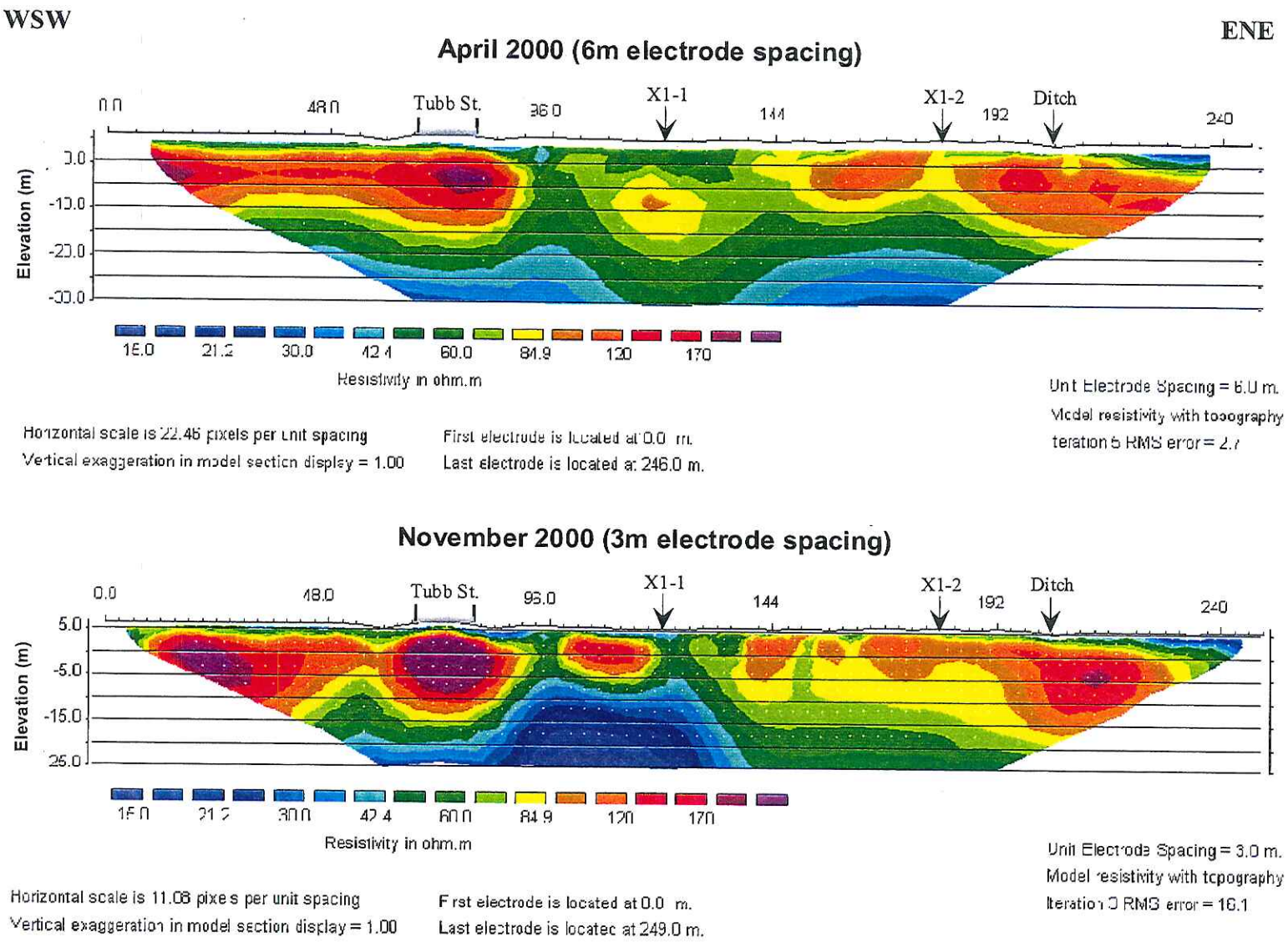

Figure 3. April 2000 (top) and November 2000 (bottom) 2D-ERI results for Profile 1.

array of 56 electrodes. The later geometry has the advantages of bridging gaps inherent in the collection of roll-along surveys and allows penetrating to greater investigation depths.

The two 2D-ERI models constructed for Profile 2 (Figure 4) compare favorably, except for the following two areas: a near surface, resistivity-high bulls-eye beneath profile position 111X, and zones of increased resistivity on the northwest end of the profile on the October survey. These differences are attributed to the drier soil conditions brought on by the summer-long drought. In this case, the drier soil conditions have increased the electrical contrasts between the clay and silt/sand intervals, and the modeling algorithm is over-estimating the true resistivity.

A thin (2-3m thick) low-resistivity layer (<20 ohm-m) is observed just below the ground surface on Profile 2 (Figure 4). This layer begins near profile position 36X and exits at the southeast end of Profile 2.

A layer of moderate-to-high resistivity (>70 ohm-m) immediately underlies the near-surface low-resistivity layer at an average depth of 2m. This high-resistivity appears as a thicker zone in the northwest third of the profile, where it averages 8-10m in thickness on the April data set and reaches approximately 12m in thickness beneath profile position 57X. The high-resistivity layer thins towards the southeast to an average thickness of 5m, and maintains this thinner state across the rest of the profile. The "layer-cake" geo-electrical response on the southeastern half of the April model is consistent with the underlying geology. The thicker electrically resistive structure between profile coordinates 45-63X may be indicative of a thicker coarser grained interval. Also note that this part of the profile crosses an area with sub-surface TCE contamination.

Near-surface, high-resistivity features observed on the northwest end of the profile are most likely associated with fill material used for construction of the motor pool's parking apron. A near-surface high-resistivity bulls-eye observed in the October data near profile position 25X is most likely caused by the drainage ditch.

The presence of clay units is inferred for causing the underlying low-resistivities in the southeast two-thirds of the profile. The top of this low-resistivity occurs in the 8-to-10m-depth range in the southeastern 2/3 of the profile, and at a minimum depth of 15-to-20m in the northwest. This change depth is similar in magnitude to that observed on Profile 1.

Figure 5 shows the 2D-ERI modeling results for Profile 3, which was acquired along an approximate north-to-south transect along the western edge of a gravel roadbed extending through

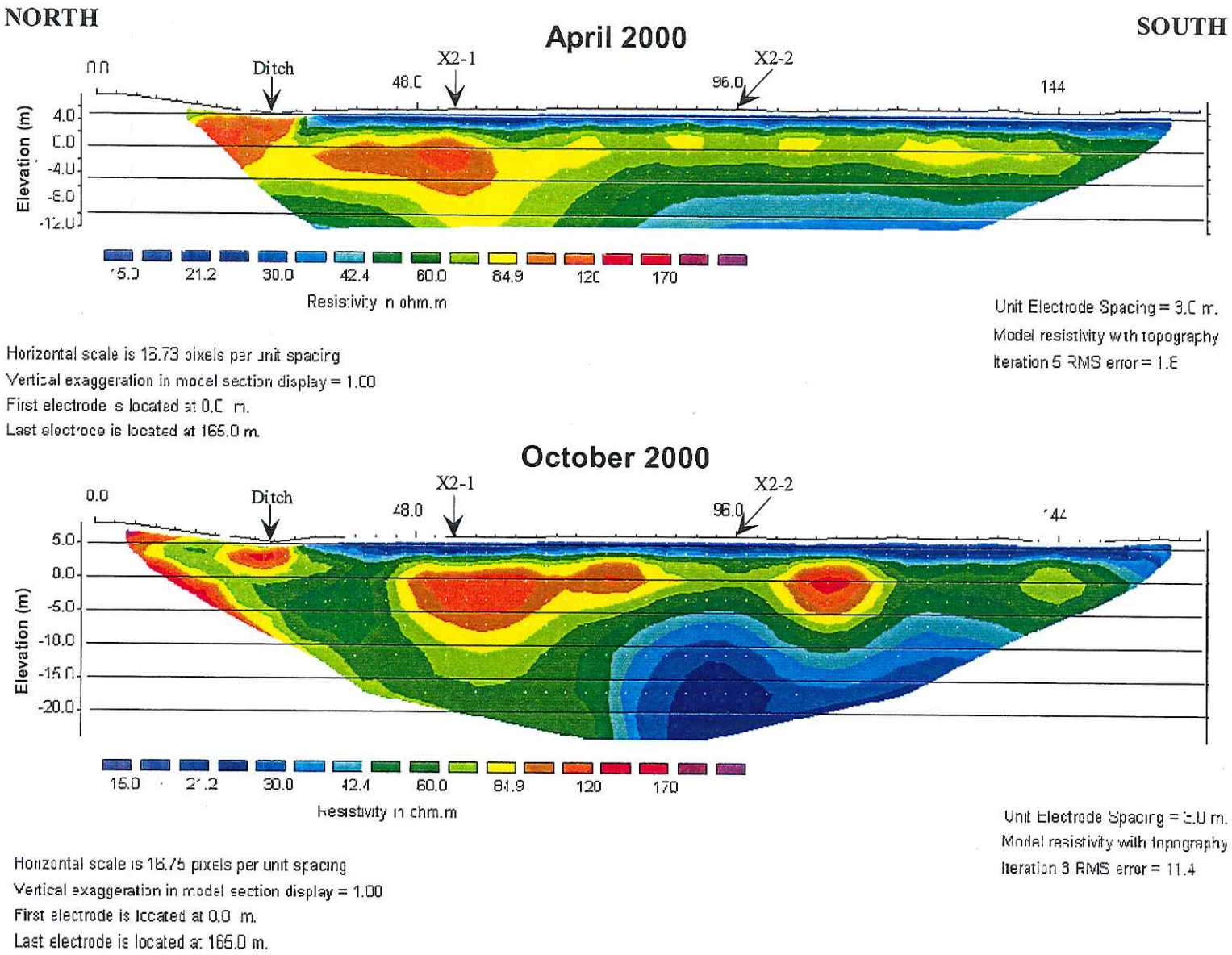

Figure 4. April (top) and October (bottom) Resistivity Models for Profile 2.

the wooded area (see Figure 2 for location). The initial survey in April used a base array of 28 electrodes and two roll-along extensions of 14 electrodes each to construct the profile, and the November survey used a single array of 56 electrodes. The geo-electric model for the April data (top panel, Figure 5) displays very low model error, whereas the November survey (bottom panel, Figure 5) yielded a very noisy data set with a correspondingly high modeling error. Processing of the November survey required using additional data smoothing and horizontal filtering that was not implemented for any of the other profiles.

Model results (Figure 5) show an approximately 2m thick, near-surface low-resistivity layer (<20 ohm-m) that extends across most of the profile. This layer begins near profile position 25X and ends near position 144X. A near-surface layer of similar low-resistivity and thickness is observed on the other three profiles, and is interpreted to be a naturally occurring feature.

Underlying the low-resistivity layer is a 7-9m thick layer of moderate-to-high-resistivity (>70 ohm-m) that extends across the profile. In the April model, this layer decreases in resistivity towards the south where it becomes a low-to-moderately resistive zone (35-60 ohm-m). The November model, however, does not indicate a decrease in resistivity to the south for this layer, but shows pronounced lateral discontinuities. Note also that the resistivity of this layer is much greater than observed on the April model. The discontinuities in the November model (bottom panel, Figure 5) are interpreted as artifacts introduced by the modeling algorithm (pinching out or necking problem). In addition, drier soil conditions are interpreted to have increased the electrical contrast between the clays and silt/sand layers, and the model algorithm is either under- or overshooting the resistivity value for individual zones.

Another zone of low resistivity immediately underlies the moderate-to-high resistivity layer. The top of this low-resistivity zone occurs at a depth of approximately 9-to-11m, and the November model indicates that this horizon is from 7-to-10m in thickness. An apparent increase in resistivity within this zone below profile position 66X is most likely a modeling artifact.

High-resistivities are observed at the base of the November model, suggesting the presence of sand or coarser-grain intervals. This zone occurs at a depth consistent with Miocene units.

