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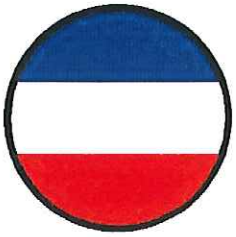

FORSCOM

CORRECTIVE ACTION PLAN

PART B

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

February 2000

SAIC®

DOCUMENT 2

FINAL

CORRECTIVE ACTION PLAN
PART B
UNDERGROUND STORAGE TANKS 25 & 26
FACILITY IDENTIFICATION NUMBER #9-025008
BUILDING 1343
HUNTER ARMY AIRFIELD, GEORGIA

Prepared for:
U.S. Army Corps of Engineers
Savannah District
Under Contract Number DACA21-95-D-0022
Delivery Order Number 0043

Prepared by:
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION
800 Oak Ridge Turnpike
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February 2000

TABLE OF CONTENTS

I. CORRECTIVE ACTION PLAN CERTIFICATION - PART B 1

II. SITE INVESTIGATION REPORT 7
A. HORIZONTAL AND VERTICAL EXTENT OF CONTAMINATION 8
1. Delineation of Soil Contamination 9
a. Contaminant concentrations 9
b. Field screening results 11
2. Delineation of Groundwater Contamination 11
a. Horizontal extent of groundwater contamination 12
b. Vertical extent of groundwater contamination 15
3. Delineation of Free Product Plume 15
4. Delineation of Surface Water and Sediment Contamination 15
B. REGIONAL, LOCAL, AND SITE HYDROGEOLOGY 16
1. Documentation of Local Groundwater Conditions 16
a. Groundwater usage 16
b. Aquifer description 17
c. Surface water 17
2. Stratigraphic Boring Logs 18
a. Local stratigraphy 18
b. Site stratigraphy 18
3. Stratigraphic Cross-Sections 19
4. Geotechnical Analysis 19
5. Direction of Groundwater Flow 19
a. Well construction details 19
b. Potentiometric mapping 19
c. Equipotential flow net 20

III. REMEDIAL ACTION PLAN 21
A. CORRECTIVE ACTION COMPLETED OR IN PROGRESS 21
1. Recovery/Removal of Free Product 21
2. Remediation/Treatment of Contaminated Backfill Material and Native Soils 21
B. OBJECTIVES OF CORRECTIVE ACTION 21
1. Remove Free Product that Exceeds One-Eighth Inch 21
2. Remediate Groundwater Contamination 21
3. Remediate Soil Contamination 22
4. Provide Risk-based Corrective Action 22
a. Potential receptor survey 22
b. Screening for chemicals of potential concern 23
c. Site-specific levels 25
d. Conclusions and recommendations 27
C. DESIGN AND OPERATION OF CORRECTIVE ACTION SYSTEMS 28
1. System Effectiveness/Basis for Selection 28
a. Theory and feasibility 29
D. IMPLEMENTATION 29
1. Milestone Schedule 29
2. Progress Reporting 29
3. Certificate of Completion Report 29
4. Inspection Schedule and Preventative Maintenance Program 30

5. Periodic Monitoring 30
6. Effectiveness of Corrective Action 30
7. Confirmatory Soil Sampling Plan 31
8. Stockpiled Bulk Soil Sampling 31
9. Monitoring Only Termination Conditions 31
10. Post-Completion Site Restoration Activities 31

E. PUBLIC NOTIFICATION 31

IV. CLAIM FOR REIMBURSEMENT 33

V. REFERENCES 35

List of Appendices

APPENDIX I: REPORT FIGURES I-1
Figure 1 Location Map for the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-3
Figure 2 Site Map of the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-4
Figure 3 CAP-Part B Soil Sampling Locations at the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-5
Figure 4a CAP-Part B Soil Sampling Analytical Results at the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-7
Figure 4b CAP-Part B Soil Sampling Analytical Results at the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-9
Figure 5 Benzene Contamination in Groundwater Determined During the UST Closure Activities and CAP-Part A Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-11
Figure 6 Toluene Contamination in Groundwater Determined During the UST Closure Activities and CAP-Part A Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-12
Figure 7 Ethylbenzene Contamination in Groundwater Determined During the UST Closure Activities and CAP-Part A Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-13
Figure 8 Total Xylenes Contamination in Groundwater Determined During the UST Closure Activities and CAP-Part A Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-14
Figure 9 Naphthalene Contamination in Groundwater Determined During the UST Closure Activities and CAP-Part A Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-15
Figure 10 Benzene Contamination in Groundwater Determined During the CAP-Part B Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-17
Figure 11 Toluene Contamination in Groundwater Determined During the CAP-Part B Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-19
Figure 12 Ethylbenzene Contamination in Groundwater Determined During the CAP-Part B Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-21
Figure 13 Total Xylenes Contamination in Groundwater Determined During the CAP-Part B Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-23
Figure 14 Naphthalene Contamination in Groundwater Determined During the CAP-Part B Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-25
Figure 15a Volatile Organic Compounds in Groundwater Determined During the CAP-Part B Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-27

Figure 15b Volatile Organic Compounds in Groundwater Determined During the CAP-Part B Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-29
Figure 16 TCE Contamination in Groundwater Determined During the CAP-Part B Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-31
Figure 17 CAP-Part B Surface Water and Sediment Analytical Results at the USTs 25 & 26 Site, Facility ID #9-025008..... I-33
Figure 18 Locations of Public and Non-Public Supply Wells at Hunter Army Airfield and Surrounding Area..... I-35
Figure 19 Locations of Surface Water Bodies and Water Supply Wells at Hunter Army Airfield I-37
Figure 20 Groundwater Potentiometric Surface Map (December 1999) for the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-39
Figure 21 Equipotential Flow Net (December 1999) for the USTs 25 & 26 Site, Facility ID #9-025008..... I-40
Figure 22 Conceptual Exposure Model for the USTs 25 & 26 Site, Facility ID #9-025008 ..... I-41
Figure 23 Remedial Alternatives Selection Process for the USTs 25 & 26 Site, Facility ID #9-025008..... I-42
Figure 24 Proposed Deep Well Locations at the USTs 25 & 26 Site I-43
Figure 25 Milestone Schedule for the Remedial Action at the USTs 25 & 26 Site I-44

APPENDIX II: REPORT TABLES II-1
Table 1a UST System Closure - Soil Analytical Results (Volatile Organic Compounds) II-3
Table 1b UST System Closure - Soil Analytical Results (Polynuclear Aromatic Hydrocarbons) II-4
Table 1c UST System Closure - Groundwater Analytical Results (Volatile Organic Compounds) II-5
Table 1d UST System Closure - Groundwater Analytical Results (Polynuclear Aromatic Hydrocarbons) II-5
Table 2a CAP-Part A/B - Soil Analytical Results (Volatile Organic Compounds) II-6
Table 2b CAP-Part A/B - Soil Analytical Results (Polynuclear Aromatic Hydrocarbons)..... II-7
Table 3 CAP-Part B - Soil Field Screening (Headspace) Data II-9
Table 4a CAP-Part A/B - Groundwater Analytical Results (Volatile Organic Compounds)..... II-10
Table 4b CAP-Part A/B - Groundwater Analytical Results (Polynuclear Aromatic Hydrocarbons) .. II-14
Table 5 CAP-Part B - Surface Water Analytical Results II-17
Table 6 CAP-Part B - Sediment Analytical Results II-18
Table 7 CAP-Part B - Geotechnical Results II-19
Table 8 CAP-Part B - Well Construction Details..... II-20
Table 9 CAP-Part A/B - Groundwater Elevations..... II-22
Table 10 CAP-Part B - Soil Data Risk-based Screening Results II-25
Table 11 CAP-Part B - Groundwater Data Risk-based Screening Results..... II-29
Table 12 AT123D Predicted Maximum 2-Year Concentrations at the USTs 25 & 26 Monitoring Well Locations..... II-42
Table 13 Evaluation of Corrective Action Technologies II-43

APPENDIX III: WATER RESOURCES SURVEY DOCUMENTATION..... III-1

APPENDIX IV: SOIL BORING LOGS (CAP-PART B)..... IV-1

APPENDIX V: SOIL LABORATORY RESULTS (CAP-PART B)..... V-1

APPENDIX VI: ALTERNATE THRESHOLD LEVEL (ATL) AND ALTERNATE CONCENTRATION LIMITS (ACL) CALCULATIONS..... VI-1

APPENDIX VII: MONITORING WELL DETAILS (CAP-PART B) VII-1

APPENDIX VIII: GROUNDWATER LABORATORY RESULTS (CAP-PART B) VIII-1

APPENDIX IX: CONTAMINATED SOIL DISPOSAL IX-1

APPENDIX X: SITE RANKING FORM X-1

APPENDIX XI: COPIES OF PUBLIC NOTIFICATION LETTERS AND CERTIFIED RECEIPTS OF NEWSPAPER NOTICE XI-1

Attachments

A GEOTECHNICAL DATA A-1

B GROUNDWATER TRANSPORT MODELING DATA B-1

LIST OF ACRONYMS

AT123D	Analytical Transient 1-, 2-, 3-Dimensional Model
ACL	alternate concentration limit
ARAR	applicable or relevant and appropriate requirement
ASTM	American Society for Testing and Materials
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
DRO	diesel-range organic
EPA	U.S. Environmental Protection Agency
GA EPD	Georgia Environmental Protection Division
gpm	gallons per minute
GRO	gasoline-range organic
GUST	Georgia Underground Storage Tank Management Program
HAAF	Hunter Army Airfield
IWQS	In-stream Water Quality Standard
MCL	maximum contaminant level
NCO	noncommissioned officer
PAH	polynuclear aromatic hydrocarbon
ppm	parts per million
PVC	polyvinyl chloride
QA	quality assurance
QC	quality control
RBCA	risk-based corrective action
SAIC	Science Applications International Corporation
scfh	standard cubic feet per hour
SI	Site Investigation
STL	soil threshold level
TCE	trichloroethene
TPH	total petroleum hydrocarbons
USACE	U.S. Army Corps of Engineers
USCS	Unified Soil Classification System
UST	underground storage tank
VOC	volatile organic compound

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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: 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: 02/23/00

B. Professional Engineer or Professional Geologist

Name: Patricia Stoll

Signature: Patricia A Stoll

Date: 2/14/00

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 8)
  - ☒ Potentiometric Map (Figure 20)
  - ☒ Flow Net Superimposed on a Base Map (Figure 21)

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) Not Applicable

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 (Reference CAP B App. VI) (Section III.B.4)

☐ 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

This document represents the Site Investigation (SI) Report for the former underground storage tanks (USTs) 25 & 26, Facility ID #9-025008, Building 1343, at Hunter Army Airfield (HAAF), Georgia. This Corrective Action Plan (CAP)-Part B report follows the guidance published by Georgia Environmental Protection Division (GA EPD) in February 1995; however, the organization of the appendices for this report mirrors the appendices listed in the CAP-Part A template issued by GA EPD in May 1998. Report figures and tables are located in Appendices I and II, respectively.

The USTs 25 & 26 site is located in the 260th Quarter Master Motorpool on Tubb Road, as illustrated in Figure 1. The USTs 25 & 26 site is located within an average or higher groundwater pollution susceptibility area and is greater than 500 feet from a withdrawal point and is less than 500 feet from a surface water body. Since 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 HAAF 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 protective coating. The refueling station construction was completed in 1986, but did not become operational until October 1989. The piping associated with the system was replaced with flex-piping in 1992 under a Corps of Engineers project. The tanks and associated piping were abandoned in-place in July 1998.

A Phase I Investigation was performed in October 1990 by RMT, Inc (USACE 1992). One groundwater sample contained groundwater concentrations above drinking water standards (i.e., MCLs). Soil contamination was also observed, but at concentrations below applicable 1990 corrective action levels. In addition, a leak test was also conducted, which indicated possible gasoline leakage along the distribution piping. Diesel fuel was observed in one of the Tracer probe locations, however, the diesel fuel did not contain any of the Tracer compounds, indicating that the presence of the fuel was due to prior leakage.

In 1992, a Phase II Investigation was performed by the U.S. Army Corps of Engineers, which found considerably more contamination than the Phase I study (USACE 1992). This was partially due to the sampling locations being closer to the potential source. It also appeared that additional leakage had occurred from the piping at various locations due to corrosion and the presence of faulty fittings. As a result of the contamination identified in 1992, the piping was replaced. The soil contamination appeared to be limited to the site boundaries and the extent of groundwater contamination was not determined.

In 1998, the tanks and piping were closed in-place by Earth Tech, Inc. (Earth Tech 1999). During UST closure activities, benzene, toluene, and ethylbenzene were present in the soil at concentrations exceeding applicable GUST STLs. Elevated concentrations of total petroleum hydrocarbon (TPH)-diesel-range organics (DRO) and TPH-gasoline-range organics (GRO) were also detected. In addition, benzene was detected in several groundwater samples collected the UST 26 tank pit and the temporary piezometer downgradient of UST 26 at concentrations exceeding Georgia In-Stream Water Quality Standards (IWQS). The CAP-Part A report (Earth Tech 1999) was submitted to the GA EPD in March 1999 and describes the results of both the in-place closure and the CAP-Part A SI. As outlined in the CAP-Part A report, a CAP-Part B SI was determined to be necessary to

- delineate the horizontal extent of benzene contamination in groundwater to concentrations below the applicable maximum contaminant level (MCL); and

- assess the potential impact of petroleum contaminants to surface water and sediment in the drainage ditch located southeast (downgradient) of the site.

Based on the findings of the in-place closure and CAP-Part A, a CAP-Part B SI was conducted by Science Applications International Corporation (SAIC) in May 1999 and September 1999 to determine the nature and extent of petroleum contamination.

The CAP-Part B SI consisted of installing 34 soil borings/groundwater monitoring wells for soil and groundwater sampling, 5 vertical profile borings for groundwater sampling, and collecting three surface water and sediment samples from a drainage ditch located downgradient of the site. A more thorough description of the CAP-Part B SI technical approach is presented in the Sampling and Analysis Plan (SAIC 1998) and associated addendum (SAIC 1999).

This report presents the findings of the CAP-Part B SI for USTs 25 & 26. The investigation was performed by SAIC for the Fort Stewart DPW, Environmental Branch, through the U.S. Army Corps of Engineers (USACE), Savannah District, in May and September 1999, under contract DACA21-95-D-0022, delivery order 0043.

II.A. HORIZONTAL AND VERTICAL EXTENT OF CONTAMINATION

The horizontal and vertical extent of petroleum contamination in soil and groundwater has been delineated by activities performed during the previous investigations, CAP-Part A SI, and CAP-Part B SI. The CAP-Part B SI was performed in accordance with the *Sampling and Analysis Plan for the Corrective Action Plan-Part A Investigation for Former Underground Storage Tanks at Hunter Army Airfield, Georgia* (SAIC 1998), and the *Addendum to Sampling and Analysis Plan* (SAIC 1999). The investigative activities associated with each investigation are summarized below.

Phase I SI (conducted in 1990 by RMT, Inc.)

- Installed nine soil borings.
- Collected one soil sample from each boring.
- Collected one groundwater sample from four of the borings.
- Leak testing.

Phase II SI (conducted in 1992 by USACE)

- Installed six soil borings and collected soil samples for benzene, toluene, ethylbenzene, and xylenes (BTEX), TPH, and volatile organic compound (VOC) headspace analyses.
- Installed six monitoring wells and collected soil samples for BTEX, TPH, and VOC headspace and collected groundwater samples for BTEX and TPH analyses.
- Collected two surface water samples for BTEX and TPH analyses.
- Collected two sediment samples for BTEX and TPH analyses.

In-Place Closure and CAP-Part A SI (conducted in 1998 by Earth Tech, Inc.)

- In-place closure of the tanks.
- Collected 13 soil samples from the along the distribution piping and dispenser islands and analyzed for BTEX, polyaromatic hydrocarbons (PAHs), TPH-DRO, and TPH-GRO.
- Collected four groundwater samples around UST 25 and collected two groundwater samples around UST 26 and analyzed for BTEX and PAHs.
- Installed four temporary piezometers for groundwater samples that were analyzed for BTEX and PAHs.
- Conducted a water resource survey.

CAP-Part B SI (conducted in 1999 by SAIC)

- Drilled 34 borings to collect soil samples for BTEX, PAHs, TPH-DRO, TPH-GRO, VOC headspace, and geotechnical analyses.
- Installed 32 monitoring wells to collect groundwater samples for BTEX, PAHs, and water quality analyses.
- Collected a comprehensive round of site water level and free product measurements.
- Collected three surface water samples for BTEX and PAHs analyses and three sediment samples for BTEX, PAHs, TPH-DRO, and TPH-GRO analyses from two unnamed ditches located downgradient of the site.