Profile 4 is oriented west-to-east, and bisects the study area along a line of monitoring wells (Figure 2). Both the April and November surveys utilized an electrode separation of 3 m and began at the same point; however, slightly different geometric configurations were used. The

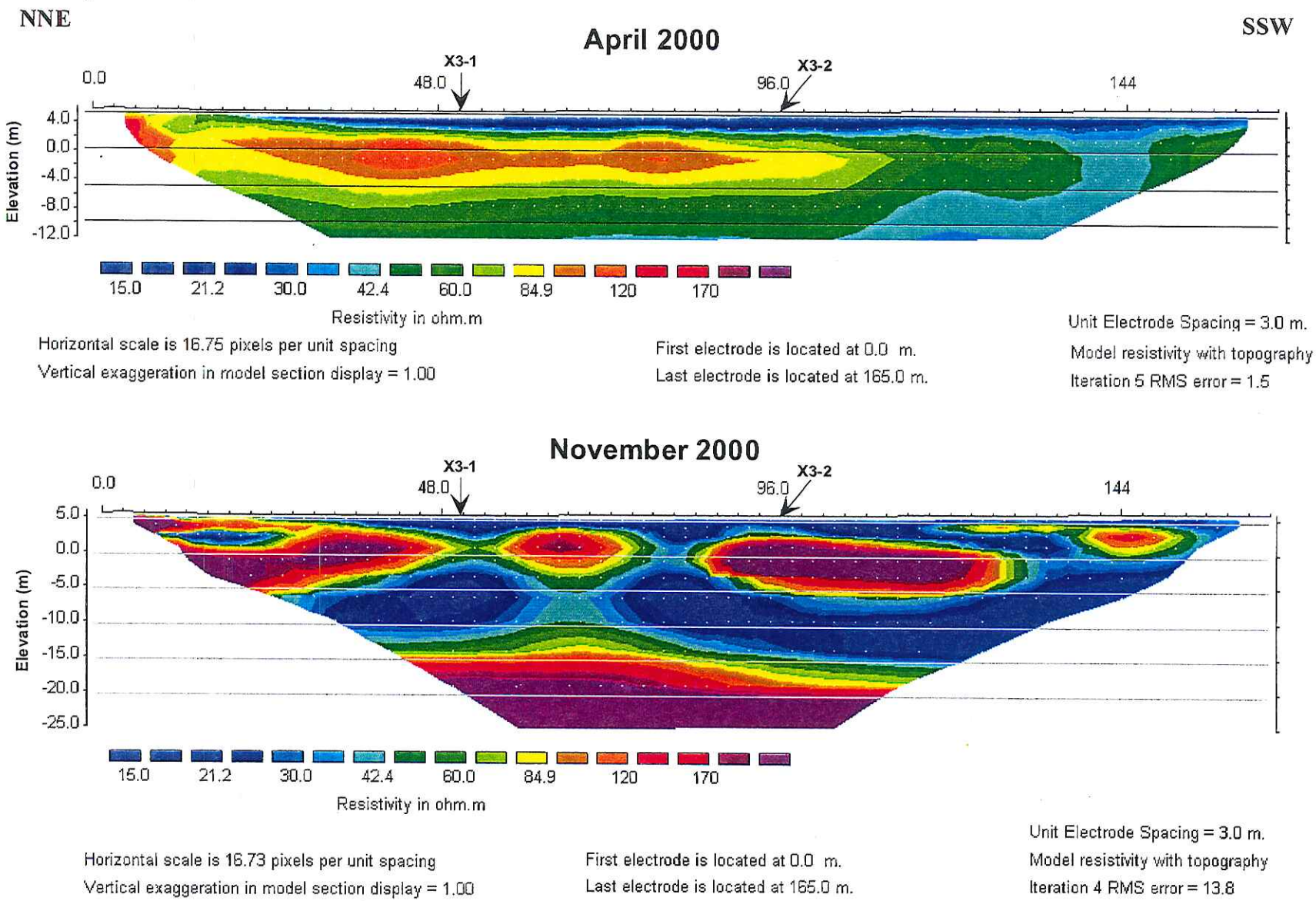

Figure 5. 2D-ERI models for Profile 3. April (top) and November (bottom), 3m electrode spacing.

April survey consisted of a base array of 28 electrodes and a single roll-along of 14 electrodes for a total line length of 123m. The November survey consisted of a single array of 56 electrodes for a total line length of 165m. The later array geometry increased depth of exploration from approximately –10 to –20 m MSL with no loss of data resolution in the near surface.

Modeling results for Profile 4 are presented in Figure 6. Like the previous three profiles, the November data suffer from a significant increase in noise that is attributed to drier soils brought on by the summer-long drought. General trends within the data are preserved, however. For both models, a thin low-resistivity layer that is approximately 2m thick is present just below the ground surface. Low-resistivity layers of similar dimension and position are also observed on the other three profiles, suggesting a common and most likely natural condition.

The western half of the profile is underlain by a high-resistivity layer (>80 ohm-m) that reaches a thickness of upwards of 15m. Profiles 1 and 2 also show a thicker, high-resistivity zone in this general region. Towards the east, the high-resistivity layer thins to approximately 7-9m. The November model exhibits an increased lateral discontinuity for this horizon in the eastern half of the profile, which is attributed to the drier soil conditions and relatively noisier data.

At depth, low-resistivities underlie the eastern half of the profile with top at approximately 6-8m in elevation (11-13m depth). The November model suggests a very thick (>10m) low-resistivity zone, though it is unclear at this time if the model is fully resolving deeper features.

No evidence for burial activity is indicated on Profile 4 (especially the November data which extended further into the wooded area).

Borehole Geophysical Logging

Borehole geophysical surveying was conducted in order to map the vertical distribution (top, bottom, and thickness) of clay horizons adjacent to the 260th Motor Pool, as well as the electrical properties of the subsurface to help interpret the 2D-ERI models. Borehole methods used consisted of direct-push conductivity (DP e-log), EM induction (conductivity), and natural-gamma surveys. The methods used, and the PVC cased holes or wells surveyed, are given in Table 1.

Table 1. Geophysical methods used for each PVC cased hole or well.

Well/Boring ID	DP e-log	Borehole Geophysical Logging	
		EM Induction	Natural Gamma

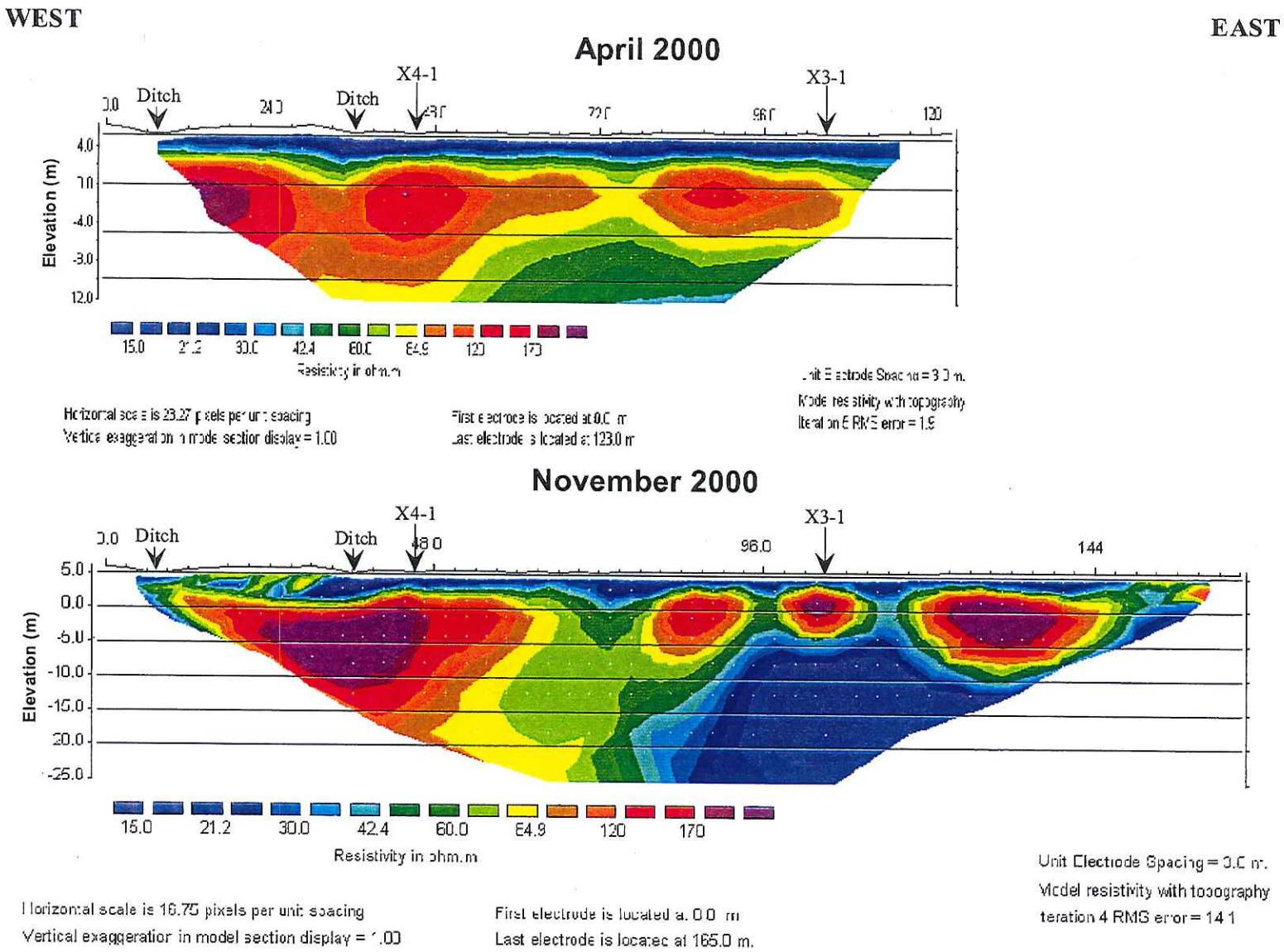

Figure 6. Resistivity Modeling Results for Profile 4, April (top), November (bottom), 3m electrode separation

X1-1	No	Yes	Yes
X1-2	Yes	No	No
X2-1*	Yes	Yes	Yes
X2-2	Yes	No	No
X3-1*	Yes	Yes	Yes
X3-2	Yes	No	No
X4-1	Yes	No	No
AF-31/42	No	Yes	Yes

* All three methods used at this location

The rationale for using the above tools is that clay horizons can be distinguished from silt/sand intervals using both radiological and electrical properties. Clay sediments include relatively high amounts of naturally-occurring, gamma-ray emitting potassium-40 and daughter isotopes of the uranium- and thorium- decay series, yielding a significantly greater response than sand intervals on natural gamma logs (Keys, 1990). Clay sediments are also more electrically conductive than sand or silt intervals, and exhibit a significantly greater response on conductivity logs. Changes in borehole conductivity, however, may also arise from variations in the concentration of total dissolved solids (TDS) within borehole fluids (Keys, 1990), and thus mask sand/clay changes. The combined use of electrical and passive radiation tools assists in determining borehole fluid versus formation effects.

Direct-push Conductivity Surveys (DP e-log)

Six electrical-conductivity DP e-logs were collected at the 260th site by the U.S. Army Corps of Engineers (Savannah) using a GeoProbe rig fitted with a Wenner-array tip. The DP e-log method provides an in situ measurement of the electrical properties of the underlying soil and sediment. Locations of the GeoProbe direct push points are indicated on Figure 2, and plots of the resulting DP e-logs are provided in Appendix B. DP e-log positions were located at predetermined sites on 2D-ERI profiles to test the model results and to aid in their interpretation (see Figure 2 for locations). Two of the DP e-logs (X2-1 and X3-1) were subsequently cased with 2 inch PVC to permit borehole geophysical logging with the EM induction and natural-gamma tools.

EM Induction and Natural-Gamma Borehole Surveys

Borehole geophysical measurements were performed in one well (AF-31/42) and three of the GeoProbe installed PVC casings at the 260th site using the natural-gamma (HLP-2375/S) probe and an EM induction (EMP-2493) tool. A Mount Sopris MGX data logger was used to manipulate the tools (see Appendix A for further discussion of these instruments). Two of the PVC cased holes surveyed using the EM induction and natural-gamma tools also had DP e-logs collected, which allows directly comparing the DP e-log with the EM induction data. Plots of the EM induction and natural-gamma logs are presented in Appendix B.

Results of Borehole Geophysics

A clay horizon, termed the Upper Clay Unit (UCU), was detected at an average depth of 8m by the borehole geophysical logs (Figures B.1 – B.4). The natural-gamma response for this unit lies within a consistent range of 100-115 counts per second (CPS), which makes it readily identifiable on the GeoProbe holes, X1-1, X2-1, and X3-1, where the average background is in the 60-70 CPS range (Figures B.1 – B.3 and Table B.2). Stronger background levels observed in Well AF-42 (80 CPS, Figure B.4) tend to mask the UCU. These stronger background levels are interpreted to arise from materials used in the construction of the well. None of the PVC cased holes/wells logged with the natural-gamma tool penetrated the Lower Clay Unit (LCU).

Five of the DP e-log and EM-induction surveys (X2-1, X2-2, X3-1, X3-2, and X4-1) indicate the presence of a high-conductivity, near-surface layer, that averages 2m in thickness. This zone directly correlates with the low-resistivity (high-conductivity) near-surface layer imaged on the 2D-ERI profiles. Direct push points X1-1 and X1-2 do not show this near-surface, high-conductivity layer and it is absent on the corresponding parts of the 2D-ERI models for profiles 1 and 2.

EM induction logs collected using the EMP-2493 downhole tool in PVC cased holes X2-1 and X3-1 compare favorably with DP e-logs recorded for those points. In general, the DP e-logs provide higher resolution than the induced method, which allows detecting thinner conductive zones. The induced response mimics that of the DP e-logs; however, the response is smoothed across finer layers and the range of values as a whole are significantly dampened.

The UCU is identified as a 1.3-to-2.5m thick zone ranging from 75-to-100 milli-siemens per meter (mS/m) in conductivity (Figures B.1 – B.4, and Table B.2). This horizon is consistent in

depth and thickness for the 100-115 CPS natural-gamma zone identified as the UCU. The DP e-logs tend to better define the top and bottom of this horizon, whereas the EM induction logs, due primarily to the length of the EM induction tool, tend to smear the upper and lower contacts. The effect is that the induction log appears as a filtered or averaged reduction of the DP e-log data.

In some cases (X1-2 on Figure B.1) the UCU starkly contrasts with the surrounding sediment where the background conductivities range from 20-to-30 mS/m. In other cases, notably push points X2-2 and X3-1 and X3-2, the UCU defines the top of a sequence of clay horizons (or stringers). Push point X3-1 for example indicates an approximately 4m thick clay zone underlying the UCU (elevation of –9 m), whereas on X2-2 and X3-2 this intermediate zone is approximately 2m thick and occurs at a higher elevation (-6 m).

Taken as a whole, the borehole electrical data suggest a 7 to 9m depth range for the top of the UCU. Except for the near-surface, high-conductivity zone, the electrical properties for the interval above the UCU appear to reflect sand and silt sediments. Minor clay stringers are interpreted to be present due to thin 1m-thick zones of moderately higher conductivity (50-to-70 mS/m). Clay horizons are more prevalent beneath the UCU as evidenced by an increase in the number of electrically conductive zones.

Only the DP e-logs penetrated into the LCU (except X3-1), which occurs as an electrically conductive unit at depths of 13 to 22 m below ground level (elevations of –12.5 to –16.5m, mean sea level, Table B.3). Thickness of the LCU ranges from 1.6m (X2-1) to almost 4m (X3-2), and the LCU exhibits a consistent range of 130-145 mS/m in conductivity. This distinguishes it from the UCU and other overlying clay zones, each of which tends to be lower in conductivity (80-100 mS/m). Thus the 4m thick electrically conductive zone (~100 mS/m) observed on X3-1 at an elevation of approximately –9m (Figure B.3) cannot be interpreted as part of the LCU.

Structure and isopach maps of the UCU were constructed from the DP e-log data and are shown in Figures 7 and 8, and a structure map of the top-of-the LCU is shown in Figure 9. These maps serve to provide boundary information for the potential migration direction and pooling locations for subsurface contaminant. The top-of-the UCU (Figure 7) shows a consistent slope towards the southeast from an elevation of approximately -2m at probe points X1-1 and X1-2 to about -3.5m in elevation at location X3-1. The isopach map (Figure 8) indicates that the UCU is thinnest under location X3-1.

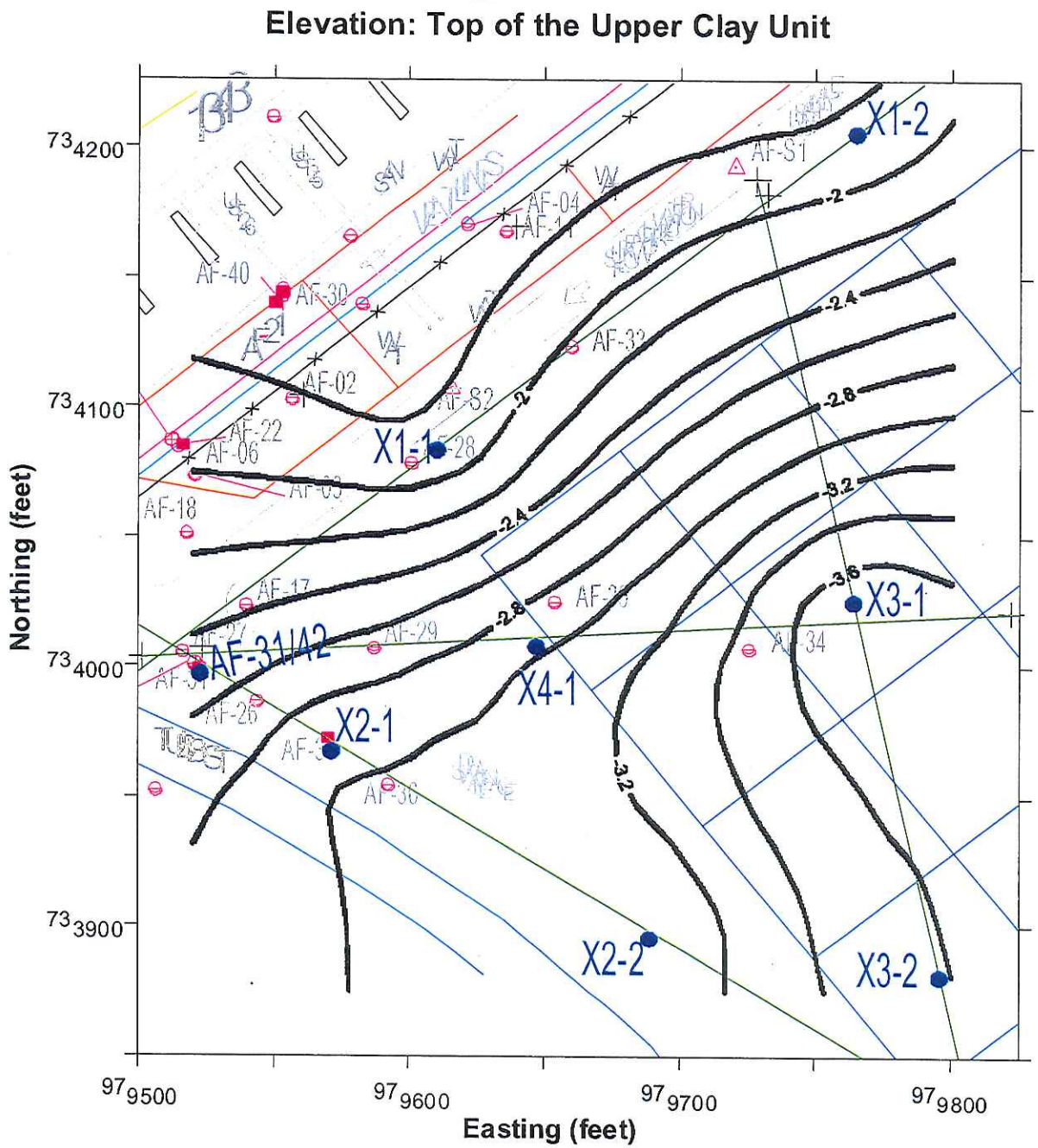

Figure 7. Structure Map of the Top of the Upper Clay Unit.
Elevation in meters relative to sea-level.

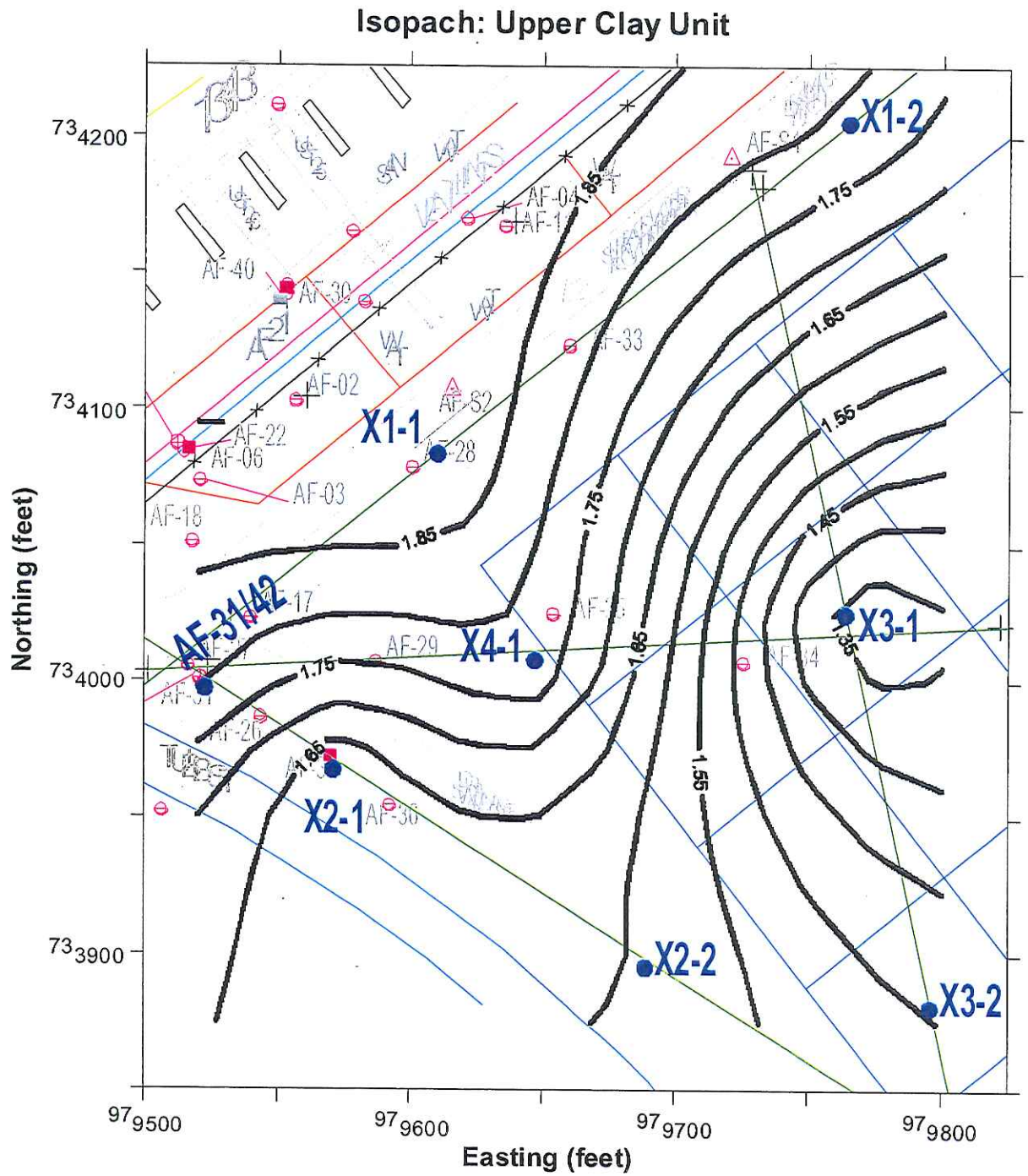

Figure 8. Isopach Map (meters) of the Upper Clay Unit

Figure 9 is a map showing the elevation of the top-of-the LCU and the contours are in meters relative to mean sea level. A topographic low for the top-of-the LCU is present beneath the X3-1 and X3-2 push probe locations. Probe point X3-2 encountered the LCU at an elevation of -16.5m, and an elevation of -17.5m is inferred for X3-1. The X3-1 push probe location did not encounter the LCU, which extended to –17.5m in elevation.

The structure maps (Figures 7 and 9) indicate that DNAPL migration would likely occur in a southwest direction towards the X3-1 location.

Electromagnetic Terrain Conductivity and Metal Detection Mapping

EM terrain conductivity mapping measures lateral variations in electrical-conductivity in the upper 2-to-4 m of the subsurface. Disposal and burial activities usually perturb the natural electrical conditions, which allows mapping trench and pit features. EM metal detection supplements the terrain conductivity data by determining whether metallic debris is buried under a particular site. The Geonics EM-31 and EM-61 instruments were used to collect the terrain-conductivity and metal-detection data, respectively. A more thorough description of the use of these instruments is provided in Appendix A.

Data were collected along NE-SW oriented transects spaced at 5 m intervals in the grid area shown in Figure 2. The primary purpose for these surveys was to determine whether unrecorded burial or disposal activities had occurred in the wooded area southeast of the motor pool. The impetus for these surveys was the discovery of areas with surface debris (pots, bottles, corrugated steel siding, etc), a partially exposed 55 gallon drum (no markings), and a 5 gallon drum (fuel/de-icing compound) during the initial phase of geophysical surveying. The resulting survey grid was constructed to encompass these features.

Figures 10 and 11 show the results for the EM-31 terrain-conductivity and EM-61 metal detection surveys. Each data set is presented as a color-contoured anomaly map with roads and cultural features overlain. The gridded data have been rotated and scaled into the Georgia State Plane (U.S. Survey Feet) coordinate system and locations of anomalies of interest are given in these coordinates.

A northeast-southwest trending zone of high-conductivity (>58 mS/m) dominates Figure 10. This zone is interpreted to be a natural feature due to its size and shape. Zones of low-conductivity (<30 mS/m) are present along the southeast and northwest edges of the survey area.

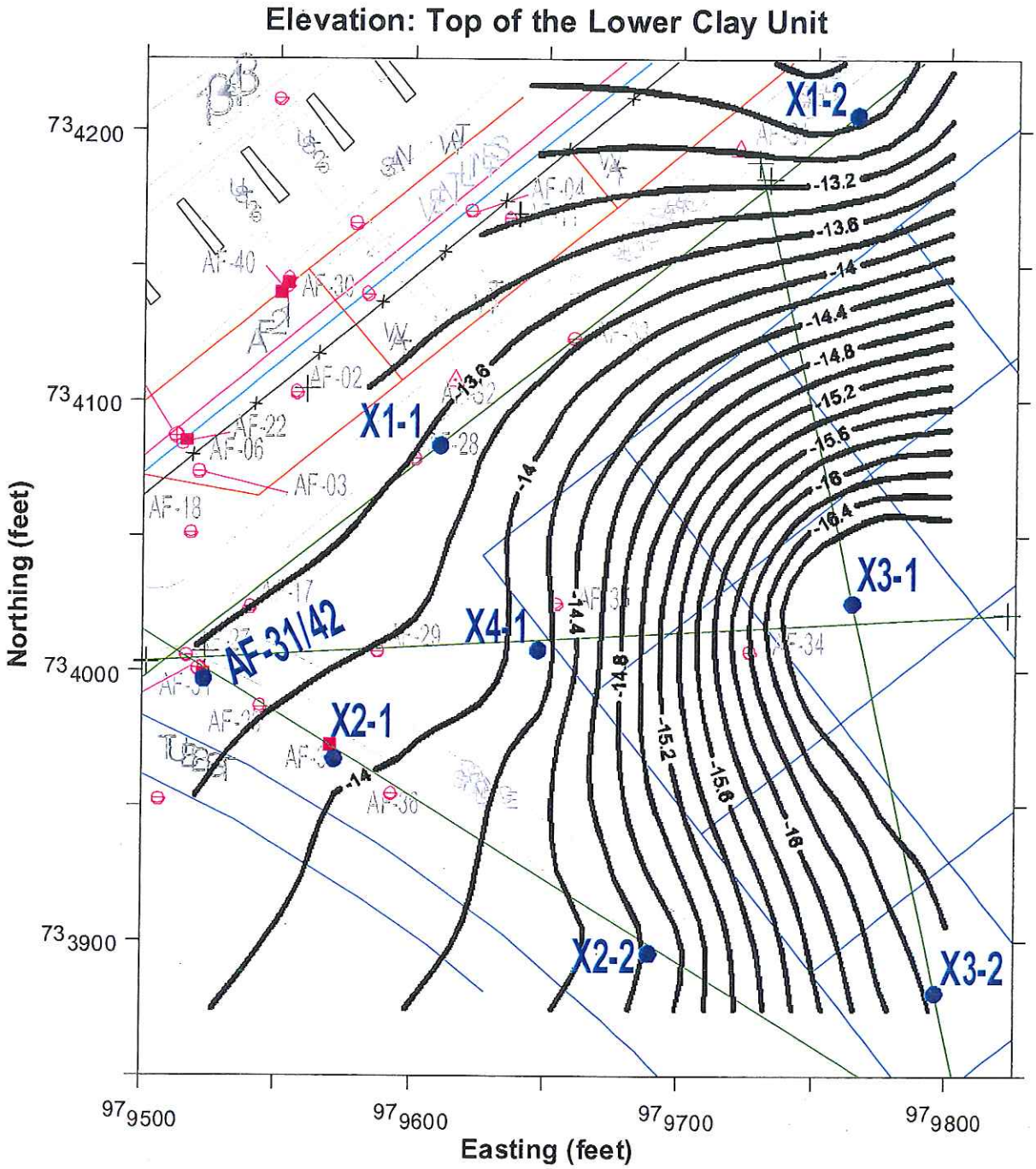

Figure 9. Structure Map of the Top of the Lower Clay Unit. Elevation is in meters relative to mean sea-level. The elevation of the LCU under boring X3-1 is estimated, and could be lower than shown.