The CAP-Part B SI soil and groundwater analytical laboratory results are included as Appendices V and VIII, respectively, of this document.

II.A.1. Delineation of Soil Contamination

Petroleum-related contaminants detected in soil at the USTs 25 & 26 site during the previous investigations, CAP-Part A SI, and CAP-Part B SI included benzene, ethylbenzene, toluene, xylenes, acenaphthlene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, chyrsene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, pyrene, and TPH-GRO/DRO. One or more of these constituents was present in 13 out of 13 soil samples collected during the in-place closure of the USTs and 25 out of 27 soil samples collected during the CAP-Part B investigation. Concentrations of benzene, ethylbenzene, and toluene exceeded the applicable GUST STLs (i.e., Table A, Column 2) during the in-place closure. Benzene was the only constituent to exceed GUST STLs during the CAP-Part B SI.

II.A.1.a. Contaminant concentrations

II.A.1.a.1. Phase I Site Investigation (1990)

During the Phase I SI, nine soil samples were collected from nine soil borings. Contamination was detected in the soil, but at concentrations below the 1990 corrective action levels. Leak testing of the tanks and piping were also performed. The results indicated that the dispenser piping containing gasoline may be leaking, the gasoline tank may be leaking, and the diesel tank was not leaking.

II.A.1.a.2. Phase II Site Investigation (1992)

During the Phase II SI conducted in 1992, 20 soil samples were collected from 10 soil borings. Benzene, ethylbenzene, toluene, xylenes, and TPH were present in 14 out of the 20 soil samples collected (USACE 1992). These samples were collected prior to the use of the current GUST STLs.

II.A.1.a.3. In-Place Closure and CAP-Part A Site Investigation (July 1998)

The in-place closure sampling and the CAP-Part A sampling were conducted simultaneously in July 1998 and the results were presented in the CAP-Part A Report. During the CAP-Part A SI, no soil samples were collected as part of the CAP-Part A SI; however, 13 soil samples were collected along the distribution piping and dispenser islands as part of the in-place closure. These soil samples were collected from approximately 2.5 feet below ground surface (BGS). The analytical results are presented in Tables 1a and 1b. The results of soil samples collected during the CAP-Part A investigation are summarized below.

- Benzene was detected in 4 of the 13 soil samples at concentrations ranging from 0.004J mg/kg to 3.3JD mg/kg.
- Toluene was detected in 4 of the 13 soil samples at concentrations ranging from 0.004J mg/kg to 140D mg/kg.
- Ethylbenzene was detected in 5 of the 13 soil samples at concentrations ranging from 0.002J mg/kg to 91D mg/kg.
- Xylenes were detected in 5 of the 13 soil samples at concentrations ranging from 0.003J mg/kg to 430D mg/kg.
- Fifteen PAH compounds were detected in 7 of the 13 soil samples.
- TPH-DRO was detected in 8 of the 9 soil samples associated with UST 25 at concentrations ranging from 2.3 mg/kg to 6000 mg/kg.
- TPH-GRO was detected in 4 of the 4 soil samples associated with UST 26 at concentrations ranging from 0.097 mg/kg to 800 mg/kg.

Concentrations of benzene, toluene, and ethylbenzene exceeded the applicable GUST STLs (i.e., Table A, Column 2) during the CAP-Part A SI.

The detection limits for soil sample analyses during the CAP-Part A SI were less than 0.006 mg/kg for BTEX, except for one sample where the detection limit was 0.670 mg/kg.

II.A.1.a.4. CAP-Part B Site Investigation (May and September 1999)

During the CAP-Part B SI, 27 soil samples were collected for geochemical analysis from 27 shallow borings installed in May 1999, as presented in Figure 2. Seven additional borings were installed in September 1999 to determine the extent of groundwater contamination and no soil samples were collected from these borings. Analytical results are presented in Tables 2a and 2b and sample locations are presented in Figure 3. These samples were collected in accordance with the technical approach presented in the SI Plan of the CAP-Part A Report, which was approved by GA EPD in correspondence dated June 14, 1999 (Logan 1999). The CAP-Part B SI soil borings were drilled to 10.5 to 13.0 feet BGS. Twenty-five of the

27 shallow soil borings were converted to shallow monitoring wells to delineate the extent of contamination. Field screening methods were used during drilling to select soil samples for geochemical analysis.

Analytical results for soil sampling are summarized in Tables 2a and 2b and presented in the plan view in Figure 4a. The results exceeding applicable GUST STLs are presented in the cross-sections in Figure 4b. The results of soil samples collected during the CAP-Part B investigation are summarized below.

- Benzene was detected in 13 of the 27 soil samples at concentrations ranging from 0.00072J mg/kg to 0.0859J mg/kg.
- Toluene was detected in 10 of the 27 soil samples at concentrations ranging from 0.00068J mg/kg to 0.0074J mg/kg.
- Ethylbenzene was detected in 6 of the 27 soil samples at concentrations ranging from 0.0025 mg/kg to 2.13 mg/kg.
- Xylenes were detected in 4 of the 27 soil samples at concentrations ranging from 0.0014J mg/kg to 0.933J mg/kg.
- Thirteen PAH compounds were detected in 9 of the 27 soil samples.
- TPH-DRO was detected in 18 of the 27 soil samples at concentrations ranging from 1.6 mg/kg to 13,100J mg/kg.
- TPH-GRO was detected in 18 of the 27 soil samples at concentrations ranging from 0.132 mg/kg to 1320 mg/kg.

Concentrations of benzene exceeded the applicable GUST STLs (i.e., Table A, Column 2) and leaching to groundwater screening levels during the CAP-Part B SI.

The detection limits for soil sample analyses during the CAP-Part B SI were less than 0.0024 mg/kg for BTEX constituents, except for one sample where the detection limit was 0.22 mg/kg for toluene and 0.33 mg/kg for xylenes, and less than 3.66 mg/kg for PAH constituents.

II.A.1.b. Field screening results

Field screening through VOC headspace was performed on all soil samples collected from above the saturated zone during the Part B SIs. For each 4-foot-length soil macro-core sample taken during direct-push activities, two 2.0-foot grab samples were collected in glass jars and covered with aluminum foil. These samples corresponded to potential analytical sample aliquots collected from the same interval. After allowing at least 15 minutes for volatilization and temperature equilibration, VOC headspace concentrations were measured with photoionization detector. Field screening results for the CAP-Part B site investigations are presented in Table 3.

II.A.2. Delineation of Groundwater Contamination

Petroleum-related contaminants detected in groundwater at the USTs 25 & 26 site during the previous investigations, CAP-Part A SI, and CAP-Part B SI included benzene, ethylbenzene, toluene, xylenes, acenaphthene, benzo(a)pyrene, chrysene, fluorene, naphthalene, phenanthrene, and pyrene. These constituents were detected in 72 of the 101 groundwater samples collected during CAP-Part B investigations.

Seven samples collected during the CAP-Part B SI from four locations exceeded the IWQS of 71.28 µg/L for benzene. Other petroleum-related constituents detected were all below applicable regulatory threshold values. Concentrations of benzene, benzo(a)pyrene, and naphthalene in groundwater exceeded their respective risk-based screening criteria. Alternate concentration limits (ACLs) based on fate and transport modeling were developed for these constituents in the USTs 25 & 26 site (Appendix VI).

In addition to these UST related compounds listed above, trichloroethene (TCE) was tentatively identified in several groundwater samples during the first phase of CAP-Part B field activities. As a result, the CAP-Part B investigation was expanded to determine the horizontal and vertical extent of this constituent.

II.A.2.a. Horizontal extent of groundwater contamination

II.A.2.a.1. Phase I Site Investigation (1990)

During the Phase I SI, four groundwater samples were collected from four of the nine soil borings. Contamination in the groundwater exceeded drinking water standards (i.e. MCLs) in one sample.

II.A.2.a.2. Phase II Site Investigation (1992)

During the Phase II SI conducted in 1992, six groundwater samples were collected from six shallow monitoring wells. Benzene, ethylbenzene, toluene, xylenes, and/or TPH were present in five of the groundwater samples collected (USACE 1992). Concentrations of benzene, ethylbenzene, and toluene exceeded their respective MCLs. The upgradient well contained low concentrations of total xylenes.

II.A.2.a.3. In-Place Closure and CAP-Part A Site Investigation (July 1998)

The in-place closure sampling and the CAP-Part A sampling were conducted simultaneously in July 1998 and the results were presented in the CAP-Part A Report. During the CAP-Part A SI, four groundwater samples were collected for chemical analysis from four temporary piezometers as presented in Table 4 to determine the horizontal extent of contamination at the site. The temporary piezometers PZ-1 through PZ-4 were located around the perimeter of the USTs 25 & 26 site. In addition, six groundwater samples were collected adjacent to the tanks as part of the in-place closure and the results are presented in Tables 1c and 1d.

Benzene was identified in nine groundwater samples during the simultaneous in-place closure and CAP-Part A SI. Benzene concentrations ranged from 1.0J µg/L to 3000D µg/L, as illustrated in Figure 5. The concentrations in three samples exceed the Georgia IWQS of 71.28 µg/L, the concentrations in seven samples exceed the federal MCL of 5 µg/L, and the concentrations in nine samples exceed the risk-based screening level of 0.36 µg/L. An ACL was not calculated during the CAP-Part A SI, however, the concentrations in two samples were above the site ACL for benzene of 340 µg/L (Appendix VI) calculated during the CAP-Part B. The analytical detection limit for benzene was 5 µg/L in all samples.

Toluene was identified in four groundwater samples during the simultaneous in-place closure and CAP-Part A SI. Toluene concentrations ranged from 1.0J µg/L to 13 µg/L, as illustrated in Figure 6. The concentrations did not exceed the Georgia IWQS of 200,000 µg/L, the federal MCL of 1,000 µg/L, or the risk-based screening level of 750 µg/L; thus an ACL was not necessary. The analytical detection limit for toluene was 5 µg/L in all samples.

Ethylbenzene was identified in six groundwater samples during the simultaneous in-place closure and CAP-Part A SI. Ethylbenzene concentrations ranged from 2.0J µg/L to 310D µg/L, as illustrated in Figure 7. The concentrations did not exceed the Georgia IWQS of 28,718 µg/L, the MCL of 700 µg/L, or the risk-based

screening level of 1,300 µg/L; thus an ACL was not necessary. The analytical detection limit for ethylbenzene was 5 µg/L in all samples.

Total xylenes were identified in seven groundwater samples during the simultaneous in-place closure and CAP-Part A SI. Total xylene concentrations ranged from 2.0J µg/L to 39.0 µg/L, as illustrated in Figure 8. There is no Georgia IWQS for xylenes. The concentrations did not exceed the federal MCL of 10,000 µg/L, or the risk-based screening level of 12,000 µg/L; thus, an ACL was not necessary. The analytical detection limit for toluene was 10 µg/L in all samples.

Several PAH compounds were estimated at concentrations below the analytical reporting limit of 10 µg/L in several groundwater samples. The compounds include acenaphthene, anthracene, chyrsene, fluorene, phenanthrene, and pyrene. ACLs were not necessary for these compounds.

Naphthalene was identified in 10 groundwater samples during the simultaneous in-place closure and CAP-Part A SI. Naphthalene concentrations ranged from 1.0J µg/L to 290E µg/L, as illustrated in Figure 9. This compound does not have a Georgia IWQS or federal MCL; however, the concentrations in 7 samples are above the current risk-based screening level of 6.5 µg/L. An ACL was not calculated during the CAP-Part A SI; however, the concentrations in all samples are below the site ACL for naphthalene of 23,400 µg/L (Appendix VI) calculated during the CAP-Part B.

II.A.2.a.4. CAP-Part B Site Investigation (May and September 1999)

To delineate the dissolved benzene contamination plume, a CAP-Part B SI was conducted. During the CAP-Part B SI, 101 groundwater samples were collected for geochemical analysis from 32 monitoring wells, 5 vertical profile borings, and 2 soil borings as presented in Tables 4a and 4b. Borings AF-01 through AF-29 were installed in May 1999 and drilled between 15.0 and 55.0 feet BGS. Temporary piezometers were installed in borings AF-06 and AF-10 to collect groundwater samples. Monitoring well, vertical profile, and soil boring locations are presented in Figure 2. Upon review of the analytical data collected in May 1999 and the tentative identification of TCE in several samples, borings AF-30 through AF-39 were installed in September/October 1999 to determine the vertical and horizontal extent of dissolved benzene contamination plume that was not determined in May and to investigate the presence of TCE contamination in the vicinity of the site.

Benzene was identified in 67 groundwater samples during the CAP-Part B SI. Benzene concentrations ranged from 0.64J µg/L to 9,940 µg/L, as illustrated in Figure 10. The concentrations in 7 samples exceed the Georgia IWQS of 71.28 µg/L, the concentrations in 41 samples exceed the federal MCL of 5 µg/L, and the concentrations in 67 samples exceed the risk-based screening level of 0.36 µg/L. The concentrations in five samples were above the site ACL for benzene of 340 µg/L (Appendix VI). The analytical detection limit for benzene was 2 µg/L in all samples.

Toluene was identified in 26 groundwater samples during the CAP-Part B SI. Toluene concentrations ranged from 0.5J µg/L to 24.8 µg/L, as illustrated in Figure 11. The concentrations did not exceed the Georgia IWQS of 200,000 µg/L, the federal MCL of 1,000 µg/L, or the risk-based screening level of 750 µg/L; thus an ACL was not necessary. The analytical detection limit for toluene was 2 µg/L in all samples.

Ethylbenzene was identified in 32 groundwater samples during the CAP-Part B SI. Ethylbenzene concentrations ranged from 0.33J µg/L to 952 µg/L, as illustrated in Figure 12. The concentrations did not exceed the Georgia IWQS of 28,718 µg/L or the risk-based screening level of 1,300 µg/L; thus an ACL

was not necessary. The concentration in one sample exceeded the MCL of 700 µg/L. The analytical detection limit for ethylbenzene was 2 µg/L in all samples.

Total xylenes were identified in 31 groundwater samples during the CAP-Part B SI. Total xylene concentrations ranged from 0.51J µg/L to 792 µg/L, as illustrated in Figure 13. There is no Georgia IWQS for xylenes. The concentrations did not exceed the federal MCL of 10,000 µg/L or the risk-based screening level of 12,000 µg/L; thus an ACL was not necessary. The analytical detection limit for total xylenes was less than 12 µg/L in all samples.

Several PAH compounds were estimated at concentrations below the analytical reporting limit of 10 µg/L in several groundwater samples. The compounds include acenaphthene, benzo(a)pyrene, chyrsene, fluorene, phenanthrene, and pyrene. The estimated concentration of benzo(a)pyrene in five samples exceeded the Georgia IWQS of 0.0311µg/L, the federal MCL of 0.2 µg/L, and the risk-based screening level of 0.092 µg/L. However, the concentrations are below the site ACL for benzo(a)pyrene of 936 µg/L (Appendix VI).

Naphthalene was identified in 14 groundwater samples during the CAP-Part B SI. Naphthalene concentrations ranged from 0.61J µg/L to 511 µg/L, as illustrated in Figure 14. This compound does not have a Georgia IWQS or federal MCL; however, the concentrations in six samples are above the current risk-based screening level of 6.5 µg/L. All of the concentrations were below the site ACL for naphthalene of 23,400 µg/L (Appendix VI).

The groundwater samples collected in May 1999 contained numerous tentatively identified compounds. TCE was one of the primary compounds tentatively identified in 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 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 addition, three vertical profile borings and six monitoring wells were installed in September 1999 to confirm the presence of TCE. The VOC analytical results from September 1999 are presented in Figure 15a and Table VIII-B (Appendix VIII) and confirmed the presence of TCE and several other organic compounds in the wells listed above, except for AF-24, as shown in Figure 15a. In addition, shallow wells AF-33 through AF-38 that were installed in September 1999 also contain TCE and other organic compounds. The source of the TCE 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.

II.A.2.a.5. Conclusions of the Horizontal Extent of Site Groundwater Contamination

Figures 6 through 14 demonstrate that the horizontal and vertical extent of petroleum contaminants in groundwater has been delineated to the appropriate analytical detection. In addition, several non-petroleum related compounds were detected in the groundwater; however, the source and horizontal extent of non-petroleum related contamination have not been determined.