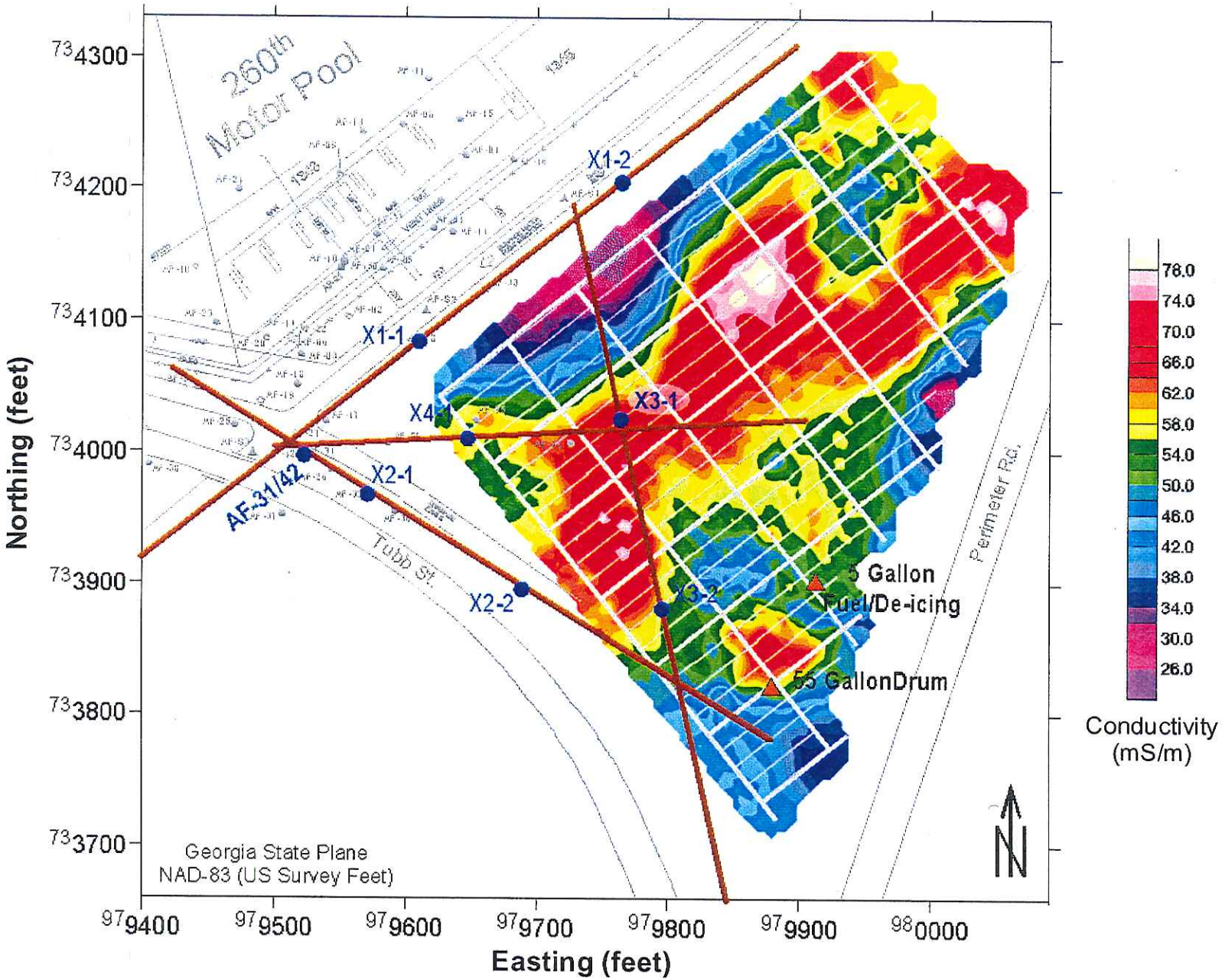

Figure 10. EM-31 Terrain Conductivity Anomaly Map

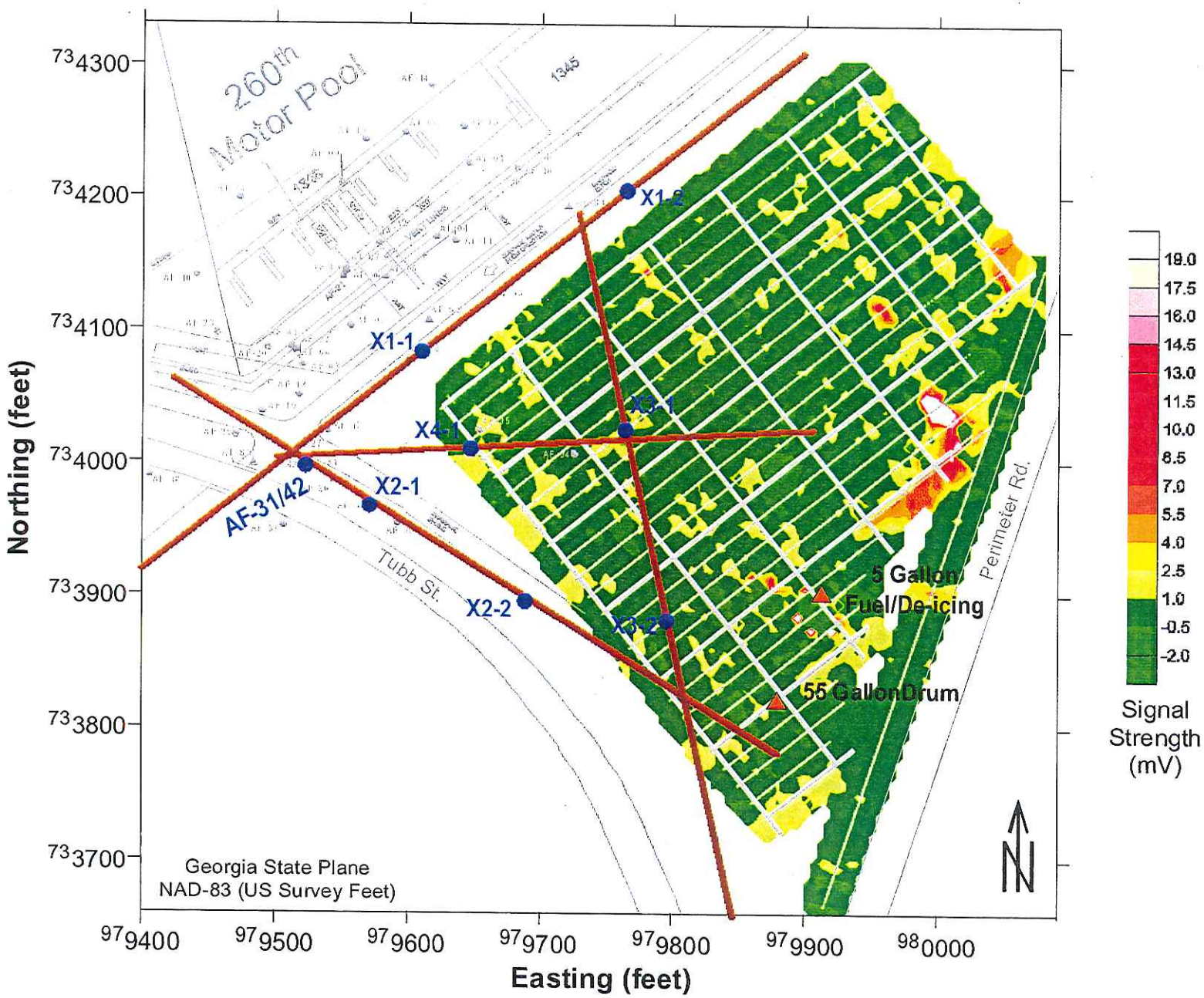

Figure 11. EM-61 Coil Difference Anomaly Map

The construction material used for the road most likely causes the southeastern low-conductivity zones. Excavation of the drainage ditch northwest of the grid may be the cause for the low-conductivity zones observed along the edge of the drainage ditch.

Other features observed on Figure 10 consist of a 20x12 m zone of high-conductivity located immediately north of where the 55 gallon drum was discovered, and an E-W elongated low-conductivity zone located approximately 10-12 m west of where the 5 gallon drum was found. The high-conductivity zone is tentatively interpreted as a natural feature due to its similarity to the NE-SW trending high that dominates the figure. The low-conductivity zone, however, may be related to the presence of a drainage ditch that cuts west-to-east through the grid at this location.

The metal detection results presented in Figure 11 do not indicate the presence of any pervasive burial activity southeast of the 260th Motor Pool. Minor amounts of buried debris are likely present along the SE edge of the grid (980000X, 734050Y) and are interpreted to be associated with where surface debris was dumped. The proximity to the existing road has perhaps allowed some uncontrolled dumping to occur. Two other zones that likely contain shallowly buried metal are present NW (979950X, 734125Y) and NNE (980025X, 734150Y) of this feature. Depth analyses performed on the above anomalies indicate a maximum burial depth of slightly less than 1 meter.

Buried debris is likely present immediately west of where the 5-gallon drum (fuel/de-icing compound) was discovered. This debris is just north of where the conductivity-low is observed (Figure 10), and may be related to minor amounts of dumping/burial. A drainage ditch cuts through the wooded area in this vicinity.

Discussion

The 2D-ERI data have mapped an electrically resistive layer that ranges from 7 to 15m in thickness. The electrically resistive zone is believed to correlate with sands and silts of Pliocene to Holocene in age, and represent a potential contaminant storage and or migration zone. Overlying this layer is a thin, near-surface, low-resistivity (conductive) layer that may be the source for the high-anomalies observed on the EM anomaly map (Figure 10), and underlying the resistive layer are zones of lower-resistivity interpreted as clayey intervals. The overall layer-cake interpretation is consistent with the local geology described for the HAAF region.

The base of the high-resistivity zone coincides with the Upper Clay Unit (UCU) where the resistive layer is thinner. This condition occurs along the southern half of Profile 2, all of Profile 3 and the western half of Profile 4. The top of the Lower Clay Unit (LCU) has probably been mapped where the high-resistivity layer is thickest, which occurs along Profile 1, and the northern and western ends of Profiles 2 and 4. In these cases, the UCU was not imaged by the resistivity data.

Comparison of 2D-ERI and Borehole Geophysical Data

Even though the 2D-ERI data indicate simple model of an electrically resistive layer overlying a more conductive zone (sands and silts overlying clayey intervals), consideration must still be given to the actual detail afforded by this type of data. To do this, comparisons of the 2D-ERI models (resistivity models) and the borehole geophysical logging results are given in Figures 12 through 15. In general, the 2D-ERI data provide gross geo-electrical structure though individual clay units are not fully resolved. The 2D-ERI data, at best, allow determining the approximate top for these clayey zones.

Figure 12 shows the results along Profile 1. The UCU does not appear to have been imaged by the 2D-ERI data as evidenced by the results for the X1-1 and X1-2 borings. At X1-1, a 2m thick layer is indicated for the UCU with a resistivity of 13-14 ohm-m (75 mS/m), yet the resistivity model only indicates the presence of higher-resistivities in the 35-50 ohm-m range. This range does, however, correspond to base line values for X1-1 (30-40 ohm-m or 25-33 mS/m) indicated on the EM induction log (magenta line).

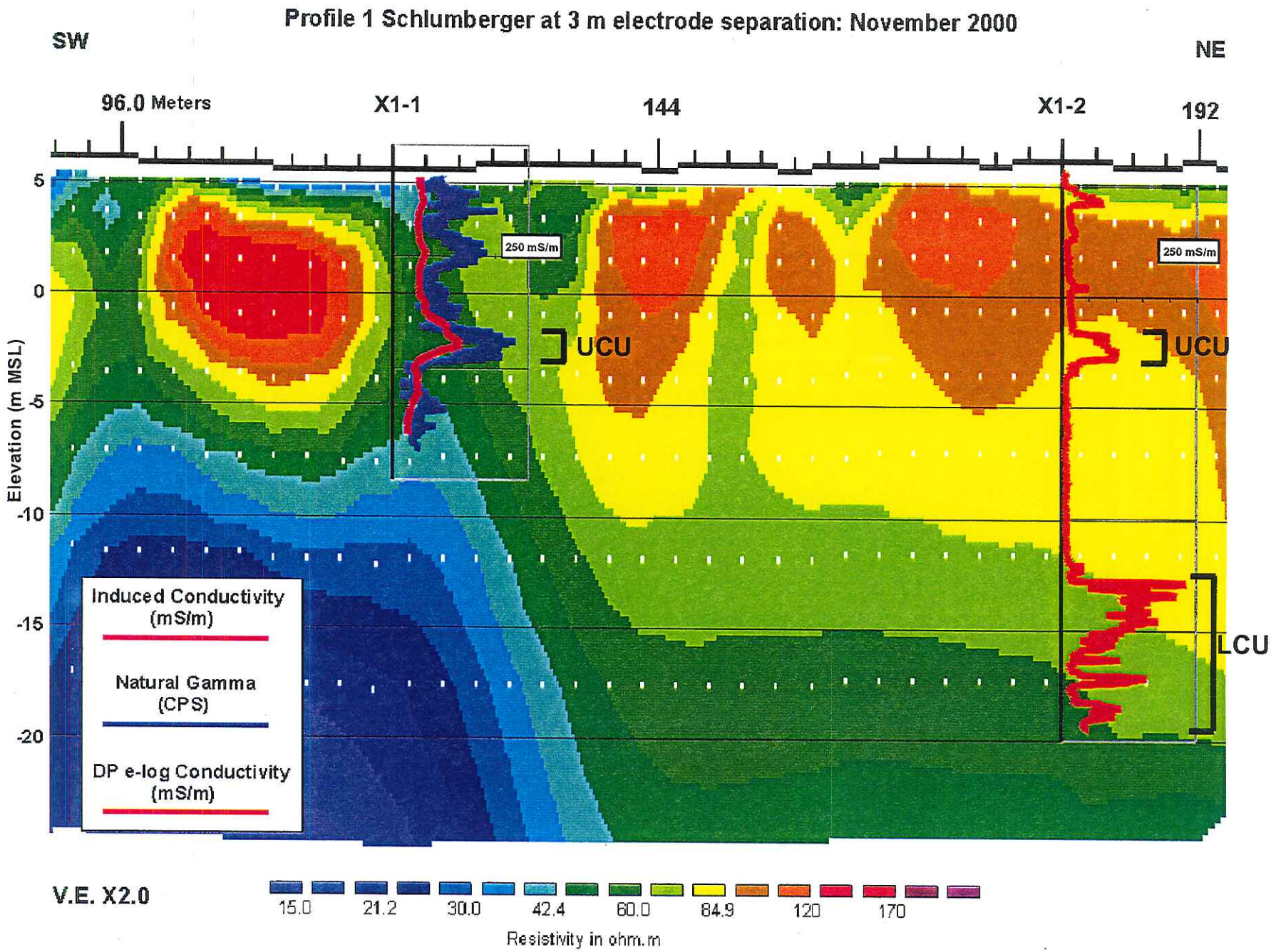

Figure 12. Comparison of Downhole and 2D-ERI results for Profile 1.

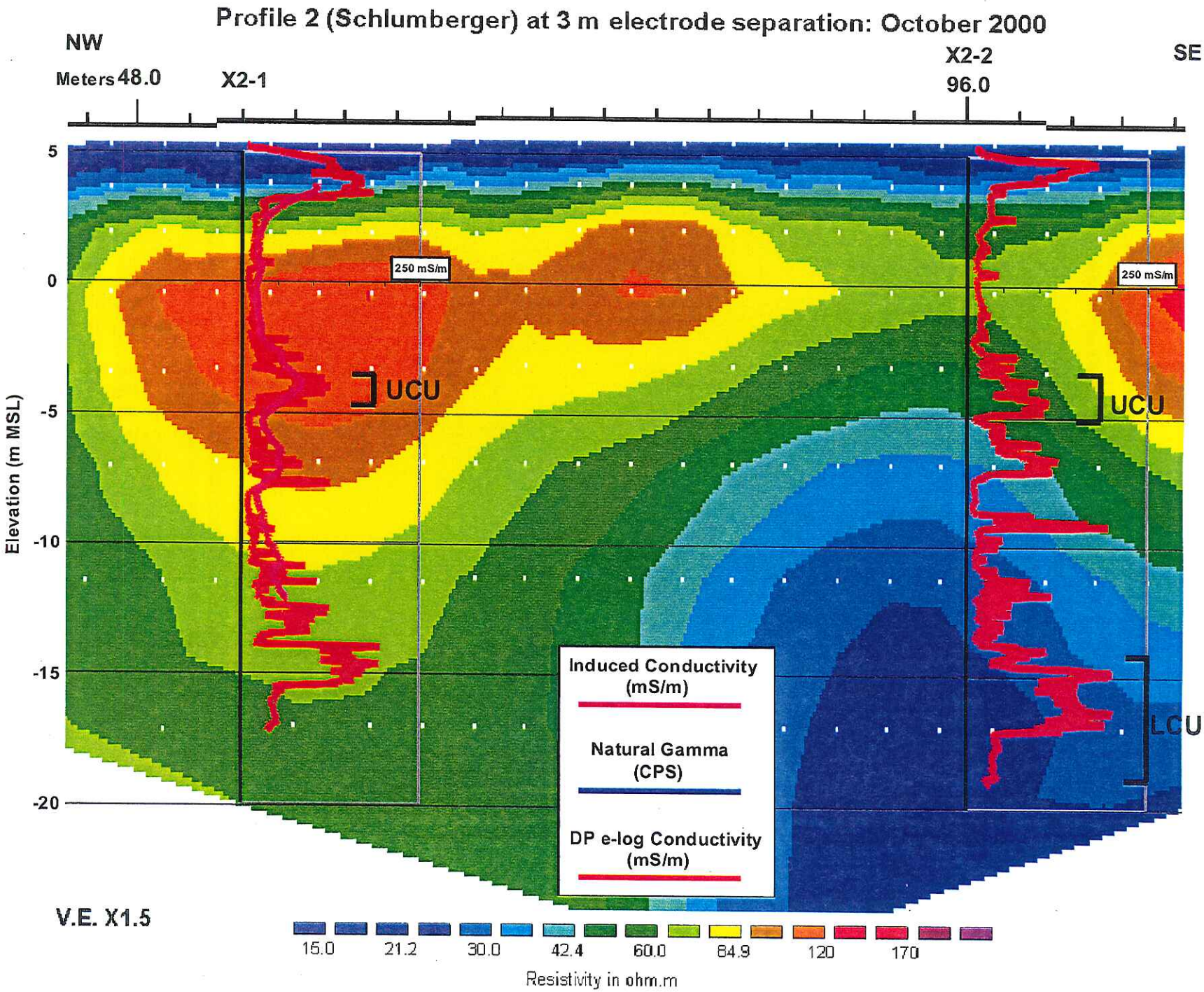

Figure 13. Comparison of Downhole and 2D-ERI results for Profile 2.

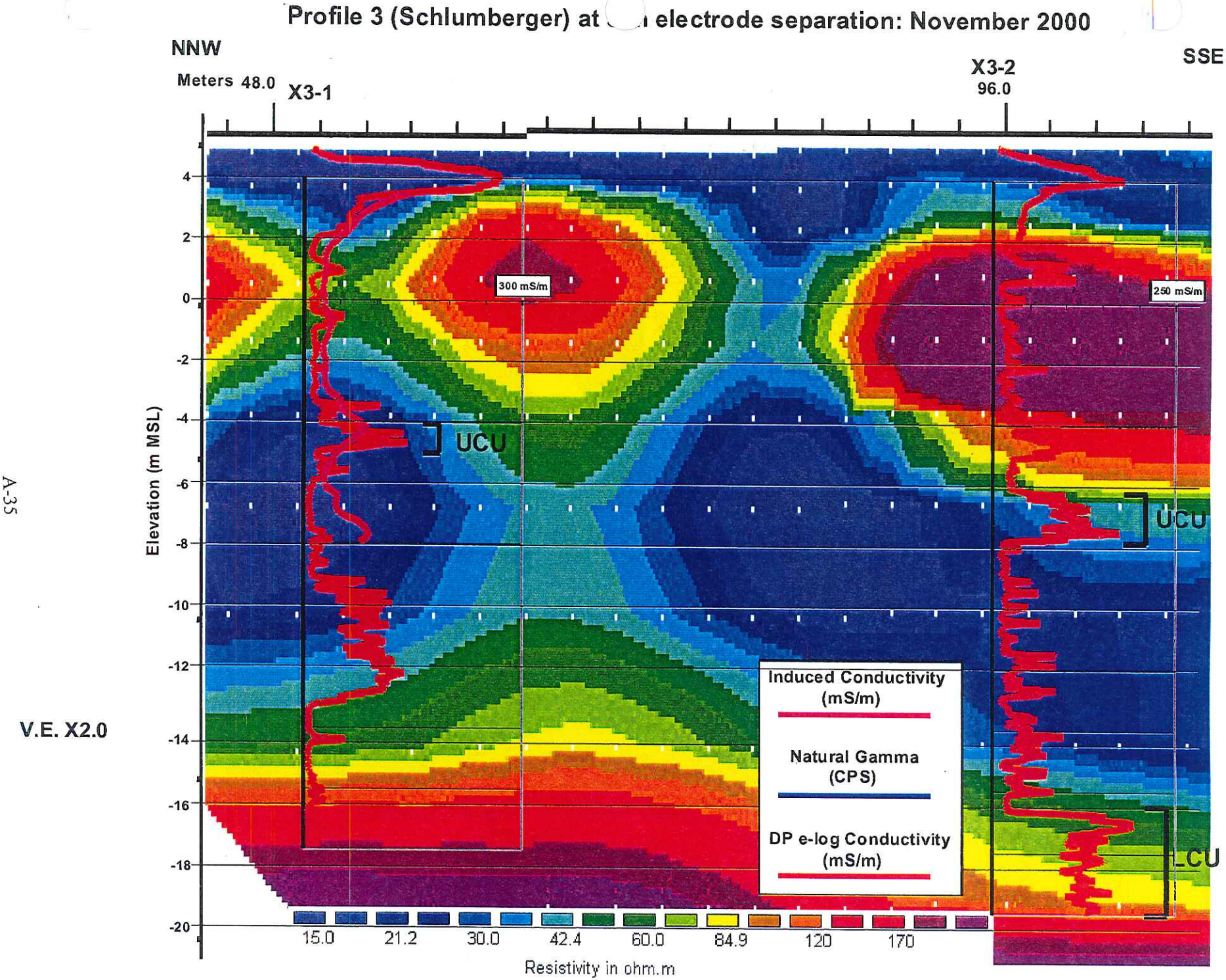

Figure 14. Comparison of Downhole and 2D-ERI results for Profile 3.

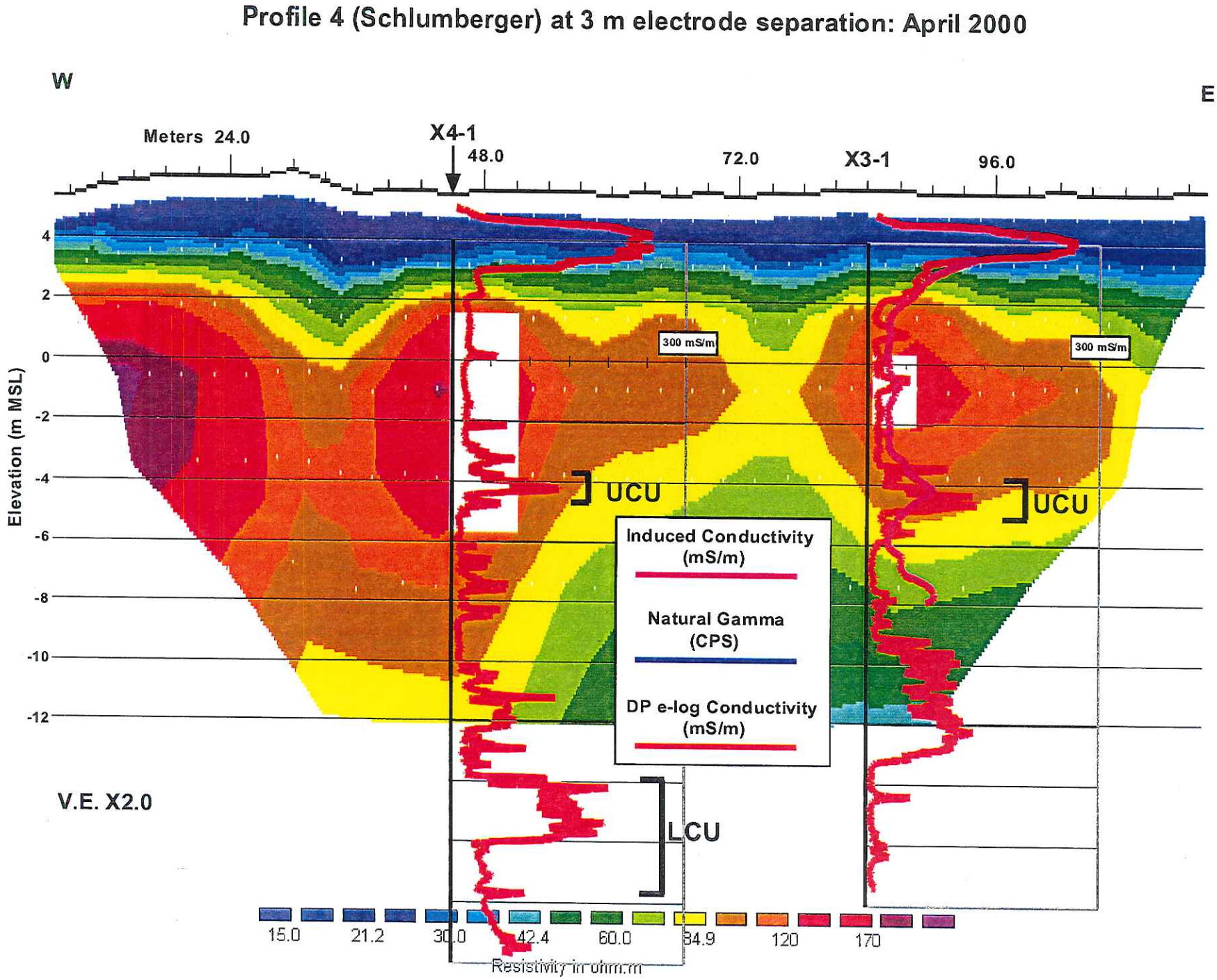

Figure 15. Comparison of Downhole and 2D-ERI results for Profile 5.