Petroleum contaminants identified in groundwater at the USTs 25 & 26 site include BTEX constituents normally associated with diesel and gasoline releases as well as PAH constituents, which likely represent less soluble biodegradation products of the release. The USTs 25 & 26 site is a candidate for natural attenuation since the source of the contamination has been removed, and the size of the plume has not expanded to the outer perimeter of monitoring wells installed at the site. However, natural attenuation will take approximately seven years for benzene concentrations to decrease below the proposed ACL. Site

groundwater flow and the geology are conducive to aerobic biodegradation, which is known to produce the most rapid biodegradation rates for hydrocarbons.

II.A.2.b. Vertical extent of groundwater contamination

The vertical extent of groundwater contamination was not investigated during the Initial Site Characterization or CAP-Part A SI. During the CAP-Part B SI, the vertical extent of groundwater contamination was delineated through groundwater sampling in vertical profiles AF-21, AF-22, AF-30, AF-31, and AF-32 using direct-push technology. Groundwater samples were collected from 5-foot intervals to depths of 50.0 to 55.0 feet BGS. During drilling of boring AF-21, refusal was at 55.0 feet BGS and was probably due to encountering the Hawthorn Formation. The sample intervals indicated the presence of BTEX or PAH constituents; however, benzene was the only compound to exceed its IWQS. The benzene concentrations in excess of its IWQS are limited to vertical profile borings AF-21 and AF-30 to a depth of 20.0 feet BGS. The benzene concentrations in these two borings are at or above the MCL for benzene from 20.0 to 55.0 feet BGS. However, the presence of the Hawthorn Formation at approximately 55 to 65 feet BGS is limiting further vertical migration of the contaminants. The vertical extent of groundwater contamination has been delineated and is confined to the Surficial Aquifer (i.e., less than 55.0 feet BGS).

As previously mentioned, TCE was tentatively identified in vertical profile borings AF-21 and AF-22. In AF-21, TCE was identified in five groundwater samples located between 21.0 and 45.0 feet BGS, with the highest concentrations observed between 26.0 to 35.0 feet BGS. In AF-22, TCE was observed in two samples located between 31.0 and 45.0 feet BGS. As a result of this tentative identification, three vertical profile borings were installed in September 1999 to confirm the presence and extent of the TCE. Boring AF-30 was installed adjacent to AF-21 and confirmed the presence of TCE to a depth of 50.0 feet with the highest concentrations occurring at 26.0 to 35.0 feet BGS. Borings AF-31 and AF-33 were located along Tubb Street where the TCE was tentatively identified in the shallow wells installed in May 1999 was observed to be the highest. In AF-31, the TCE is present to a depth 25.0 feet BGS; the concentrations below 25.0 feet are estimated below the reporting limit of 5 µg/L. In AF-32, the TCE is present to a depth of 15.0 feet BGS and not detected below that depth. The VOC analytical results from September 1999 vertical profile borings are presented in Figure 15b and Table VIII-B (Appendix VIII). As shown in Figure 16, the source of the TCE 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. Three deep monitoring wells were installed in January 2000 as permanent monitoring locations for VOCs. The screened intervals of the deep wells correspond to the highest TCE concentrations observed in nearby vertical profile borings. Analytical data, boring logs, and well construction diagrams will be provided in the First Annual Monitoring Only Report.

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, or CAP-Part B SI.

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

Surface water and sediment samples were collected from three locations southeast of the USTs 25 & 26 site (Figure 17 and Tables 5 and 6). The sampling points were located in the drainage ditch that is approximately 75 feet directly southeast (downgradient) of the USTs 25 & 26 site.

No BTEX or PAH constituents were detected in any of the three surface water samples. Toluene was estimated to be present in the sediment at 0.0024J mg/kg at location AF-S1. Benzene was estimated to be present in the sediment at 0.00066J mg/kg at location AF-S3. TPH-DRO was detected in the sediment at

all three locations concentrations ranging from 1.8 to 13.0 mg/kg and TPH-GRO was estimated to be present in the sediment at a concentration of 0.206J mg/kg at location AF-03. No PAH constituents were detected in any of the three sediment samples.

II.B. REGIONAL, LOCAL, AND SITE HYDROGEOLOGY

Discussion of the regional, local, and site hydrogeology is based on field observations and other investigative activities performed, including a water resource survey, during the CAP-Part A and CAP-Part B investigations of the USTs 25 & 26 site.

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 18 and 19). 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 vicinity.

Wells 1 and 2, both public water supply wells located in the cantonment area of HAAF, constitute the main water supply system at HAAF (Figure 19). Well 1, located at Building 711 on the corner of Moore Road and Douglas, Street, is a 12-inch-diameter well with a 100-hp 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-hp 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 (NCO) 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-hp 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-hp 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-hp 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 less than 25 occupants per day and having less 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 18. 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 to 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 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 to 10 feet BGS (Miller 1990). 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 Appendix III. 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 southeast

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 in Appendix III, the USTs 25 & 26 site, Facility ID #9-025008, is classified as being located less than 500 feet to 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 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. There are three wells that are located adjacent to the force main, and in December 1999, the depths to groundwater in these wells were 4.97 feet in AF-01, 5.02 feet in AF-07, and 5.00 feet in AF-20. The invert depth of the force main is located approximately 2.0 feet above the water table, thus the force main is not considered a potential receptor.

II.B.2. Stratigraphic Boring Logs

The local stratigraphy of HAAF and the 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 in offshore and inner continental shelf, barrier island, and marsh/lagoonal-type environments. According to the Geologic Map of Georgia, clay beds of marsh origin, which were deposited on the northwest 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 located 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 based on the CAP-Part B SI soil boring logs. Cross-sections A-A' (southwest/northeast), B-B' (north/south), and C-C' (northwest/southeast), and D-D' (northwest/southeast) presented in Figure 3, show the site geology as determined by drilling and sampling activities.

II.B.4. Geotechnical Analysis

Disturbed soil samples were collected from soil borings AF-03, AF-05, AF-11, AF-12, AF-16, AF-18, AF-19, AF-20, AF-23, and AF-24 in order to determine selected engineering properties of the saturated zone underlying the USTs 25 & 26 site. In addition, an undisturbed soil sample was collected from soil boring AF-01. The engineering properties measured included Unified Soil Classification System (USCS) classification, grain size, moisture content, Atterberg limits, porosity, specific gravity, and permeability, as presented in Table 7 and Attachment A. The methods used for performing the geotechnical analyses were American Society for Testing and Materials (ASTM) D 422 (grain size distribution), ASTM D 2216 (moisture content), ASTM D 4318 (Atterberg Limits), ASTM D 5084 (permeability), and EM 1110-2-1906 (specific gravity and porosity).

II.B.5. Direction of Groundwater Flow

II.B.5.a. Well construction details

Following contact with fully saturated material in a soil boring, a water level measurement was taken to determine the remaining depth to be drilled. This measurement was necessary to ensure the placement of at least 5.0 feet of well screen below the water table, in accordance with the work plan. Due to the shallow depth of the water table, less than 4.0 feet BGS, the screen length, filter pack height above the screen, and thickness of the bentonite seal were modified in the field.

Monitoring well casing consisted of ¾- or 2-inch inside diameter schedule 40 flush-thread polyvinyl chloride (PVC) risers and screens in 5- and 10-foot sections. The well screen slot size was 0.010 inches. Table 8 summarizes construction details for Part B SI monitoring wells. Well construction diagrams are presented in Appendix VII. 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 feet 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 × 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 SI and from the new monitoring wells installed during the CAP-Part B SI groundwater sampling activities in October 1999. Data obtained from these measurements are presented in Table 9. During the Part A SI in November 1998, groundwater flowed to the south-southeast with a gradient of 0.020 ft/ft. A complete

round of water level measurements for the CAP-Part B SI were collected in December 1999 to construct a groundwater potentiometric surface map (Figure 20). During the CAP-Part B SI in December 1999, groundwater flowed to the south-southeast with a gradient of 0.018 ft/ft.

II.B.5.c. Equipotential flow net

Equipotential flow nets based on December 1999 water level measurements and the contoured potentiometric surfaces are presented in Figure 21.

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 Soils

During UST closure activities in 1998, the tanks were closed in-place with a concrete slurry. Soils were not excavated or remediated during in-place closure activities. No further excavation of potentially contaminated backfill or native soils 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, or was it required based on known site conditions.

III.B.2. Remediate Groundwater Contamination

The CAP-Part B SI documented groundwater contamination that exceeded IWQS in four CAP-Part B SI wells or borings. Benzene exceeded its IWQS in 7 of the 101 CAP-Part B groundwater samples. The results of the CAP-Part B SI suggest that benzene concentrations within the plume are above the IWQS, and concentrations at the perimeter of the plume are below the MCL of 5 µg/L.

Groundwater is flowing towards the southeast, and conservative fate and transport modeling using the Analytical Transient 1-, 2-, 3-Dimensional Model (AT123D) (Attachment B) predicts that benzene (the most conservative representative compound) may exceed its IWQS at the drainage ditch located 75 feet southeast of the site. The model results for this compound indicates that there is no groundwater impact at a distance of 700 feet from the area of highest contamination. However, actual groundwater results indicate that the benzene concentrations in excess of the applicable IWQS does not reach the drainage ditch. Even though there is a small area (25 ft × 60 ft) of the benzene plume that exceeds the ACL of 340 µg/L, monitoring only is recommended for this site.

In addition to the BTEX contamination at the site, the CAP-Part B documented the presence of TCE in groundwater. The source and extent of this contamination were not determined during the CAP-Part B SI. However, Fort Stewart DPW is 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 this document is intended to monitor the shallow BTEX contamination and deep TCE contamination. Additional investigative activities are necessary to determine the extent and source of the TCE plume prior to remediation, if required. A non-intrusive investigation using geophysical instrumentation will be conducted in April 2000, and based on those results, an SI plan will be prepared under a separate document (i.e., CAP-Part B Addendum or similar) to address the investigation of the TCE plume.

III.B.3. Remediate Soil Contamination

During the 1992 Phase II SI, the GA EPD action levels at the time were 100 mg/kg for BTEX and 500 mg/kg for TPH. In correspondence dated July 31, 1998 (Logan 1998), GA EPD approved the use of these action levels at the USTs 25 & 26 site. During the CAP-Part B SI, the ATLs were calculated for specific compounds. Fort Stewart DPW proposes to use the ATL for benzene of 0.159 mg/kg (Appendix VI) as the remediation level for the site.

The results from the in-place closure and CAP-Part B SI indicated that one and three soil samples, respectively, exceeded GUST STLs (i.e., Table A, columns 2) for benzene. The benzene concentrations are below the risk-based screening level (i.e., 197.4 mg/kg) that is protective of soil exposure during industrial land use. The CAP-Part B benzene concentrations in soil were below the revised ATL for benzene of 0.159 mg/kg that was developed based on fate and transport modeling. The site is located beneath 10 to 12 inches of concrete, which prevents incidental contact with the soil. Since numerous soil samples were collected around the tanks and distribution piping during the in-place closure and CAP-Part A investigation and only one sample contained a benzene concentration above the ATL, active remediation of soil is not recommended.

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

A risk-based approach was used to determine the need for further action at the USTs 25 & 26 site. Due to the nature of the contamination (petroleum hydrocarbon contamination of groundwater), the risk-based approach was limited to human health concerns. Ecological risk concerns are negligible because of the lack of habitat available for ecological receptors at the site due to the 10 to 12 inches of concrete overlying the immediate area of the former USTs. The analytical results from surface water and sediment sampling in the drainage ditch indicate that the habitat potentially associated with the drainage ditch is not impacted by the former UST operations.

The methods for assessing human health concerns for the site were derived from GUST CAP-Part B guidance (GA EPD 1995) and recent GA EPD guidance (GA EPD 1996). These were supplemented by the additional guidance documents on risk assessment methods referenced in this section. In general, the risk-based corrective action (RBCA) approach is performed in two steps:

1. Results are screened against readily available regulatory levels and risk-based screening levels to identify chemicals of potential concern (COPCs).

2. Site-specific ACLs are developed for COPCs using the results of the fate and transport modeling and identified receptor locations.

The following sections present the conceptual model of the exposure setting and potential receptors as well as the general methodology employed to perform the screening for COPCs and the development of ACLs.

III.B.4.a. Potential receptor survey

The exposure assessment identifies any potentially complete pathways between the contaminant source and potential receptors. This involves identifying potential current and future receptors, release mechanisms through which contamination might come into contact with the receptors, and routes of exposure through which receptors might be exposed. Figure 22 presents potentially complete and incomplete pathways for contaminant sources at the USTs 25 & 26 site.

The USTs 25 & 26 site is located within an active military installation and within an access-controlled fence of a secured motorpool. The land use at the site is currently military industrial. Installation housing areas are located approximately 1,200 feet to the northwest and 1,600 feet to the northeast. A drainage ditch is located approximately 75 feet southeast (downgradient) of the site.

No connection between site contamination and current off-site receptors has been identified. Site contamination has migrated to the Surficial Aquifer. The Hawthorn Group, which is approximately 90 feet of clay, separates the Surficial Aquifer from the deep drinking water aquifer, the Floridan Aquifer. There appears to be no vertical migration from the Surficial Aquifer to the Floridan Aquifer. None of the HAAF's current water supply wells are located downgradient of the USTs 25 & 26 site. The Hawthorn Group, a thick and highly effective confining unit, separates the water supply wells from the Surficial Aquifer.

Current on-site receptors have not been identified for the site. Potential future on-site receptors might include industrial workers and military residents.

Potential future on-site industrial receptors may come in direct contact with site soil contamination during construction or excavation activities. No near-term on-site receptors are likely to come into contact with groundwater unless the Surficial Aquifer discharges into the drainage ditch.

III.B.4.b. Screening for chemicals of potential concern

III.B.4.b.1. Screening Methodology

The purpose of a risk evaluation screening is to identify the COPCs and areas of concern at a site, and possibly to identify sites for which no further action is needed. The first step in the risk process uses screening levels that are readily obtainable and that, due to their conservative nature, can be used with a high degree of confidence to indicate sites for which no further action is required.

An American Society for Testing and Materials (ASTM 1995) Tier 1-type risk evaluation process will be applied to the data collected for the USTs 25 & 26 site to identify any COPCs and media for which no further action is needed. The risk evaluation screen involves the steps listed below:

- identify potential migration and exposure pathways associated with the site, and identify potential exposure scenarios that should be used to select screening levels;
- identify risk-based screening levels and regulatory-based screening levels for each contaminant;
- compare site-related concentrations to screening levels to determine if any COPCs exist at the site; and
- compare detection limits to screening levels to identify potential false-negative screening results.

The screening levels for the USTs 25 & 26 site data have been taken from the following sources based on GA EPD guidance (GA EPD 1996):

- Georgia IWQS (GA EPD 1998),
- GUST STLs (i.e., Table A, column 2),
- soil screening levels developed by the U.S. Environmental Protection Agency (EPA) (1996), and
- soil and groundwater risk-based concentrations developed by EPA Region 3 (EPA 1999).

These values reflect screening levels based on a combination of regulatory screening levels (i.e., IWQS and GUST STLs), and calculated risk-based values (i.e., EPA Region 3 risk-based concentrations).

Screening levels inherently incorporate assumptions about land use. In identifying COPCs, it is generally accepted that screening levels will reflect any potential future land uses and, thus, they usually reflect a conservative residential use scenario (EPA 1991; EPA 1996; ASTM 1995). Based on GA EPD guidance, risk-based screening levels reflect residential land use for groundwater and industrial land use for deep soils (i.e., > 2 feet BGS) (GA EPD 1996).

Default residential exposure scenarios for groundwater assume that use of the land could someday be residential and that the following exposures could occur:

- ingestion of groundwater, and
- inhalation of volatiles during showering.

The default industrial exposure assumptions for deep soils (i.e., > 2 feet BGS) assume that the following exposures could occur:

- incidental ingestion of soil, and
- inhalation of volatiles and dust.

EPA's *Soil Screening Guidance* (EPA 1996) provides two options for selecting soil values that address protection of groundwater. One value assumes no contaminant dilution or attenuation would occur between the soil and groundwater; a second value assumes a 20-fold dilution attenuation factor (DAF). A DAF of 20 was used to develop soil screening values protective of groundwater at the USTs 25 & 26 site.

If applicable or relevant and appropriate requirement (ARAR)- or risk-based values are not available, it generally means that (1) the chemical is not considered to be toxic except perhaps at extremely high concentrations (e.g., aluminum, sodium); (2) the dose-response data do not indicate a toxic effect; or (3) EPA is currently reviewing toxicity information, and no reference dose or cancer slope factor is currently available.