At boring location X1-2, the top of the UCU coincides with a subtle change from approximately 100 ohm-m (brown color) to about 85 ohm-m (yellow color) and not the true observed change of 100 to 10 ohm-m (10 mS/m to 100 mS/m on Figure B.1). The top of the LCU at Boring X1-2 also coincides with a subtle decrease in resistivity, from 85 ohm-m (yellow) to 65 ohm-m (green) on the 2D-resistivity model. The measured decrease (DP e-log) indicates a true change from 100 to approximately 15 ohm-m for this interval.

A similar interpretation can be made at location X2-1 on Profile 2 (Figure 13). In this case, however, the UCU does not appear to be imaged at all as a resistive zone has been modeled at its appropriate depth. Based on the DP e-log results, the top of the UCU occurs in the transition from high to low resistivity. The UCU is thinner here (<1.5m) and below the vertical resolution of the 2d-ERI model. Also, the DP e-log indicates fewer clay intervals in the –25 - -10m elevation range than observed at location X2-2.

A better correlation between the 2D-ERI model and the borehole geophysical data is observed at location X2-2 on Figure 13. Here, both the 2D-ERI model and DP e-log data indicate a near-surface, low-resistivity zone (<10 ohm-m, >100 mS/m). This near-surface agreement also occurs at position X2-1. Underlying the low-resistivity zone is an approximately 8m thick zone of increased resistivity, which corresponds to the decrease in electrical conductivity observed on the DP e-log. The 2D-ERI model indicates a thick, low-resistivity zone towards the base of the model at X2-2. The DP e-log, on the other hand, indicates a series of clay horizons and not one thick zone. This discrepancy highlights limits in the vertical resolution of the 2D-ERI method at greater depths.

The 2D-ERI model for Profile 3 and the X3-1 and X3-2 borehole geophysical logs are shown in Figure 14. Both the DP e-logs and the 2D-ERI model indicate a near-surface, low-resistivity (< 10 ohm-m) layer of approximately 2m in thickness. The DP e-log data indicate an approximately 7m thick zone of higher resistivity (50-90 ohm-m) underlying the near-surface layer. The corresponding parts of the 2D-ERI models also show a 7-8m thick zone of higher resistivity, though the value is greatly over-estimated at the X3-2 location. The over estimation is most likely due to the extremely dry soil conditions.

The top of the UCU has been approximated by the 2D-ERI model for Profile 3 (Figure 14) as a change to low-resistivities at depth (position of the UCU on the DP e-log). Below this elevation

the correlation between the 2D-ERI and DP e-log data falls apart. For the X3-1 location, the low-resistivities exhibited by the 2D-ERI model could be caused by the UCU and intermediate clay zone (-4 to –14 m elevation range). However, at X3-2, the 2D-ERI model and DP e-log appear to be of opposite sense. Here the resistivity model indicates low-resistivities where the DP e-log indicates higher resistivities, and vice versa for the LCU.

Figure 15 shows the comparison between the 2D-ERI model for Profile 4 and the logging results for borings X4-1 and X3-1. A near-surface, low-resistivity zone of approximately 2m in thickness is indicated by both the X4-1 and X3-1 surveys, and the 2D-ERI model. Underlying this near-surface zone is a layer of higher-resistivity. Note that for the X4-1 location, the resistivity layer is modeled by the 2D-ERI data to extend to at least -10m in elevation, and does not resolve the numerous clay strings or the UCU. The LCU is below the maximum depth imaged by the 2D-ERI model, though the resistivity model does hint at decreasing resistivities at depth. The 7m thick, high-resistivity zone located at position X3-1 on Figure 15 corresponds to an intermediate, electrically-resistive zone between the near-surface and UCU on the DP e-log.

Conclusions

Both the DP e-log and borehole geophysical technologies have demonstrated that they are suitable for mapping key geologic units at the 260th Motor Pool site. A clay horizon, termed the Upper Clay Unit (UCU) was observed on all 8 of the borings/wells logged by the geophysical methods, and a clay zone termed the Lower Clay Unit (LCU) was observed on 5 of the borings.

This UCU appeared at a consistent depth and had a unique geophysical response, such that it is interpreted to be laterally continuous beneath the field site. In particular, depth and thickness of the UCU are readily discernable on the borehole geophysical logs, and these data were integrated to produce structure and isopach maps. A general thinning and decrease in elevation towards the southeast is observed for the UCU.

The LCU occurs at depths of 18 to 22 m below ground surface and its upper surface shows a general decrease in elevation towards the southeast. The LCU was more electrically conductive than the UCU and other shallow clay horizons, which allows using it as a basal marker horizon.

The lateral continuity of the UCU and LCU indicate that they can act as a barrier to the migration of DNAPL. If the DNAPL pools on top of either unit, then the likely migration direction will be to the southeast towards probe point X3-1.

The 2D-ERI data have mapped an electrically resistive layer that ranges from 7 to 15m in thickness. This electrically resistive zone is believed to correlate with sands and silts of Pliocene to Holocene in age, and represent a potential contaminant storage and/or migration zone. The base of the high-resistivity zone coincides with the UCU where the resistive layer is thinnest and with the top of the LCU where the high-resistivity layer is thickest. The overall layer-cake interpretation for resistivity data is consistent with the regional geology for HAAF.

Electromagnetic terrain-conductivity and metal-detection surveys do not indicate the presence of an undocumented disposal or burial site in the wooded area SE of the 260th Motor Pool. The 2D-ERI data collected along Profiles 1, 3, and 4 also do not show any features consistent with burial or disposal activity. The surface debris present is probably due to isolated dumping incidents and does not represent a systematic disposal. Buried debris will likely be found at two small regions that are indicated by high-anomaly response on Figure 11. Maximum depth of burial is probably less than 1 m.

Recommendations

Based upon the success of the subsurface geophysical technologies, it is recommended that any further characterization of geology within the 260th Motor Pool site include DP E-log and well-log geophysical surveys where feasible. To constrain and map the UCU with geophysical well-logging techniques, wells that extend to at least 12m in depth (-6m MSL) are required. Furthermore, metal casing precludes the use of the induction method, which severely limits the capability of a well-log geophysical program. For this reason, viable wells will have to be cased with PVC.

Geophysical survey results at the 260th site indicate that the 2D-ERI method might be suitable for mapping the UCU if a tighter electrode spacing (<3m) is used. The 2D-ERI method may also be suitable for mapping the LCU if gross structural features are desired (e.g. approximate depth and lateral-continuity). Modeling results when combined with limited GeoProbe DP e-logging points provides a sufficient level of confidence in the interpretation of the 2D-ERI data.

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APPENDIX A: Geophysical Instrumentation

Overview

Geophysical investigations conducted at the 260th Motor Pool at HAAF were designed to detect whether uncontrolled burial/disposal activities had occurred, and to map the continuity and structure of the underlying geology. Instrumentation used to collect geophysical data at HAAF consisted of the following:

- Geonics EM-31 electromagnetic conductivity meter
- Geonics EM-61 electromagnetic induction meter
- Sting/Swift 2D-Electrical Resistivity Profiling System
- GeoProbe Direct Push Resistivity/Conductivity Meter
- MGX Downhole Induction and Natural-Gamma Logging System
- Trimble Pro XRS Global Positioning Instrument

Electromagnetic Terrain-Conductivity Surveying

Electromagnetic-induction instruments (EM-31 and EM-34) are used to measure the electrical conductivity of the near-surface, and can also be used to locate buried metallic objects. A transmitter coil is used to induce an electrical current into the ground, and the receiver coil measures the strength of the secondary magnetic field generated by these currents. Two components of the secondary magnetic field are recorded: 1) the quadrature-phase component which is used to measure the ground conductivity, and 2) the inphase component which is used for metallic detection due to its extreme sensitivity to large metallic objects (Geonics Ltd., 1991). The electrical conductivity of the ground is nearly linearly proportional to strength of the quadrature-phase component and is given in units of milli-siemens per meter (mS/m). The inphase measurement is the ratio between the secondary magnetic field to the primary field, and is expressed in parts per thousands (ppt).

The coils can be oriented in either a vertical dipole or horizontal dipole configuration. For the vertical dipole case, the axes of the coils are oriented perpendicular to the ground surface, and for the horizontal dipole, the axes are parallel to the ground surface. For both cases, the coils are maintained in a coplanar state. The vertical dipole orientation is generally preferred over the

horizontal dipole because it provides for a greater investigative depth and is less sensitive to near surface variations.

The separation between the transmitter and receiver coils is the primary component that determines the depth of penetration. Table A-1 lists the depth of investigation for different coil orientations and separations for the Geonics EM-31 and EM-34 meters. The "Maximum Depth" is roughly the depth at which 90% of the instrument response has occurred (0.75x horizontal coil spacing; 1.5x vertical coil spacing). The "Effective Depth" is the depth range where the instrument's overall response is the greatest. Thus, layers within the "Effective Depth" range contribute most to the measured conductivity.

Conductivity values obtained in EM surveying represent weighted mean values of all the layer conductivities from the ground surface to the maximum depth that is sensed by the EM instrument (McNeill, 1980). If the underlying rock or sediment is uniform, the measured conductivity value will be the true conductivity. The amount of contribution to the measured conductivity from a single layer depends on its conductivity, depth, and thickness. Deeper layers contribute less to the final value than do near-surface layers.

Table A- 1. Effective penetration depth of the EM-31 and EM-34 Instruments

Instrument	Coil Orientation	Maximum Depth	Effective Depth
EM-31 (3.3 m)	Horizontal Dipole	2.5 m	0-2 m
	Vertical Dipole	5.5 m	0.5-2.5 m
EM-34 (20 m)	Horizontal Dipole	15 m	0-13 m
	Vertical Dipole	30 m	3-16 m
EM-34 (40 m)	Horizontal Dipole	30 m	0-26 m
	Vertical Dipole	60 m	6-32 m

Geonics EM-31

The EM-31 transmitter and receiver coils are housed in a 3.5m long sensor boom, and a single person can operate the instrument. A nominal depth of investigation of 5.5m is realized when measurements are made using the vertical-dipole mode. Measurements are collected at ½ second intervals, and the quadrature and inphase components are collected simultaneously. This allows discrimination between anomalies sourced by buried metallic objects from those that are either lithologically or hydrologically controlled. Additional information consisting of the profile position, starting, and ending points, as well as fiducial mark locations along the profile, were

recorded with an OMNI 720 data logger (Polycorder). This information is then downloaded to a personal computer for processing and display.

Geonics EM-61 Metal Detector

The Geonics EM-61 is a portable electromagnetic induction instrument that measures the secondary magnetic field generated from buried metallic debris. The EM-61 uses a stacked, dual-coil configuration in order to allow discriminating between buried and surface-borne metallic debris. The EM-61 is capable of detecting buried metallic items to a depth of 3.3 m (10 ft). Data are recorded on three channels, which include an upper-coil response, lower-coil response, and coil-difference. The strength of the resulting secondary magnetic field is measured in millivolts (mV). These data, along with the survey geometry, are recorded on an OMNI 720 data logger, and are later downloaded to an IBM compatible personal computer for processing and display.

The dual coil configuration used by the EM-61 allows for discriminating between metallic objects that are more deeply buried than from those that are either at the surface, or are buried at a shallow depth (less than half-foot). Metal objects at or near the ground surface will produce approximately the same response from the upper- and lower-coils, whereas buried targets will produce a stronger response from the upper coil than from the lower coil, with the difference in response increasing with depth. Subtracting the lower coil response from the upper coil response produces a data set that effectively suppresses the anomaly signature from metallic debris at the ground surface, while simultaneously enhancing the signature for more deeply buried targets. In practice, maintaining meticulous field notes marking the locations of surface debris encountered during the survey augments discrimination of surface objects.

A depth estimate for individual targets can be determined from the ratio between the upper- and lower-coil values at the peak of the corresponding anomaly (see Pawlowski et al., 1995). Software developed by Geonics Ltd. for the EM-61 metal detector automates this process by providing a graphical display of the profile data, and a real-time calculation of the depth. The algorithm used by the Geonics software is accurate for small, ball-shaped objects that are buried at a shallow depth, but will over-estimate the target depth for larger and/or more deeply buried targets. Clusters of small, shallow-buried objects will produce a secondary magnetic field that appears to be sourced from a larger and more deeply buried object (Geonics Ltd., 1994).

2-D Electrical Resistivity Imaging

Two-dimensional electrical resistivity imaging (2D-ERI) is conducted using an Advanced Geosciences, Inc. (AGI) Sting/Swift™ automatic multi-electrode system and earth resistivity meter. Earth resistivity measurements are accomplished by passing an electric current between two electrodes and measuring the potential difference (voltage) between two separate electrodes. The measured voltage is a factor of the resistance of the earth material and the geometry of the electrode array. Resistivity, an intrinsic property of the earth, is then calculated using the measured voltage, the electric current strength, and a geometric factor for the electrode array. The calculated resistivity value is actually an "apparent-resistivity" because it includes the resistances of all the material that the electrical current passes through. A modeling procedure is then used to convert the measured apparent-resistivity data into earth-layer resistivity sections.

The electrodes used to measure the voltage difference are arranged in various geometries called arrays, and the calculated apparent-resistivity value is interpreted to represent a depth point at the center of an individual array. Depth of measurement is related to width of electrode separation, with greater electrode separation resulting in greater depths of penetration. Classically, two different techniques are used to determine the electrical resistivity of earth materials. In vertical electrical sounding (VES), electrodes are expanded about the center of an array to generate a layered electrical section at a single point (vertical profile). The horizontal profiling technique uses an array with a fixed electrode separation, which is marched along a line to image lateral variations at a constant depth.