III.B.4.b.2. Screening Results

The risk screening process is a systematic screening of sample results to determine site-related COCs. Constituent concentrations below risk- or regulatory-based screening levels are not considered COCs and are not evaluated further. Table 10 presents the results of the risk-based screening for the CAP-Part B SI soil data. Table 11 presents the results of the risk-based screening for the CAP-Part B SI groundwater data.

Twenty-seven soil samples were collected during the Part B SI for the USTs 25 & 26 site. Benzene was detected above GUST screening levels in three samples and above risk-based screening levels (i.e., leaching to groundwater) in two samples. Benzene, ethylbenzene, toluene, xylenes, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, pyrene, and TPH were detected below screening levels. Benzene was identified as a COPC for USTs 25 & 26 site soils.

Detection limits for benzo(a)anthracene, benzo(a)pyrene, and dibenzo(a,h)anthracene were above risk-based screening levels one, five, and eight samples, respectively. The ethylbenzene and xylenes results in sample AF0411 were rejected (R qualified) due to extremely low area counts or a major drop off in performance of the laboratory controls. No COPCs for soils were selected for the site based on the detection limit screening or qualifier screening.

One hundred and one groundwater samples were collected for the USTs 25 & 26 site during the CAP-Part B SI. Benzene was detected above its IWQS in 8 samples and above risk-based screening levels in 67 wells.

Benzo(a)pyrene was detected above its IWQS and risk-based screening levels in four locations. Naphthalene was detected above risk-based screening levels in six locations. Ethylbenzene, toluene, xylenes, acenaphthene, fluorene, naphthalene, phenanthrene, and pyrene were detected below screening levels. Benzene, benzo(a)pyrene, and naphthalene were identified as COPCs for USTs 25 & 26 site groundwater.

The detection limit for benzene exceeded the risk-based screening level during the CAP-Part B. Detection limits achieved for several PAHs exceeded their respective IWQS and/or risk-based screening levels for the groundwater data. For these constituents, screening levels represent values below analytically achievable levels. The PAH fraction for samples AF0112, AF0812, AF0912, and AF1012 were rejected due to a surrogate recovery of 0%. No additional COPCs were selected for groundwater based on the detection limit or qualifier screening.

III.B.4.c. Site-specific levels

Detections exceeding the conservative generic screening levels are considered COPCs. ACLs are developed, when appropriate, for the COPCs using site-specific information. ACLs were developed from available regulatory screening levels. When regulatory screening levels were not available, then ACLs were developed based on risk-based levels.

III.B.4.c.1. Alternate Threshold Levels

Benzene was identified as a COPC for soil at the site. ATL calculations for this constituent are presented in Appendix VI and are based on the migration of leachate to the water table using the results of the SESOIL modeling. The ATL was calculated to be 0.159 mg/kg for benzene. One soil sample (HAAF-260-PIPE-D-2-S) collected during the in-place closure exceeded this ATL for benzene.

III.B.4.c.2. Alternate Concentration Limits

Benzene, benzo(a)pyrene, and naphthalene were identified as COPCs for groundwater at the site. To be conservative, the chemical properties of benzene were used to evaluate contaminant migration from the site. Benzene was modeled to a potential downgradient location where a receptor may come in contact with migrating site contamination, which was determined to be a drainage ditch located 75 feet downgradient from the former tanks. Fate and transport modeling was used to develop a site-specific DAF between the source and the receptor location (see III.B.4.c.3 below). The modeling results estimated a DAF for benzene of 4.8 for the drainage ditch. The DAF for naphthalene to the drainage ditch is 3600. Compound specific regulatory levels or risk-based screening criteria were used in conjunction with the site-specific DAFs identified for the potential migration of contamination from the site to determine the ACL for each compound. The ACL calculations are presented in Appendix VI. The ACLs associated with the drainage ditch were determined to be

- 340 µg/L for benzene (i.e. 4.8 × 71.28 µg/L),
- 936 µg/L for benzo(a)pyrene (i.e. 3600 × 0.0311 µg/L),
- 23,400 µg/L for naphthalene (i.e. 3600 × 6.5 µg/L).

Benzene was the only compound to exceed its respective ACL. The benzene concentrations exceeded the ACL in well AF-07 and vertical profile AF-30.

III.B.4.c.3. Fate and Transport Model

Site-specific DAFs between the source and the receptor locations were developed. The DAF is a numerical value that represents the attempt to mathematically quantify the natural physical, chemical, and biological

processes (e.g., advection-dispersion, sorption-retardation, biodegradation, and volatilization) that result in the decrease of a chemical concentration in an environmental medium. In simple terms, the DAF is the ratio of chemical concentration at the source (or the point of origin) to the concentration at the exposure point. The DAFs reflect the natural attenuation concepts outlined in the ASTM's RBCA protocol (ASTM 1995).

Fate and transport models are used as tools for developing DAFs. The application of fate and transport models at any release site must ensure that the modeling results are protective of human health and the environment. Therefore, the selection process of a predictive model at a release site must consider its performance, characteristics, and applicability to the site being considered. The following characteristics were considered before selecting an appropriate model for the Installation:

- the model provides conservative predictions,
- the model is technically sound,
- the model is a public-domain model or is readily available,
- the model has received adequate peer review,
- the model has been applied to other similar sites, and
- the model is easy to use.

The AT123D meets all of the above criteria and was selected for performing fate and transport analysis for this site. AT123D is a well-known and commonly used analytical groundwater pollutant fate and transport model. This model computes the spatial-temporal concentration distribution of chemicals in the aquifer system and predicts the transient spread of a chemical plume through a groundwater aquifer. The fate and transport processes accounted for in AT123D are advection, dispersion, adsorption/retardation, and decay. This model can be used as a tool for estimating the dissolved concentration of a chemical in one, two, or three dimensions in the groundwater resulting from a mass release (either continuous or instant or depleting source) over a source area (i.e., point, line, area, or volume source).

SESOIL is used to simulate the vertical transport of contaminants from the source areas down through the vadose zone to the shallow groundwater (water table). SESOIL is an acronym for Seasonal Soil compartment model and is a one-dimensional, vertical transport code for the unsaturated soil zone, and is designed to simultaneously model water transport and pollutant fate. The program was originally developed by EPA and has been extensively modified to enhance its capabilities (Hetrick et al. 1989, Hetrick et al. 1986, and Hetrick and Travis 1988).

The SESOIL defines the "soil compartment" as a soil column extending from the ground surface through the unsaturated zone to the water table. Processes simulated in SESOIL include both the hydrologic cycle and pollutant cycle, each of which are separate sub-modules in the SESOIL code. The hydrologic cycle includes rainfall, surface runoff, infiltration, soil water content, evapotranspiration, and groundwater recharge. The pollutant cycle includes convective transport, volatilization, adsorption/desorption, and degradation/ decay. A contaminant in SESOIL can partition in up to four phases (liquid, adsorbed, air, and pure).

SESOIL is well recognized and accepted by the scientific community utilizing soil-chemical fate models. Some of the attributes of SESOIL that make it particularly attractive and suitable for the vadose zone soil leaching at this site are as follows:

- SESOIL has been extensively validated and shown to work under a number of scenarios. It has also been used for similar applications in other parts of the country and is capable of providing the information required from this study (Bonazountas, Wagner, and Goodwin 1984; Wagner et al. 1986; Hetrick 1984; Watson and Brown 1985; Hetrick et al. 1986; Melancol, Pollard, and Hern 1986; Hetrick and Travis 1988; Hetrick et al. 1989; Hetrick, Luxmoore, and Tharp 1993).

- SESOIL has the advantage of fewer input requirements and faster run times than more complex unsaturated zone models, while still maintaining considerable resolution of the pollutant front in both time and space.

- The model can be divided into as few as two layers and as many as four layers, with as many as 10 sub-layers in each of the layers. This compartmental nature of the model allows for user-specified tailoring to suit a particular site.

The maximum soil concentration of benzene at this site was above the water table (i.e., 3.3 mg/kg in HAAF-26-PIPE-D-2-S at 2.5 ft). Modeling of leaching to groundwater by percolating rain water was performed with SESOIL in order to determine the predicted maximum concentration in the leachate at the water table interface and the soil ATLs. Since the predicted leachate concentration (i.e., 7130 µg/L) was below the maximum groundwater concentration at the source (i.e., 9940 µg/L), the steady-state model was developed by calibrating the model against the maximum estimated concentration (i.e., 9940 µg/L) beneath the site. The potential receptor is a drainage ditch located approximately 75 feet southeast of the site. The invert depth of the force main for the sanitary sewer, located approximately 5 feet from UST 25, is located approximately 2 feet above the water table, therefore, this utility is not considered a potential receptor.

Vertical migration of the contaminant plume through the confining unit to the Principal Artesian aquifer is improbable. The confining unit has a vertical hydraulic conductivity on the order of 10^{-8} cm/sec and ranges from 15 to 90 feet in thickness. Assuming a vertical gradient of 1.0 ft/ft and an effective porosity of 0.06 (Mills et al. 1985) for the confining unit, the groundwater travel time is estimated to be 87 years. Therefore, it would take more than 400 years for the benzene contamination to migrate through the confining layer. The surficial aquifer in which the contaminant plume is located is not used as a source of drinking water.

The fate and transport modeling results are provided in Attachment B. The ditch located 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. The AT123D model was calibrated to the maximum observed concentration of benzene (i.e., 9940 µg/L) assuming steady-state (continuous) concentration at the source. In reality, the source of benzene will deplete due to biodegradation and natural attenuation. Contaminant fate and transport simulation was performed to predict the maximum concentration at the receptor location over a period of 100 years. The modeling results indicate that benzene will reach the ditch at a concentration of 2080 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 indicate that the 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 it is not being impacted by the site. Therefore, the surface water body adjacent to the USTs 25 & 26, Facility ID #9-025008, site is not impacted from former UST operations.

Based on modeling results the estimated DAF for benzene at the drainage ditch is 4.8. The estimated DAF for naphthalene at the drainage ditch is 3600. Simulations were also performed to predict the maximum concentrations of benzene over a simulation period of two years in the monitoring wells at the site. The predicted two-year maximum concentrations are presented in Table 12.

III.B.4.d. Conclusions and recommendations

The conclusions below are based on a review of the CAP-Part A and CAP-Part B SI results using a risk-based approach:

- Free product was not detected during the CAP-Part A or CAP-Part B SI.

- The horizontal and vertical extent of soil contamination below applicable GUST STLs was delineated during the CAP-Part A and Part B SI.

- The horizontal and vertical extent of groundwater contamination associated with the former UST operations was delineated to below federal MCLs during the CAP-Part B SI.

- Risk-based screening results show that benzene concentrations in soil exceed the initial screening levels. However, using results of the fate and transport modeling, the benzene concentrations during the CAP-Part B do not exceed the site-specific ATL of 0.159 mg/kg.

- Risk-based screening results show that benzene concentrations in groundwater exceed the initial screening levels. However, using results of the fate and transport modeling, the benzene concentrations in one monitoring well exceeds the site-specific ACL of 340 µg/L and the IWQS of 71.28 µg/L.

- Risk-based screening results show that benzo(a)pyrene concentrations in groundwater exceed the initial screening levels. However, using results of the fate and transport modeling, the benzo(a)pyrene concentrations in all of the monitoring wells are below the site-specific ACL of 936 µg/L.

- Risk-based screening results show that naphthalene concentrations in groundwater exceed the initial screening levels. However, using results of the fate and transport modeling, the naphthalene concentrations in all of the monitoring wells are below the site-specific ACL of 23,400 µg/L.

- Contaminant concentrations detected in the surface water and sediment samples collected downgradient of the site do not exceed applicable state or federal standards.

- Fate and transport modeling of benzene assuming a continuous, steady-state source indicates that contamination will exceed the state IWQS at the nearest defined downgradient receptor, the drainage ditch. However, groundwater sampling data indicates that groundwater contamination in excess of the IWQS has not reached the drainage ditch.

- Based on the CAP-Part B data, the environmental site ranking score is 5750 (Appendix X).

Considering the site characteristics, natural attenuation is recommended as the corrective action for the site. Groundwater concentrations during the CAP-Part B exceeded the proposed ACL of 340 µg/L in one monitoring well, thus a monitoring only plan is recommended to confirm modeling predictions. Detailed sampling and analysis recommendations are provided in Section III.D. Fort Stewart will also evaluate the cost effectiveness of conducting a hot-spot treatment versus monitoring only.

III.C. DESIGN AND OPERATION OF CORRECTIVE ACTION SYSTEMS

III.C.1. System Effectiveness/Basis for Selection

The selected corrective action approach, natural attenuation, was chosen following evaluation of numerous established and innovative active and passive remediation alternatives. A three-step screening process was used to select the preferred remedy for the USTs 25 & 26 site. This alternative selection process is illustrated in Figure 23.

III.C.1.a. Theory and feasibility

The presumed remedies for dissolved hydrocarbon contamination in groundwater are provided in Table 13. Based on the hydrocarbon concentrations above the proposed ACL in only one well and the small area (25 ft × 60 ft) of the benzene plume, natural attenuation is the preferred alternative. Natural attenuation is based on the premise that fuel-type hydrocarbons are readily biodegraded in most environmental systems. Biodegradation of BTEX has been documented for sites similar to the USTs 25 & 26 site (e.g., shallow water table, permeable silty sand). In fact, the conditions at the USTs 25 & 26 site are similar to other sites that are ideal for biodegradation (Abou-Rizk et al. 1995). Site groundwater flow and the geology are all conducive to aerobic biodegradation, which is known to produce the most rapid biodegradation rates for hydrocarbons. Finally, the primary source (i.e., USTs) has been removed; therefore, subsurface conditions (dissolved oxygen, oxidation-reduction potential, background nutrient availability) will steadily improve with time. The piping that remains in the ground was purged during closure and filled with grout and is no longer a contributing source.

Other remedial options that were considered introduce more risk of exposure due to contaminant release into other matrices (soil gas, air, treatment canisters) or excavation. In addition, the excessive costs associated with an aggressive remediation system do not result in added protection to the industrial worker receptor.

The Georgia IWQS for benzene of 71.28 µg/L was exceeded at one monitoring well during the CAP-Part B SI. This well AF-07 is located adjacent to vertical profile borings AF-21 and AF-30 where the concentrations also exceeded the IWQS. Well AF-07 was the only well where the benzene concentrations exceeded the ACL of 340 µg/L. Benzo(a)pyrene and naphthalene were also selected as COPCs based on estimated concentrations above screening levels; however, the concentrations were well below the respective ACLs of 936 µg/L and 23,400 µg/L.

The proposed locations of the three deep wells installed in January 2000 are presented in Figure 24. These wells will be screened at intervals corresponding to the highest TCE concentrations in the nearby vertical profile borings.

III.D. IMPLEMENTATION

III.D.1. Milestone Schedule

A milestone schedule for the monitoring only plan has been prepared. A Gantt chart showing milestone activities and anticipated duration is provided in Figure 25. The actual time required to achieve the site remedial levels (i.e., ACLs) may be greater, or less, than that presented in Figure 25. Therefore, Fort Stewart will notify GA EPD USTMP of any significant changes to the proposed monitoring time and will provide GA EPD USTMP an updated Gantt chart, as necessary.

III.D.2. Progress Reporting

Annual monitoring reports will be submitted to GA EPD 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 the monitoring wells, which will be requested in the final monitoring only report. Decommissioning of monitoring wells will be completed according to the U.S. Army Corps

of Engineers 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 submitting 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 the monitoring wells remain in conformance with GA EPD and EPA performance standards will be made as needed.

III.D.5. Periodic Monitoring

Groundwater samples from AF-02, AF-05, AF-07, and AF-12 will be collected semiannually and analyzed for BTEX. In addition, groundwater samples will be collected from the deep wells AF-40, AF-41, and AF-42 semiannually and analyzed for VOCs. Benzo(a)pyrene and naphthalene were the only 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 semiannual sampling. 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 once the extent of that contamination has been determined.

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 where 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 under a future document once the extent of that 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 terminating the monitoring only program. Once the benzene ACL and ATL are achieved, monitoring only 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 monitoring program will be removed from the site.

III.E. PUBLIC NOTIFICATION

The USTs 25 & 26 site is located entirely within the confines of the Hunter Army Airfield, 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 Directorate of Public Works has complied with the public notice requirements defined by GA EPD guidance by publishing an announcement in the *Savannah Morning News* on September 26 and October 3, 1999. 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 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

Abou-Rizk, J.A., M.E. Leavitt, and D.A. Graves 1995. "In Situ Aquifer Bioremediation of Organics Including Cyanide and Carbon Disulfide" in *In Situ and On-Site Bioreclaimation*, R. Hinchee, ed., Battelle Press, Columbus, Ohio.