The 2-D ERI method combines VES and lateral profiling in a single survey without the time-consuming process of constantly moving electrodes and reconnecting cables. In 2D-ERI a single cable connects a linear array of electrodes (28 to 56 in this study), which are turned on and off using a preprogrammed sequence via a controller box. The raw apparent-resistivity data are typically displayed as a pseudosection where the lateral position of the measurement point is placed at the center of the corresponding electrode array, and the depth of the measurement increases with increasing electrode spacing. Apparent-resistivity pseudosections are useful for performing quality-control checks and for examining whether cultural objects have impacted the data set.

Apparent-resistivity pseudosections are converted, through a process termed inversion, into an electrical-resistivity cross-section showing true earth-layer resistivities. RES2DINV, a commercially available program, was used to perform the two-dimensional inversion modeling (Loke, 1998). During the inversion, the subsurface is divided into a number of blocks equal to or less than the number of measurement points. A smoothness-constrained, least-squares inversion routine is used to estimate the resistivity value of each block, and finite-element or finite-difference forward modeling algorithm is used to calculate the resulting pseudosection. The model is iteratively corrected until an apparent-resistivity pseudosection calculated from the model converges with the measured apparent-resistivity pseudosection. A root-mean-square (RMS) error calculation of the difference between the two apparent-resistivity pseudosections is used as a measure of the degree of fit for the model. Maximum convergence often occurs within 3 to 5 iterations, after which RMS values do not change significantly and the model may start to become unstable (Loke, 1998). The model conversion threshold (change between iterations) is normally set to 5% to avoid producing unrealistic model results (due to instability).

In some cases the apparent-resistivity data were manually edited to remove "bad" data points prior to inversion. These "bad" points are usually due to electrode grounding problems and to the presence of cultural interference (underground utilities). Other steps taken to improve the model quality are to incorporate topographic information and to verify a good coupling between the electrode and ground. Contact resistance checks are used prior to measurement to check for poor electrode-ground coupling, and those electrode positions with a coupling resistance greater than 1 kilo-ohm are soaked with a salt-water solution to enhance electrode/earth coupling.

Figure A-1 shows an output example from the RES2DINV program. The upper panel contains the measured apparent resistivity data, the middle panel is the computed (modeled) apparent-resistivity data, and the lower panel is the resulting resistivity cross-section. It must be understood that the models are constructed of distinct blocks and the method used to display this information smoothes over these blocks using a color-contouring scheme. Because the vertical and horizontal resolution is tied to the dimensions of each block, depth and thickness for individual anomalies will not be accurate. In general, both the vertical and lateral resolutions of the models decrease with depth.

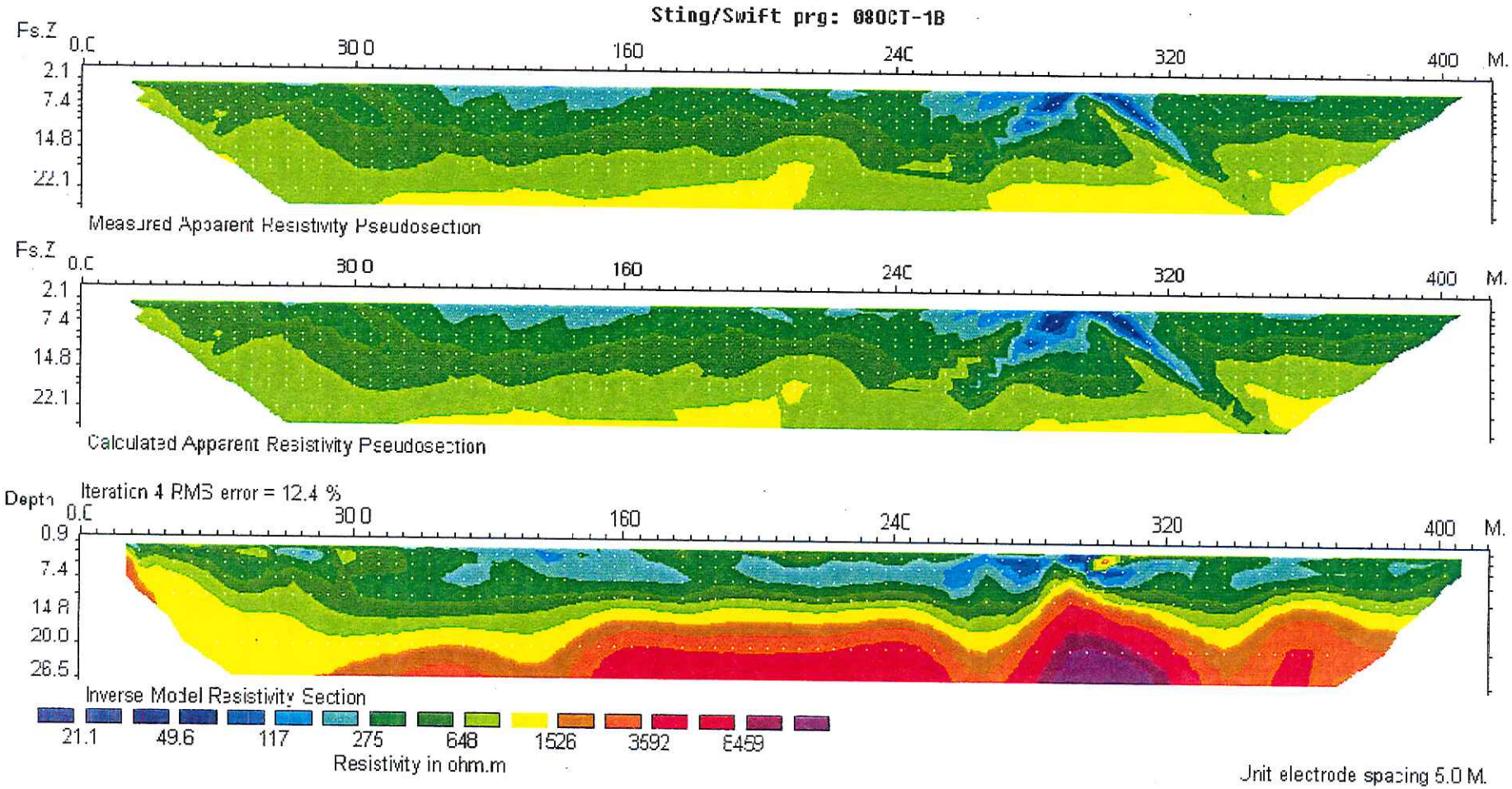

Figure A.1. Example output from RES2DINV program.

Direct-push Electrical Logging (DP e-log)

Direct-push electrical logging (DP e-log) is a modification of conventional borehole resistivity logging techniques in that no pre-existing borehole or well is required. The direct-push probe is attached to the leading end of the tool string and advanced into the subsurface using the percussion hammer and hydraulic slides on the direct push vehicle. A track mounted Geoprobe 66DT probing system was used to direct push the e-logging probe at the FBTS at YPG.

The Geoprobe Model SC400 probe was used for this project, which consists of a four-electrode Wenner array and measures 15 inches long by 1.5 inches in diameter. Measurements are made by applying an electric current to the outer two electrodes and recording the voltage difference between the inner two electrodes (Christy et al., 1994). The measurement is transmitted via a pre-strung coaxial cable to signal processing hardware at the surface where a real-time log (measurement at 0.05 ft intervals) is displayed on a laptop computer. A string pot mounted on the mast of the DP unit tracks the depth and speed of advancement of the probe.

Global Positioning System (GPS)

The Trimble Pro XR/XRS global positioning system was used to determine the State Plane coordinates for geophysical survey grid, fence corners, well locations, and other surface features at 260th Motor Pool. The Trimble Pro XR/XRS uses the RACAL satellite subscription service to provide real-time differential correction during data collection. Quality control of the GPS surveying was maintained by positioning the "rover" unit at points with a known location, and by occupying several grid coordinates within the survey grid so as to reduce stretching errors.

Gridding, Contouring, and Presentation of Data

The EM-31 and EM-61 data are presented as color-contoured maps depicting lateral variations in the respective data, and the 2D-resistivity data are displayed as color-coded profile sections depicting vertical and lateral changes. Maps are constructed from the quadrature-phase (conductivity) for EM-31, and coil-difference for the EM-61. The processing steps used to convert the profile data to a map image are:

<u>Correct the data to the local grid frame</u>. Fiducial markers, consisting of the profile location, end points, and intermediate points are used to stretch individual profiles to the correct lengths used by the survey grid. The intermediate markers

are required so that stretching errors associated with uneven walking speeds and changes in terrain can be minimized.

Transformation to final grid frame. GPS measurements are made on selected grid stakes and the true spatial coordinate for the stake is determined. From 5 to 10 stakes are occupied in order to reduce survey errors associated with the initial grid construction. A data rotation and transformation program uses this information to convert the local grid frame information to a real-world coordinate system (usually a Universal Transverse Mercator projection). This transformation allows incorporating the geophysical data into a GIS based system in order to aid the interpretation.

Gridding. The data were gridded using the Kriging algorithm of the commercial software code SURFER. The Kriging method will construct a reasonably accurate grid surface, though artifacts are produced at the grid edges and where long-distance interpolation is required in sparsely populated regions.

Color Contouring. The generated grids are displayed as color-contoured maps where green-to-blue colors represent relative lows, and red-to-white colors, relative highs. The contour-range, interval, and color-scheme used for individual grids was designed to provide the best possible detail of identified anomalies while simultaneously suppressing visible instrument and/or external noise. Mapped features such as fence lines and surface debris are overlain onto the final image to aid and improve the interpretation.

APPENDIX B: Geophysical Instrumentation

Overview

Results from the borehole geophysical surveys are presented in this Appendix for the 7 borings or wells entered. Table B.1 provides a short summary by boring or well ID and methods used. Figures B.1 through B.4 show the logging results for each boring or well by profile line. The locations for the 7 geophysical logging points are shown in Figure 2 in the main body of text.

Table B.1. Geophysical methods used for each boring or well.

Well/Boring ID	Figure #	DP e-log	Borehole Geophysical Logging	
			EM Induction	Natural Gamma
X1-1	B.1	No	Yes	Yes
X1-2	B.1	Yes	No	No
X2-1*	B.2	Yes	Yes	Yes
X2-2	B.2	Yes	No	No
X3-1*	B.3	Yes	Yes	Yes
X3-2	B.3	Yes	No	No
X4-1	B.4	Yes	No	No
AF-31/42	B.4	No	Yes	Yes

- All three methods used at this location

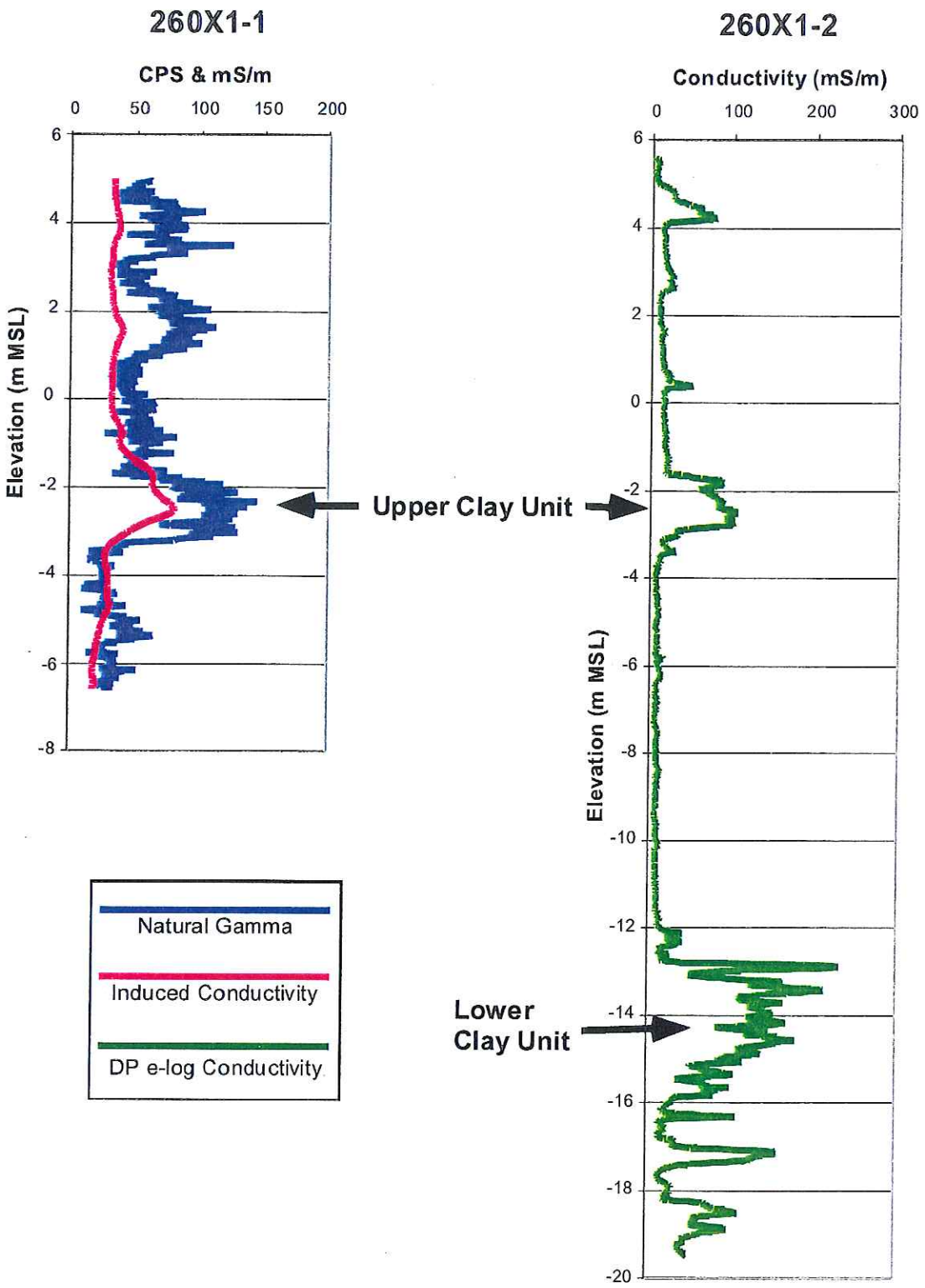

Figure B.1. Subsurface geophysical logs collected along Resistivity Profile 1. See Figure 2 for survey locations.