Arora, Ram 1984. *Hydrologic Evaluation for Underground Injection Control in the Coastal Plain of Georgia,* Department of Natural Resources, Environmental Protection Division, Georgia Geological Survey.

ASTM (American Society for Testing and Materials) 1995. *Standard Guide for Risk-based Corrective Action Applied at Petroleum Release Sites*, ASTM E 1739-95, approved September 10, 1995.

Clark, W. Z., Jr. and Zisa, A. C. 1976. *Physiographic Map of Georgia*, Department of Natural Resources, Environmental Protection Division, Georgia Geologic Survey.

Earth Tech, Inc. 1999. *Corrective Action Plan-Part A Report for Facility ID: 9-025008, Underground Storage Tanks 25 & 26 at Building 1343, Hunter Army Airfield, Georgia,* March.

EPA (U.S. Environmental Protection Agency) 1991. *Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual, Supplemental Guidance, Standard Default Exposure Factors* (Interim Final), OSWER Directive 9285.6-03, Office of Emergency and Remedial Response, Washington, D.C.

EPA 1995, Bioventing Principles and Practice Manual. EPA/540/R-95/534A/001. Office of Research and Development, September.

EPA 1996. *Soil Screening Guidance*, EPA/540/R-94/101, Office of Solid Waste and Emergency Response, available from U.S. Government Printing Office, Washington, D.C.

EPA 1999. *Risk-based Concentration Table*, EPA Region 3, Office of RCRA Technical and Program Support Branch, April.

Furlow, J. W., 1969. *Stratigraphy and Economic Geology of the Eastern Chatham County Phosphate Deposit*, Department of Mines and Mining, Division of Conservation, Georgia Geologic Survey, Bulletin 82.

GA EPD (Georgia Environmental Protection Division) 1976. *Geologic Map of Georgia*, Department of Natural Resources, Environmental Protection Division, Georgia Geologic Survey (reprinted 1997).

GA EPD 1992. *Groundwater Pollution Susceptibility Map of Georgia.*

GA EPD 1995. Guidance Document for the Preparation of an Underground Storage Tank Corrective Action Plan, Part B, February.

GA EPD 1996. *Guidance for Selecting Media Remediation Levels at RCRA Solid Waste Management Units*, Georgia Environmental Division, Atlanta, Georgia, November.

GA EPD 1998. *Rules of Georgia Department of Natural Resources, Environmental Protection Division, Chapter 391-3-6, Water Quality Control*, May.

Herrick, S. M., 1961. *Well Logs of the coastal Plain of Georgia*, Department of Natural Resources, Environmental Protection Division, Georgia Geologic Survey.

Hetrick, D.M. 1984. *Simulation of Hydrologic Cycle for Watersheds*, paper presented at Ninth IASTED International Conference on Energy, Power and Environmental Systems, San Francisco, CA.

Hetrick, D.M., C.C. Travis, P.S. Shirley, and E.L. Etnier 1986. *Model Predictions of Watershed Hydrologic Components: Comparison and Verification*, Water Resources Bulletin, pp. 803-810.

Hetrick, D.M. and C.C. Travis 1988. *Model Predictions of Watershed Erosion Components*, Water Resources Bulletin, pp. 413-419.

Hetrick, D.M., C.C. Travis, S.K. Leonard, and R.S. Kinerson. 1989. *Qualitative Validation of Pollutant Transport Components of an Unsaturated Soil Zone Model (SESOIL)*, ORNL/TM-10672, Oak Ridge National Laboratory, Oak Ridge, TN.

Hetrick, D.M., R.J. Luxmoore, and M.L. Tharp. 1993. *Latin Hypercube Sampling with the SESOIL Model*, proceedings, Eighth Annual Conference on Contaminated Soils, University of Massachusetts at Amherst, September.

Logan, William 1999. Letter to Ovidio E. Perez (Fort Stewart Directorate of Public Works, Environmental Branch), June 14, 1999.

Logan, William 1998. Letter to Engineering and Housing Director (Headquarters, 24th Infantry Division and Fort Stewart), July 31, 1998.

Melancol, S.M., J.E. Pollard, and S.C. Hern. 1986. "Evaluation of SESOIL, PRZM, and PESTAN in a Laboratory Column Leaching Experiment," *Environmental Toxicology and Chemistry* **5**(10): 865-878.

Miller, James A. 1990. *Groundwater Atlas of the United States*, U.S. Department of the Interior, U.S. Geological Survey, Hydrologic Inventory Atlas 730G.

Mills, W. B., Porcella, D. B., Ungs, M. J., Gherini, S. A., Summers, K. V., Rupp, G. L., and Bowie, G. L. 1985. *Water Quality Assessment: A Screening Procedure for Toxic and Conventional Pollutants: Parts 1, 2, and 3*, EPA/600/6-85/002, EPA Environmental Research Laboratory, Office of Research and Development, Athens, Georgia.

SAIC (Science Applications International Corporation) 1999. *Addendum to Sampling and Analysis Plan for Preliminary Groundwater and Corrective Action Plan Part A/Part B Investigations at Former Underground Storage Tank Sites, Hunter Army Airfield, Georgia*, May.

SAIC 1998. *Work Plan for Preliminary Groundwater and Corrective Action Plan-Part A Investigations at Former Underground Storage Tank Sites, Hunter Army Airfield, Georgia*, August.

U.S. Army Corps of Engineers (USACE) 1992. *Phase II Site Investigation, Tactical Equipment Shop Refueling Station, Building 1343, Hunter Army Airfield, Savannah, Georgia*, April.

Watson, D.B. and S. M. Brown 1985. *Testing and Evaluation of the SESOIL Model*, Anderson-Nichols and Co., Inc., Palo Alto, CA, p. 155.

Wilkes, R. L., Johnson, J. H., Stoner, H. T., and Bacon, D. D., 1974. *Soil Survey of Bryan and Chatham Counties, Georgia*, U.S. Department of Agriculture Soil Conservation Service, 71 pp.

APPENDIX I

REPORT FIGURES

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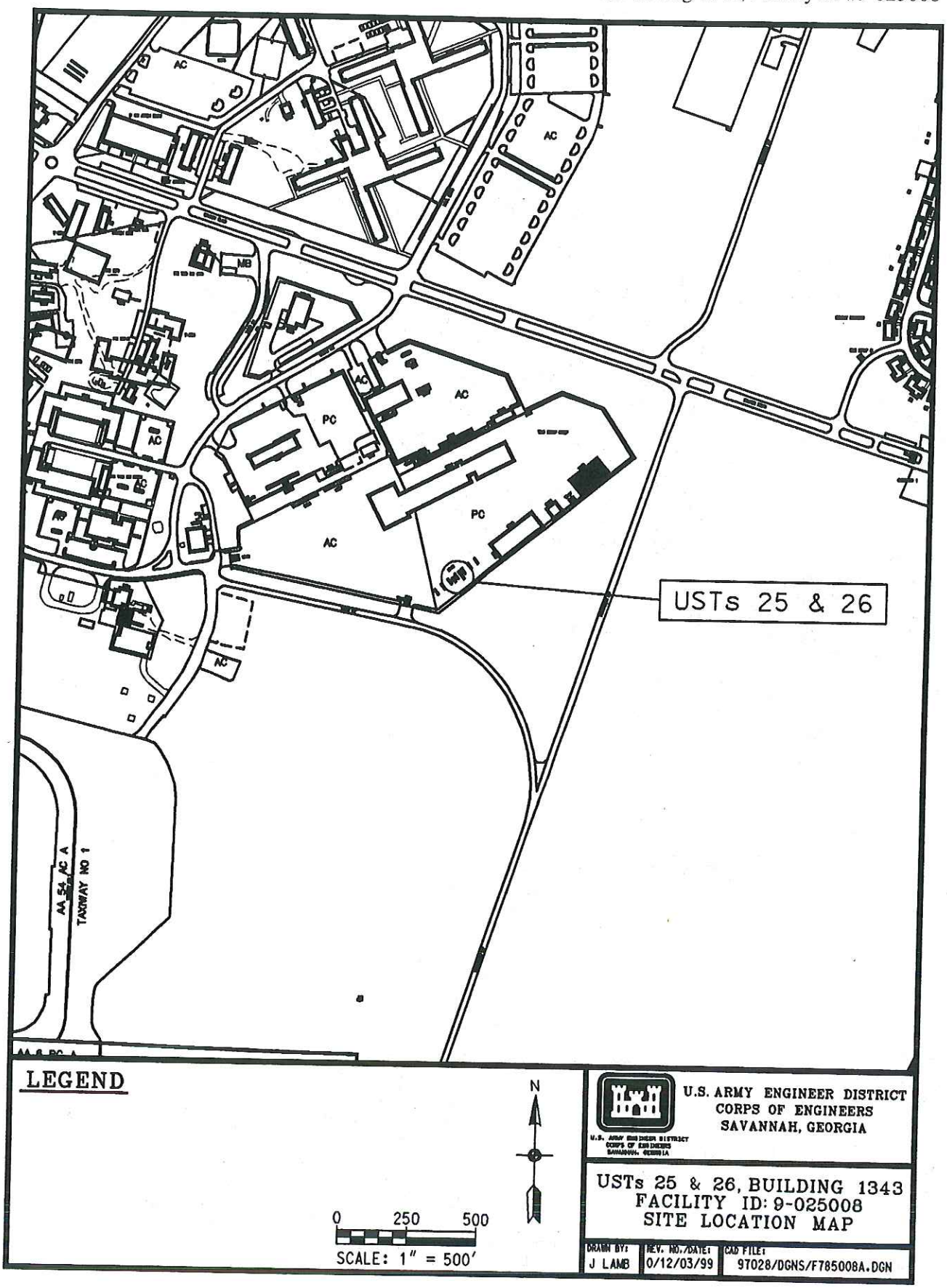

Figure 1. Location Map for the USTs 25 & 26 Site, Facility ID #9-025008

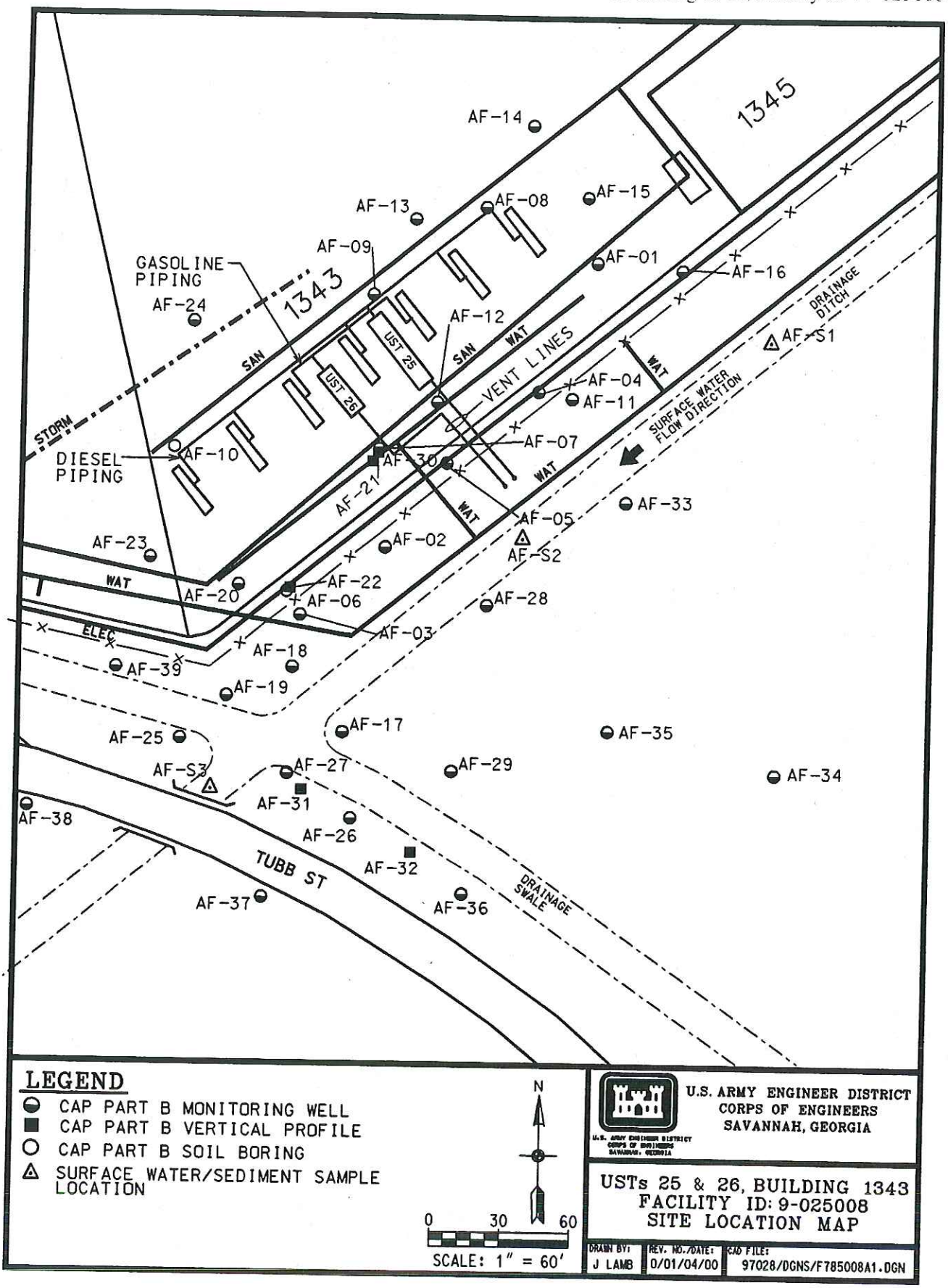

Figure 2. Site Map of the USTs 25 & 26 Site, Facility ID #9-025008

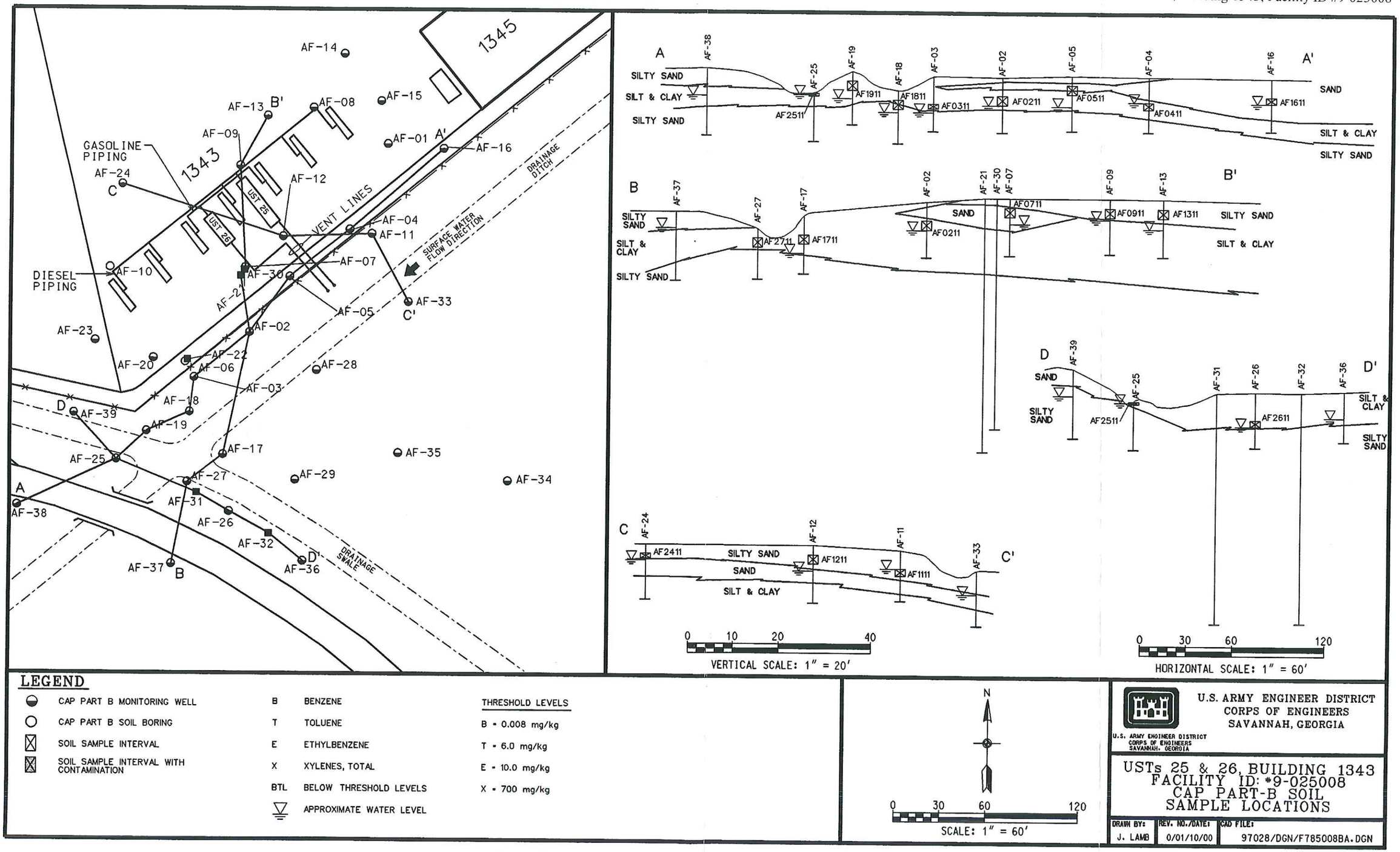

Figure 3. CAP-Part B Soil Sampling Locations at the USTs 25 & 26 Site, Facility ID #9-025008