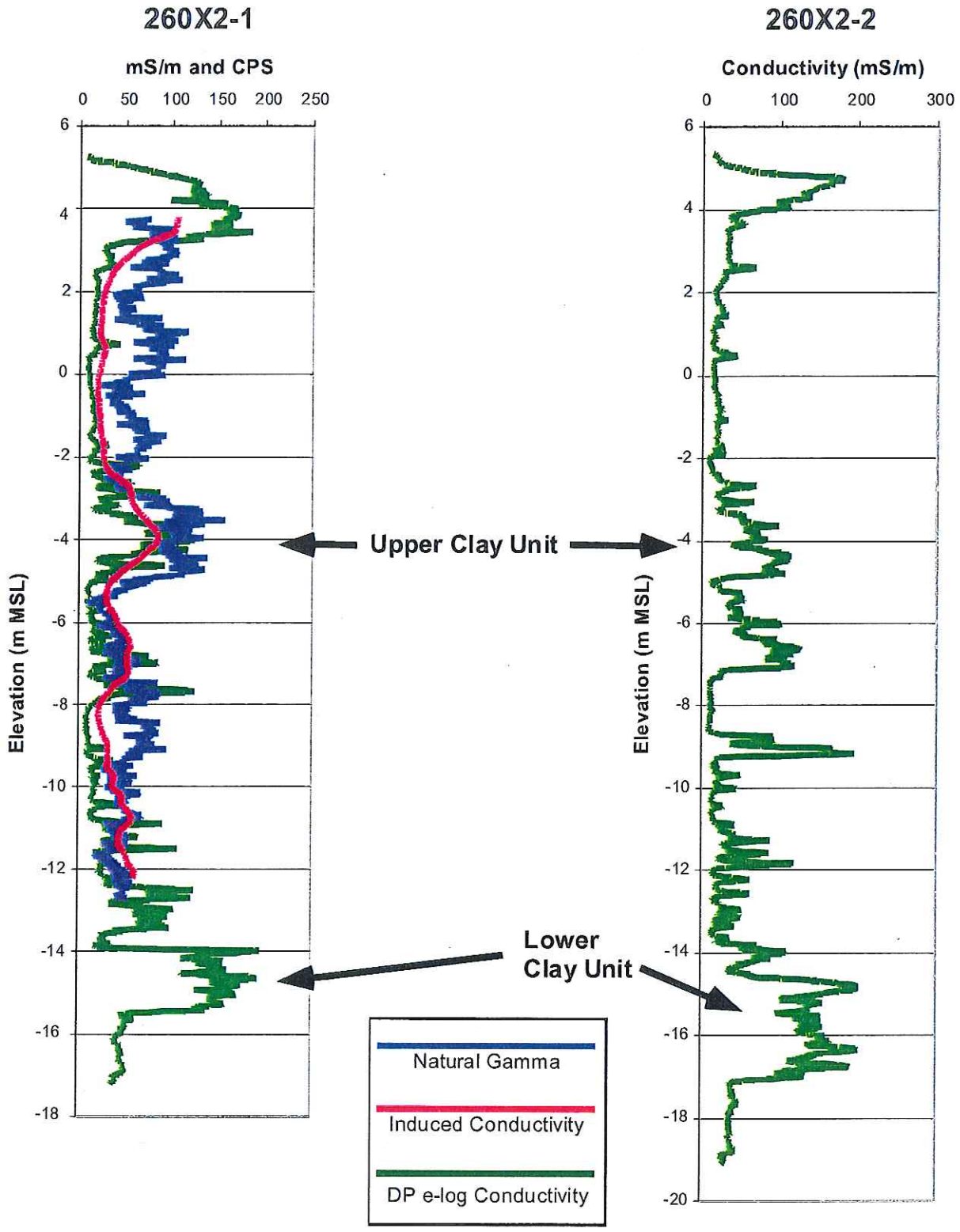

Figure B.2. Subsurface geophysical logs collected along Resistivity Profile 2. See Figure 2 for locations

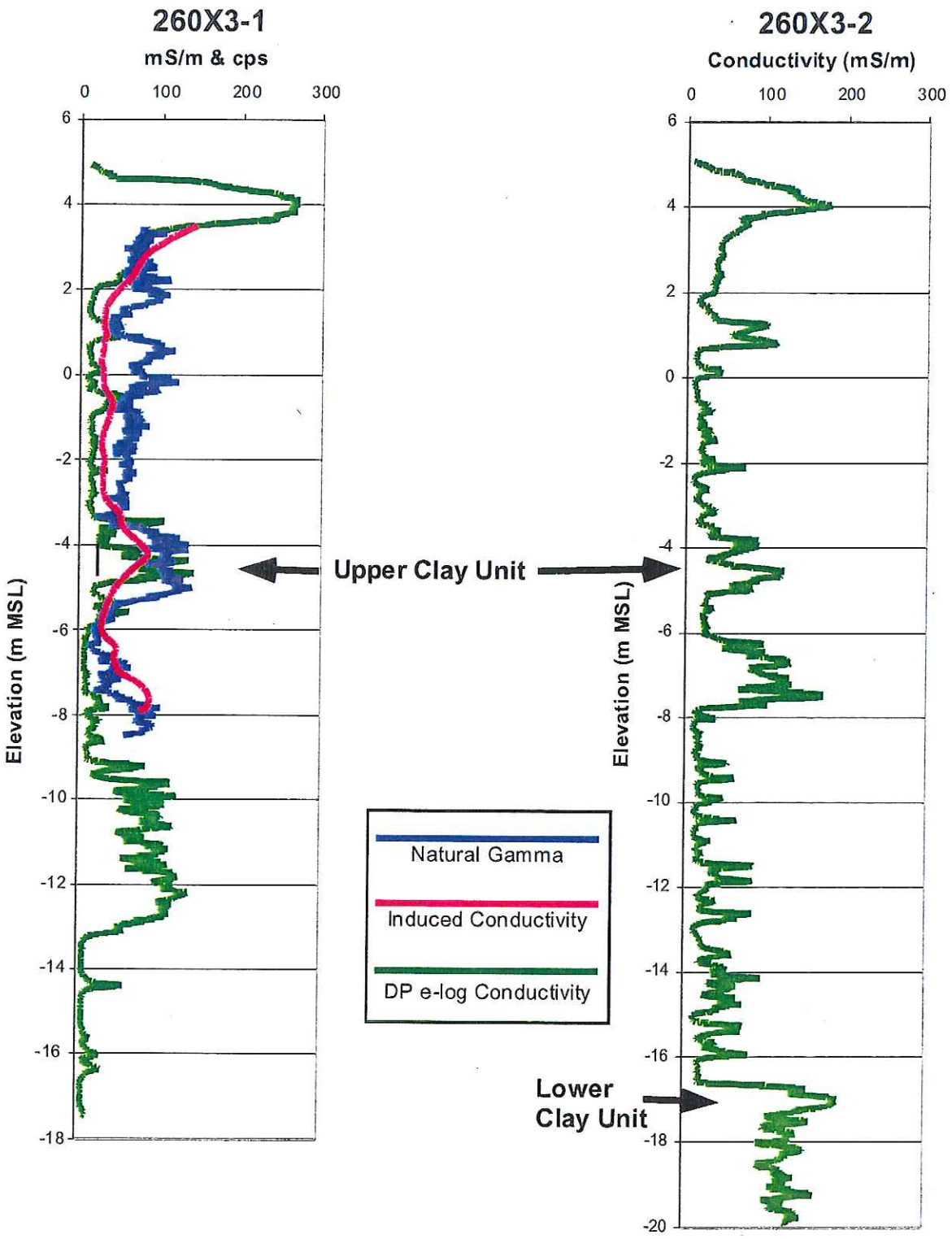

Figure B.3. Subsurface geophysical logs collected along Resistivity Profile 3. See Figure 2 for survey locations.

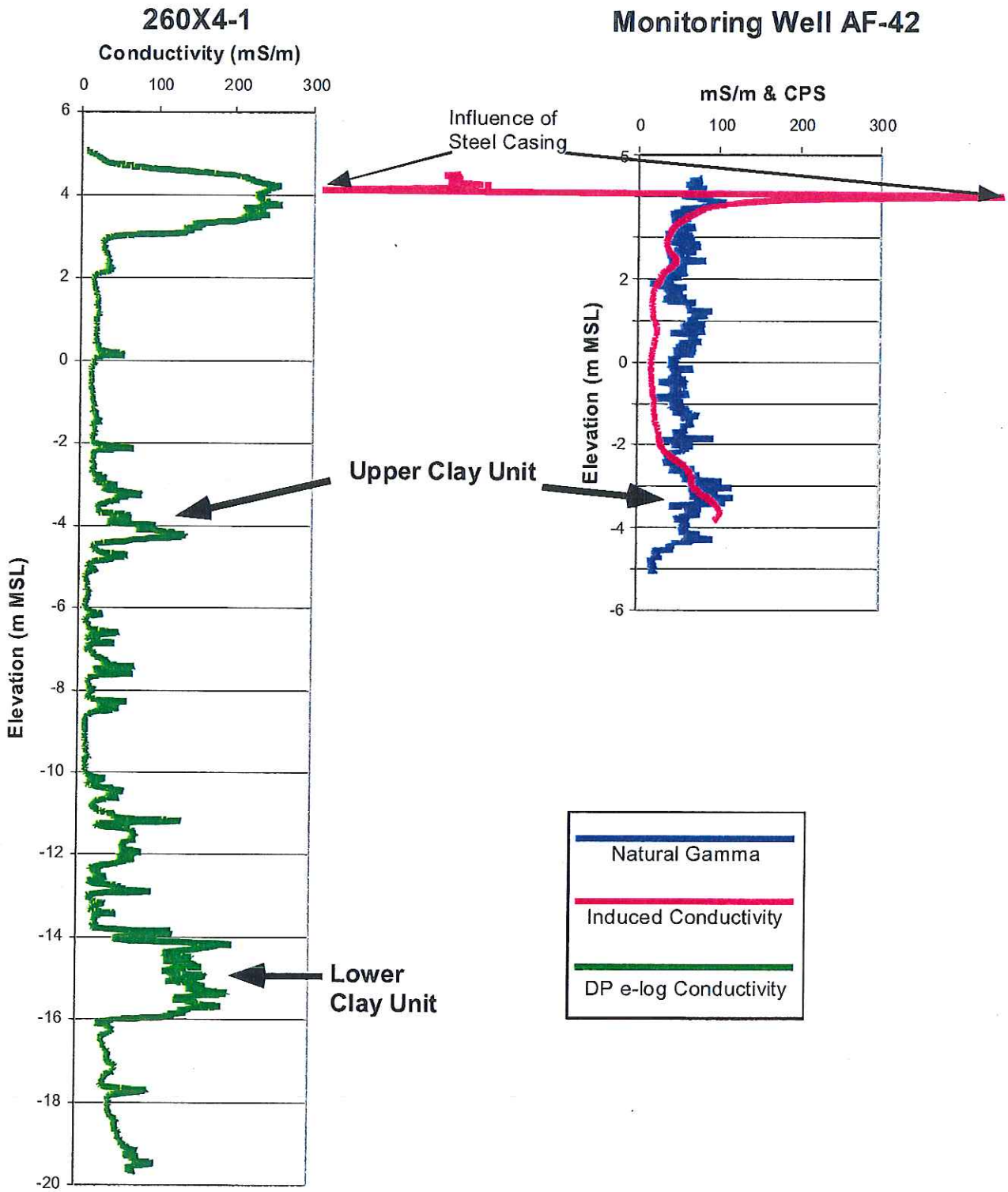

Figure B.4. Subsurface geophysical logs collected along Resistivity Profile 4 and at monitoring well AF-42. See Figure 2 for locations.

Table B.2. Upper Clay Unit Parameters

Well/Boring ID	Electrical Conductivity (mS/m)		Gamma (CPS)	Elevation, Top of UCU (meters ASL)	Thickness (meters)
	DP e-log	EM Induction			
X1-1	N/A	75	115	-1.8	1.9
X1-2	90	N/A	N/A	-1.8	1.8
X2-1	90	75	105	-3.0	1.6
X2-2	80	N/A	N/A	-3.0	1.6
X3-1	95	85	110	-3.8	1.3
X3-2	75	N/A	N/A	-3.6	1.5
X4-1	90	N/A	N/A	-3.0	1.8
AF-31/42	80	100	100	-2.5	1.8

Table B.3. Lower Clay Unit Parameters

Well/Boring ID	Electrical Conductivity DP e-log (mS/m)	Elevation, Top of LCU (meters ASL)	Thickness (meters)
X1-1	N/A	N/A	-
X1-2	130	-12.5	2.9
X2-1	140	-14.0	1.5
X2-2	140	-14.5	2.5
X3-1	N/A	-17.5*	-
X3-2	130	-16.5	3.5
X4-1	145	-14.0	2.0
AF-31/42	N/A	N/A	-

* Estimated at the bottom of the boring, LCU not encountered