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AF-01	
AF0111	(4.1-6.1 FT)
B	0.00083J
TPHG	0.219

AF-02	
AF0211	(4.0-8.0 FT)
B	0.0129
T	0.0007J
TPHD	6.3
TPHG	1.32

AF-03	
AF0311	(6.0-7.0 FT)
B	0.0022
TPHG	0.735

AF-04	
AF0411	(5.5-7.0 FT)
B	0.0038J
T	0.001J
TPHD	2.9
TPHG	0.938

AF-05	
AF0511	(2.0-4.0 FT)
B	0.0012J
T	0.0074J
X	0.933J
B(B)F	0.082J
FL	0.116J
N	0.408
PH	0.045J
TPHD	1030
TPHG	1130

AF-06	
AF0611	(2.0-4.0 FT)
B	0.0013J
TPHD	1.6
TPHG	1.1

AF-07	
AF0711	(2.0-4.0 FT)
B	0.069
T	0.0006J
E	0.0539
X	0.0526
N	0.489J
TPHD	1510J
TPHG	4030

AF-08	
AF0811	(2.0-4.0 FT)
B	0.00072J
TPHG	0.223

AF-09	
AF0911	(2.0-4.0 FT)
B	0.0859J
E	2.13
AN	1.1J
B(B)F	0.0833J
B(K)F	0.0761J
C	0.312J
N	17.1
PY	2.29
TPHD	13100J
TPHG	1270

AF-10	
AF1011	(2.0-4.0 FT)
B(A)A	0.278J
B(A)P	0.242J
B(B)F	0.264J
B(G,H,I)P	0.157J
B(K)F	0.274J
C	0.282J
F	0.467J
I(1,2,3-CD)P	0.138J
PY	0.436J
TPHD	1.8J
TPHG	0.281

AF-11	
AF1111	(4.0-5.5 FT)
T	0.002J
FL	0.136J
N	0.449
PH	0.052J
TPHG	0.637

AF-12	
AF1211	(2.0-4.0 FT)
B	0.0012J
E	0.0274
X	0.0018J
AN	17.6J
B(A)A	0.164J
B(A)P	0.113J
B(B)F	0.0729J
C	0.257J
F	0.385J
N	9.6
PY	1.82
TPHD	6420J
TPHG	1320

AF-13	
AF1311	(2.0-4.0 FT)
T	0.0013J
E	0.0025
X	0.0014J
B(A)P	0.0382J
TPHD	17.8J
TPHG	1.05

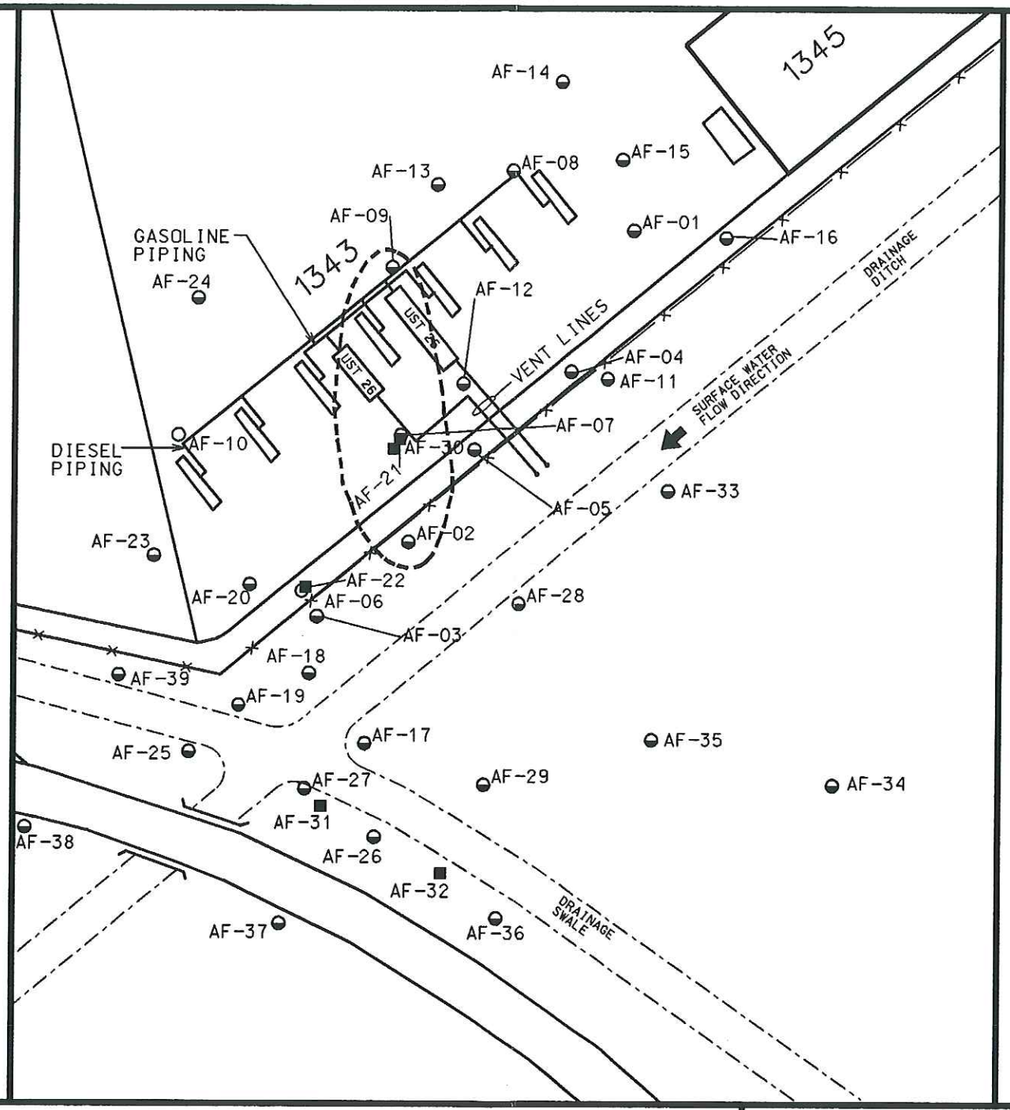
AF-14	
AF1411	(4.0-4.8 FT)
T	0.0007J
E	0.0049
TPHD	14.4

AF-15	
AF1511	(4.0-5.1 FT)
TPHD	2.8

AF-16	
AF1611	(4.0-5.4 FT)
NO DETECTS	

AF-17	
AF1711	(4.0-6.0 FT)
B	0.0036

AF-18	
AF1811	(2.0-4.0 FT)
TPHD	0.84
TPHG	5.14



AF-19	
AF1911	(2.0-4.0 FT)
B(A)A	0.112J
B(A)P	0.0842J
B(B)F	0.0891J
B(G,H,I)P	0.0414J
B(K)F	0.0826J
C	0.118J
F	0.18J
I(1,2,3-CD)P	0.153J
TPHG	0.274

AF-20	
AF2011	(6.0-7.0 FT)
B	0.0065
T	0.0033
E	0.021
TPHD	2
TPHG	0.186

AF-23	
AF2311	(4.0-5.0 FT)
TPHD	5.6
TPHG	0.132

AF-24	
AF2411	(2.0-3.0 FT)
T	0.00068J
B(A)A	0.156J
B(A)P	0.159J
B(B)F	0.137J
B(G,H,I)P	0.129J
B(K)F	0.19J
C	0.184J
F	0.115J
I(1,2,3-CD)P	0.498J
TPHD	21.5

AF-25	
AF2511	(0.0-0.6FT)
T	0.0015J
TPHD	3.4

AF-26	
AF2611	(6.0-7.4 FT)
B	0.0078

AF-27	
AF2711	(2.0-4.0 FT)
NO DETECTS	

AF-28	
AF2811	(4.0-4.9 FT)
TPHD	2

AF-29	
AF2911	(0.0-2.4 FT)
TPHD	2.5
TPHG	0.216J

LEGEND

- CAP PART B MONITORING WELL
- CAP PART B VERTICAL PROFILE
- CAP PART B SOIL BORING
- ESTIMATED AREA OF SOIL CONTAMINATION ABOVE STLs

B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	XYLENES, TOTAL
AN	ANTHRACENE
B(A)A	BENZO(A)ANTHRACENE
B(A)P	BENZO(A)PYRENE
B(B)F	BENZO(B)FLUORANTHENE
B(G,H,I)P	BENZO(G,H,I)PERYLENE
B(K)F	BENZO(K)FLUORANTHENE
C	CHRYSENE
F	FLUORANTHENE

FL	FLUORENE
I(1,2,3-CD)P	INDENO(1,2,3-CD)PYRENE
N	NAPHTHALENE
PH	PHENANTHRENE
PY	PYRENE
TPHD	TPH-DIESEL RANGE ORGANICS
TPHG	TPH-GASOLINE RANGE ORGANICS

NOTE:
SEE SITE LOCATION PLAN FOR LOCATION OF UTILITIES

CONCENTRATIONS IN mg/kg

THRESHOLD LEVELS

B = 0.008 mg/kg

T = 6.0 mg/kg

E = 10.0 mg/kg

X = 700 mg/kg

N

0 30 60 120

SCALE: 1" = 60'

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
CAP-PART B
SOIL ANALYTICAL RESULTS

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Figure 4a. CAP-Part B Soil Sampling Analytical Results at the USTs 25 & 26 Site, Facility ID #9-025008

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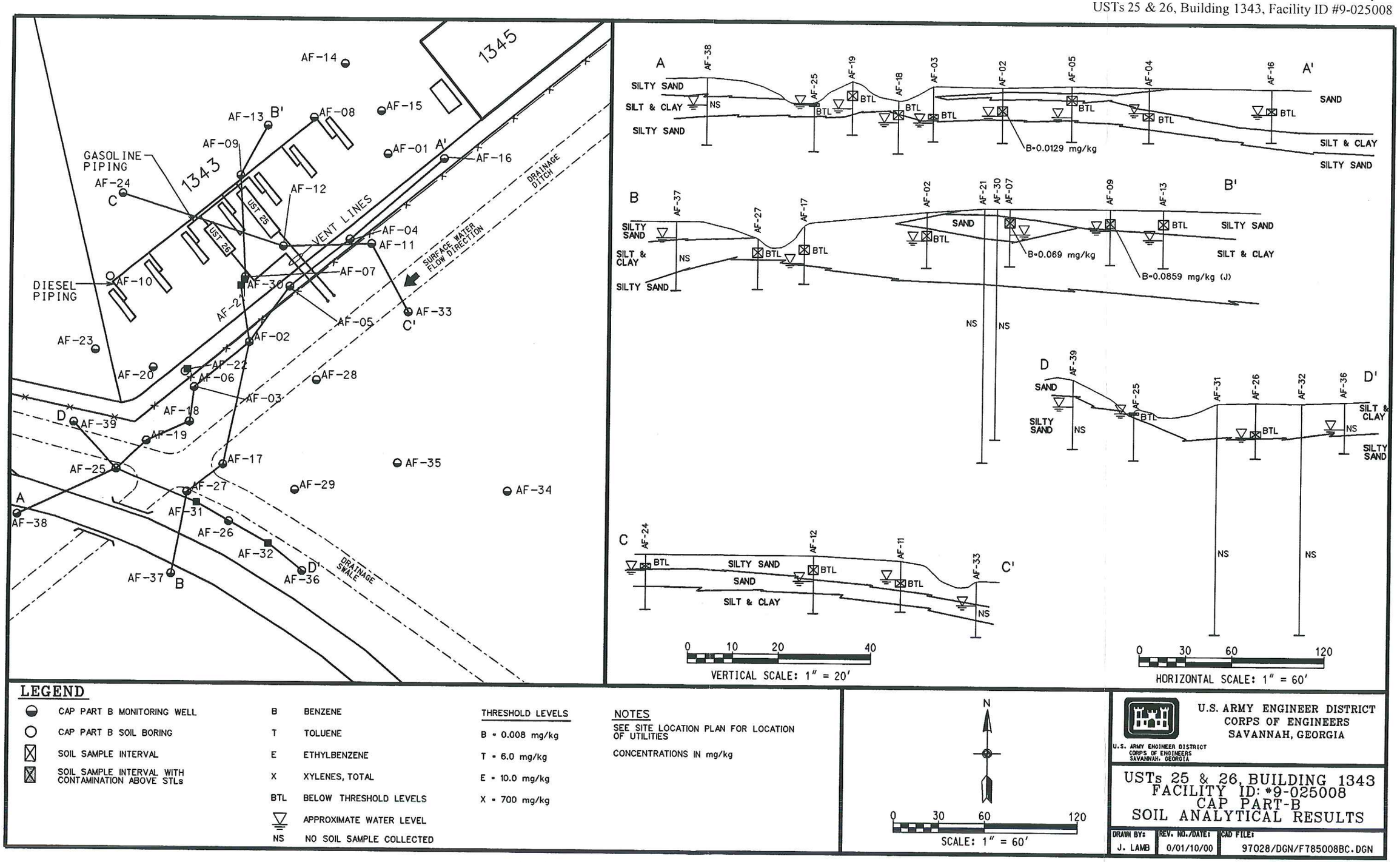

Figure 4b. CAP-Part B Soil Sampling Analytical Results at the USTs 25 & 26 Site, Facility ID #9-025008

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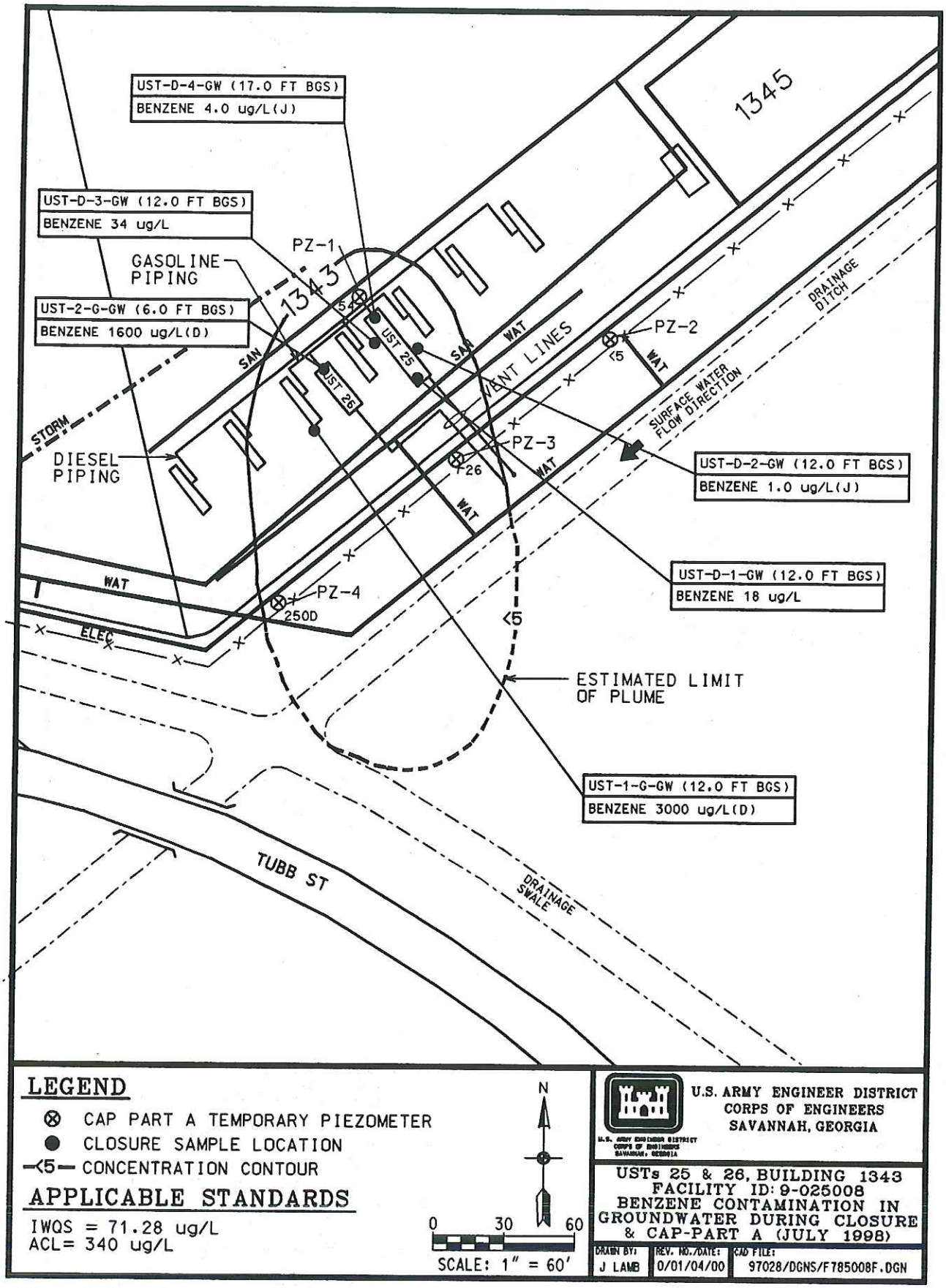

Figure 5. Benzene Contamination in Groundwater Determined During the UST Closure Activities and CAP-Part A Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008

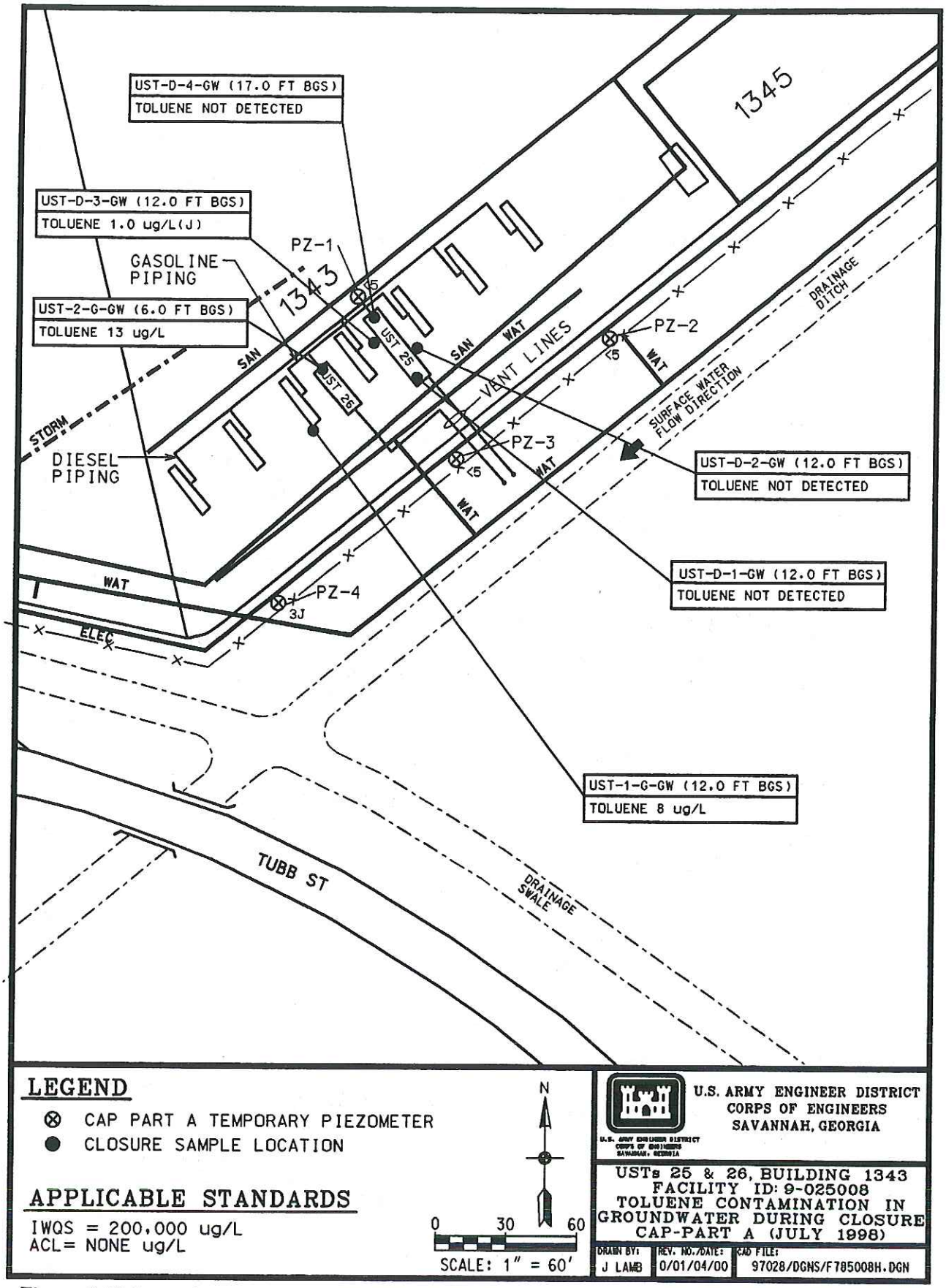

Figure 6. Toluene Contamination in Groundwater Determined During the UST Closure Activities and CAP-Part A Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008

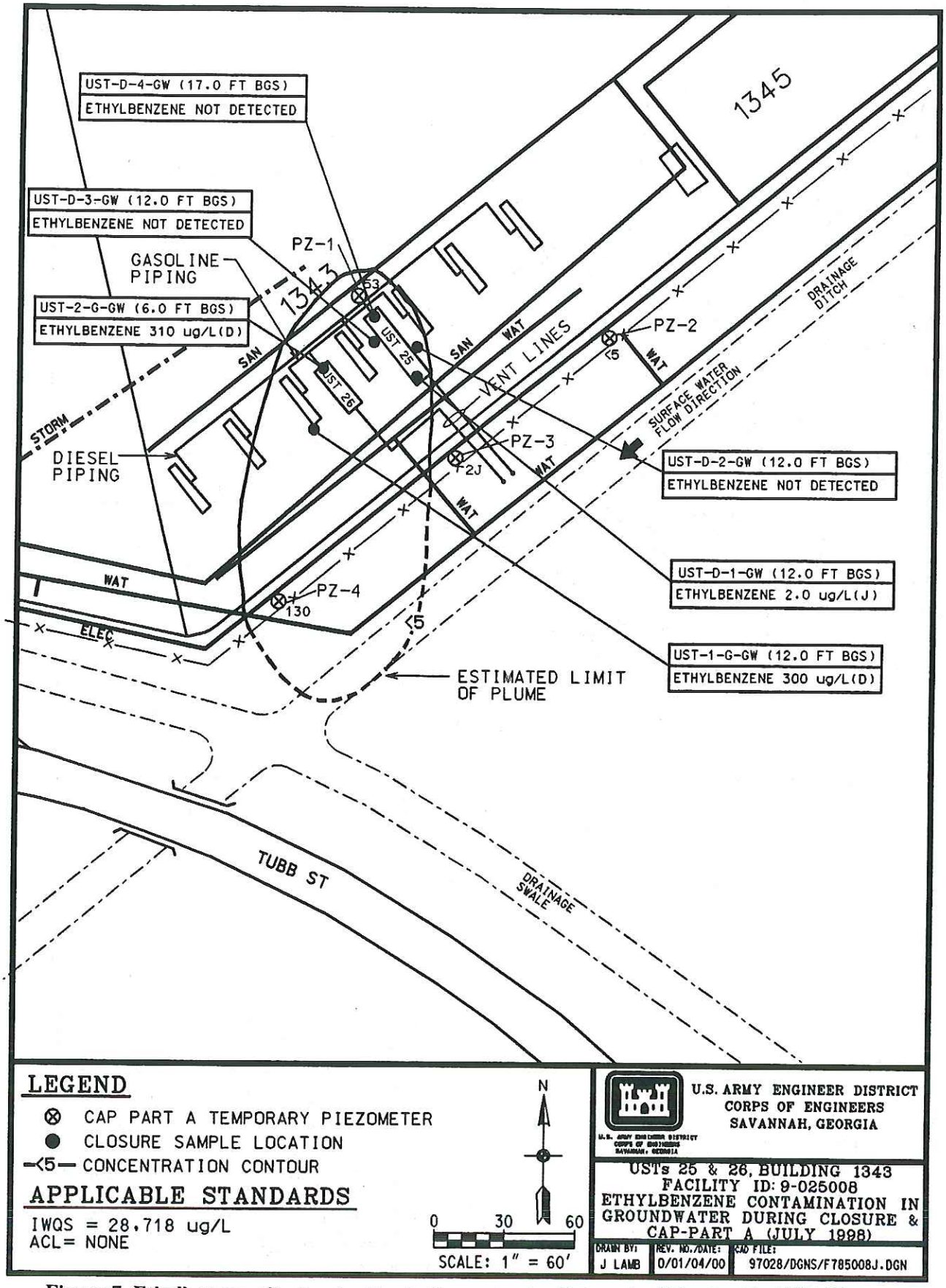

Figure 7. Ethylbenzene Contamination in Groundwater Determined During the UST Closure Activities and CAP-Part A Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008

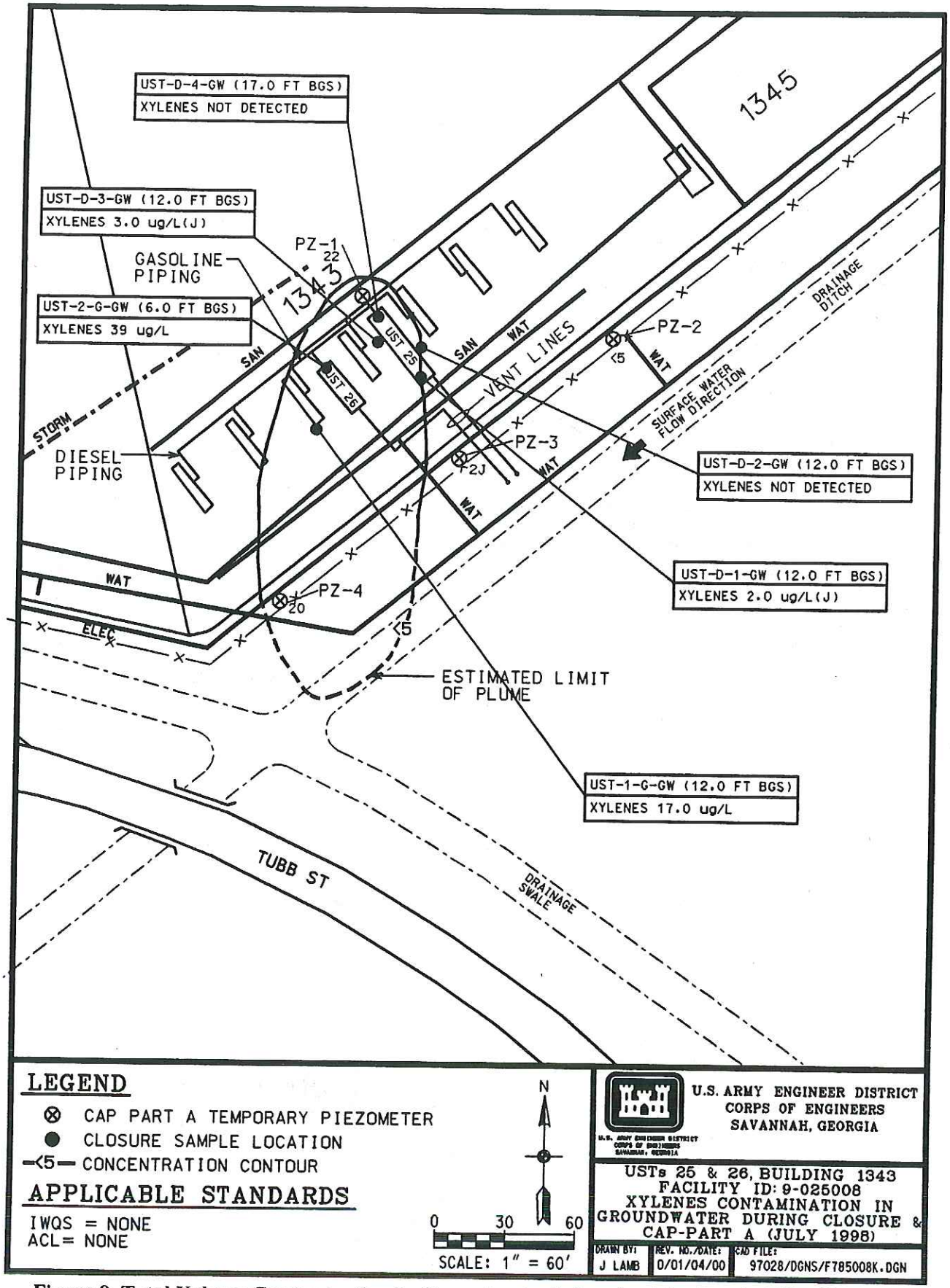

Figure 8. Total Xylenes Contamination in Groundwater Determined During the UST Closure Activities and CAP-Part A Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008

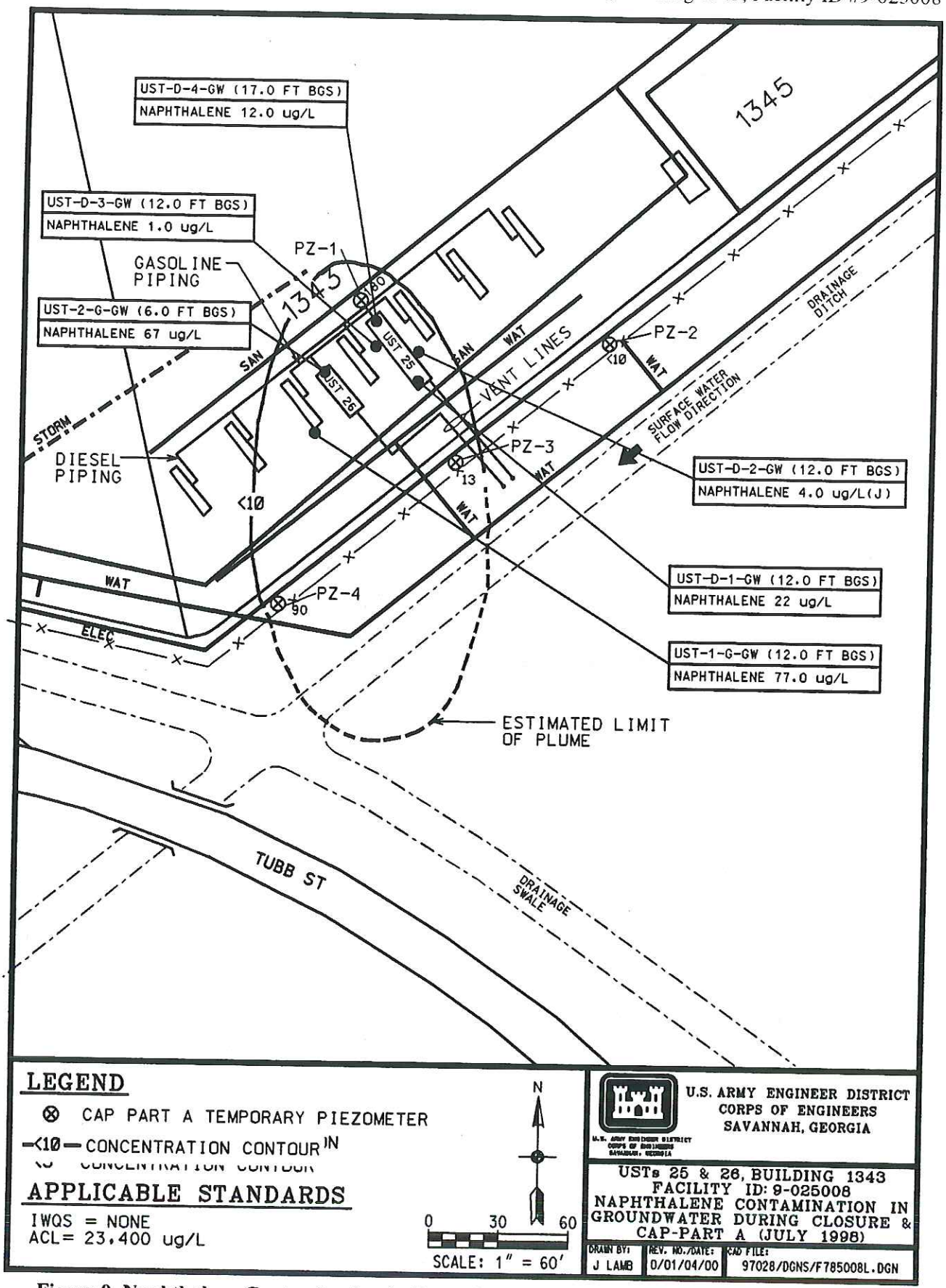

Figure 9. Naphthalene Contamination in Groundwater Determined During the UST Closure Activities and CAP-Part A Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008

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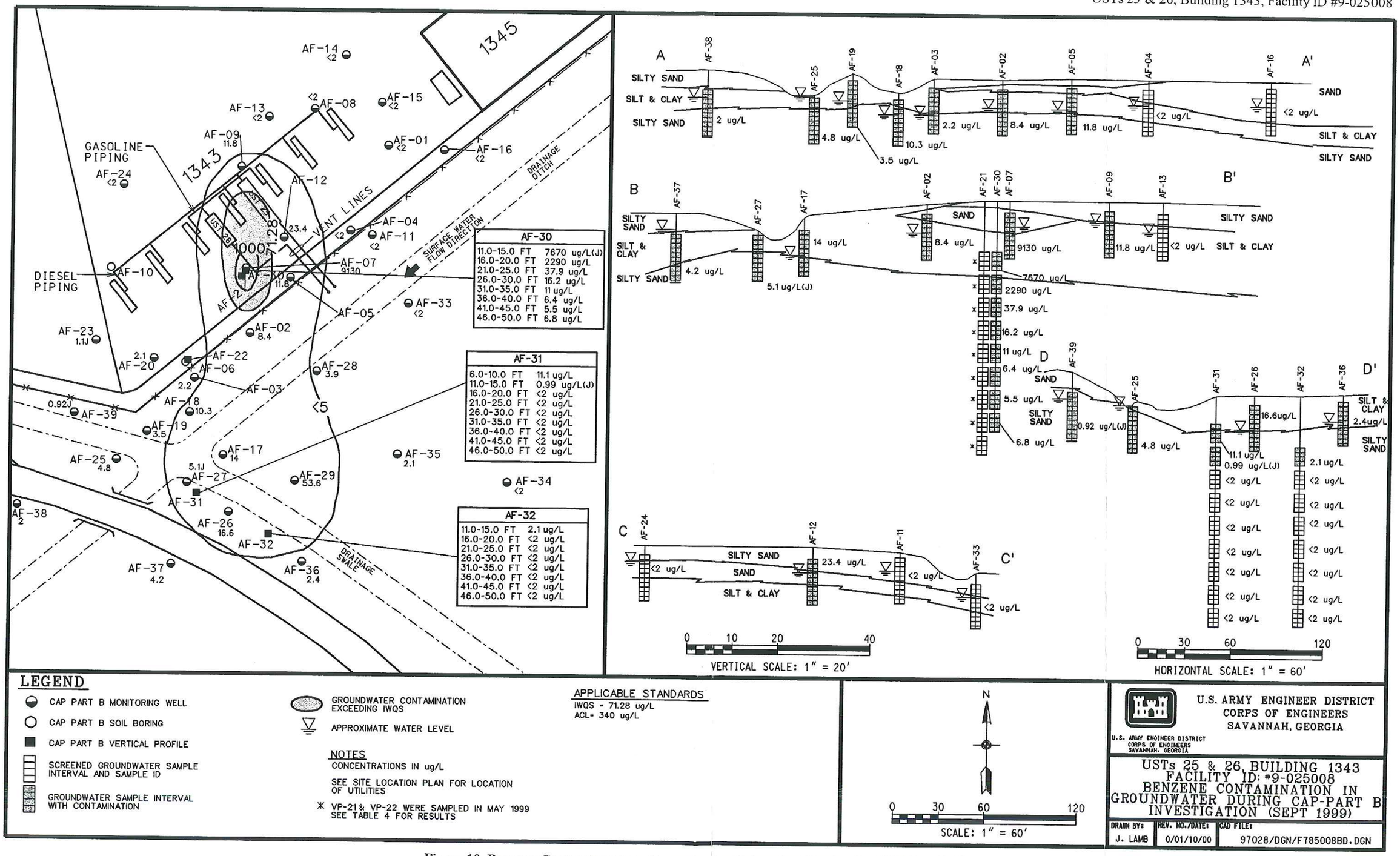

Figure 10. Benzene Contamination in Groundwater Determined During the CAP-Part B Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008

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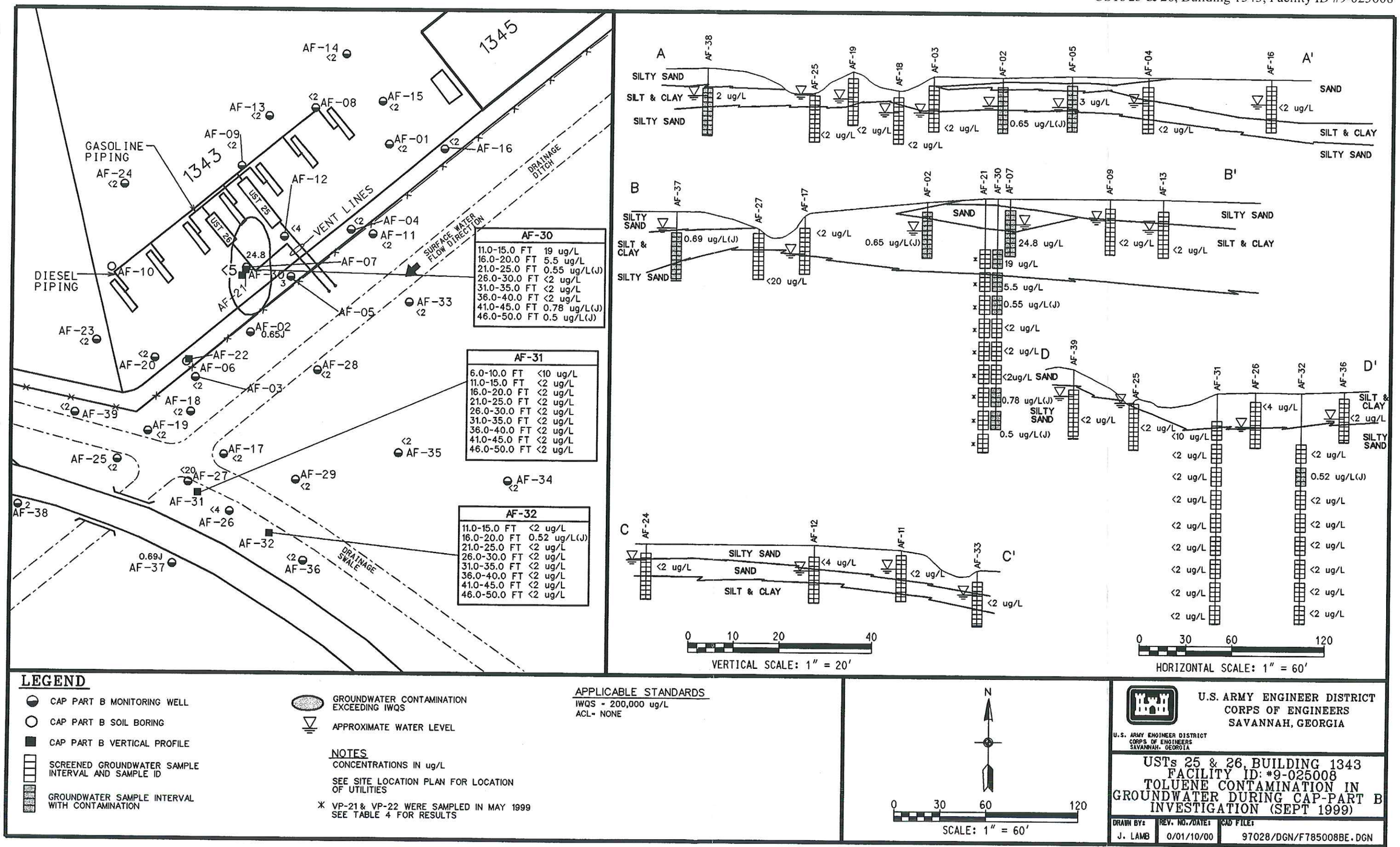

Figure 11. Toluene Contamination in Groundwater Determined During the CAP-Part B Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008

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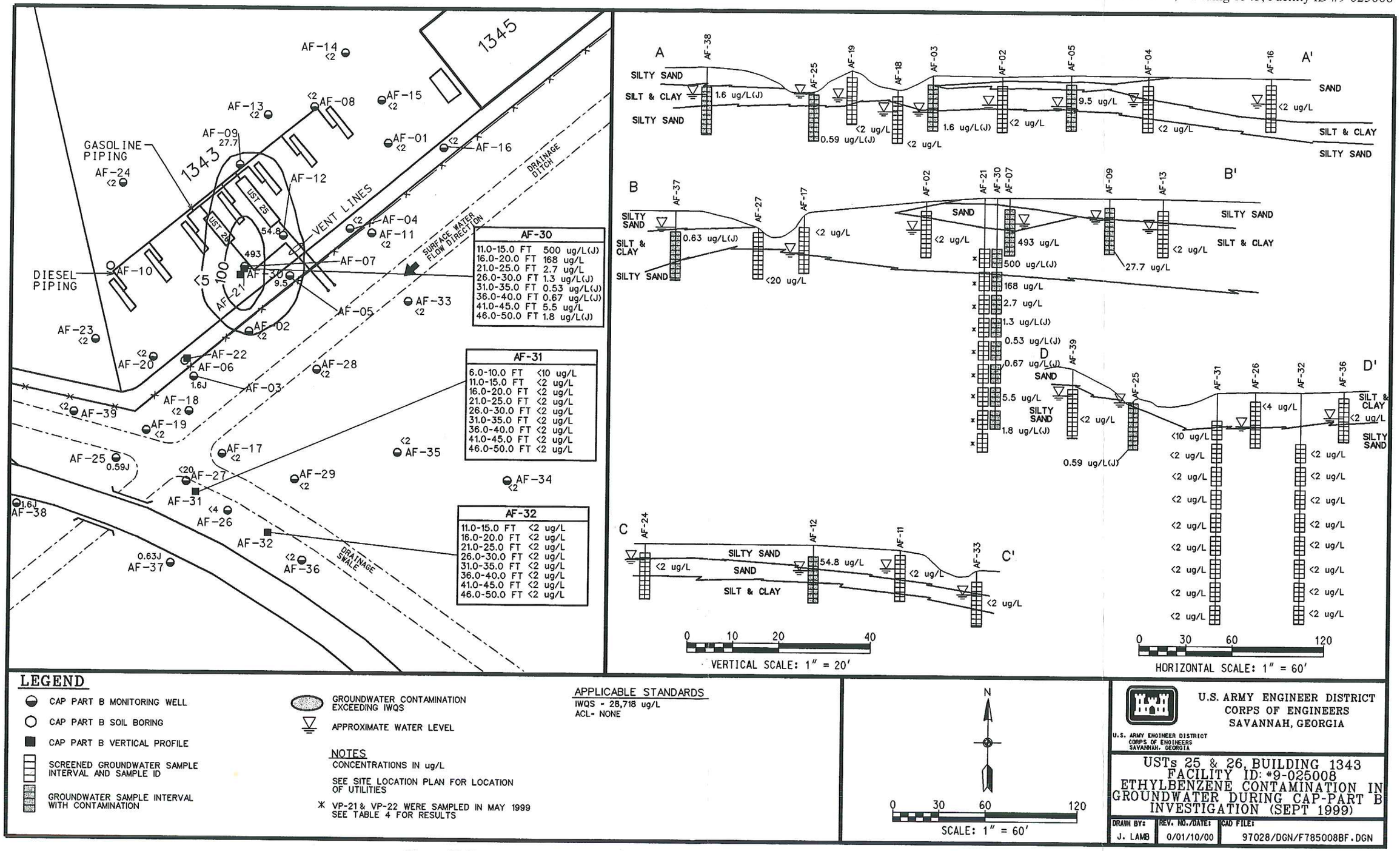

Figure 12. Ethylbenzene Contamination in Groundwater Determined During the CAP-Part B Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008

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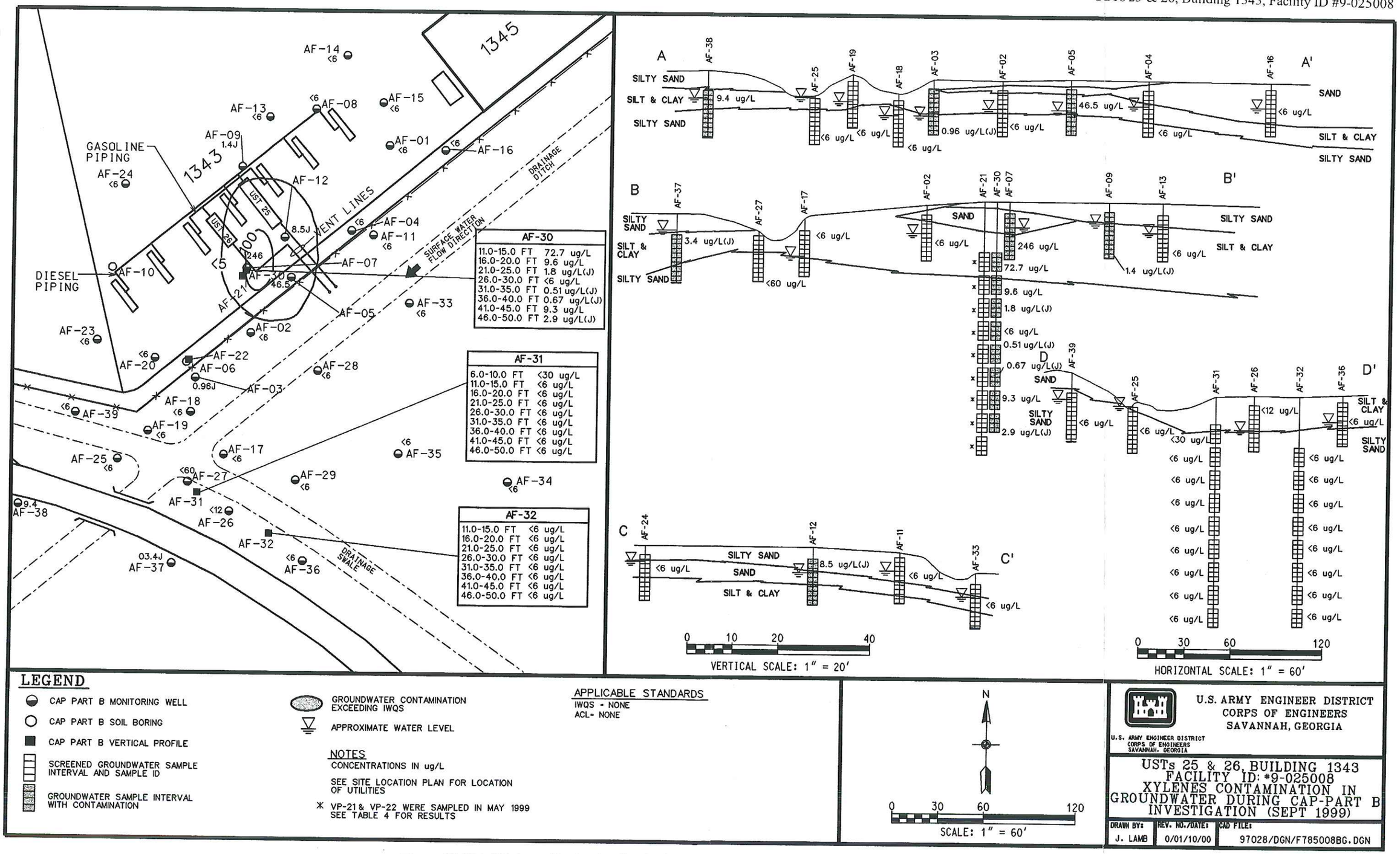

Figure 13. Total Xylenes Contamination in Groundwater Determined During the CAP-Part B Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008

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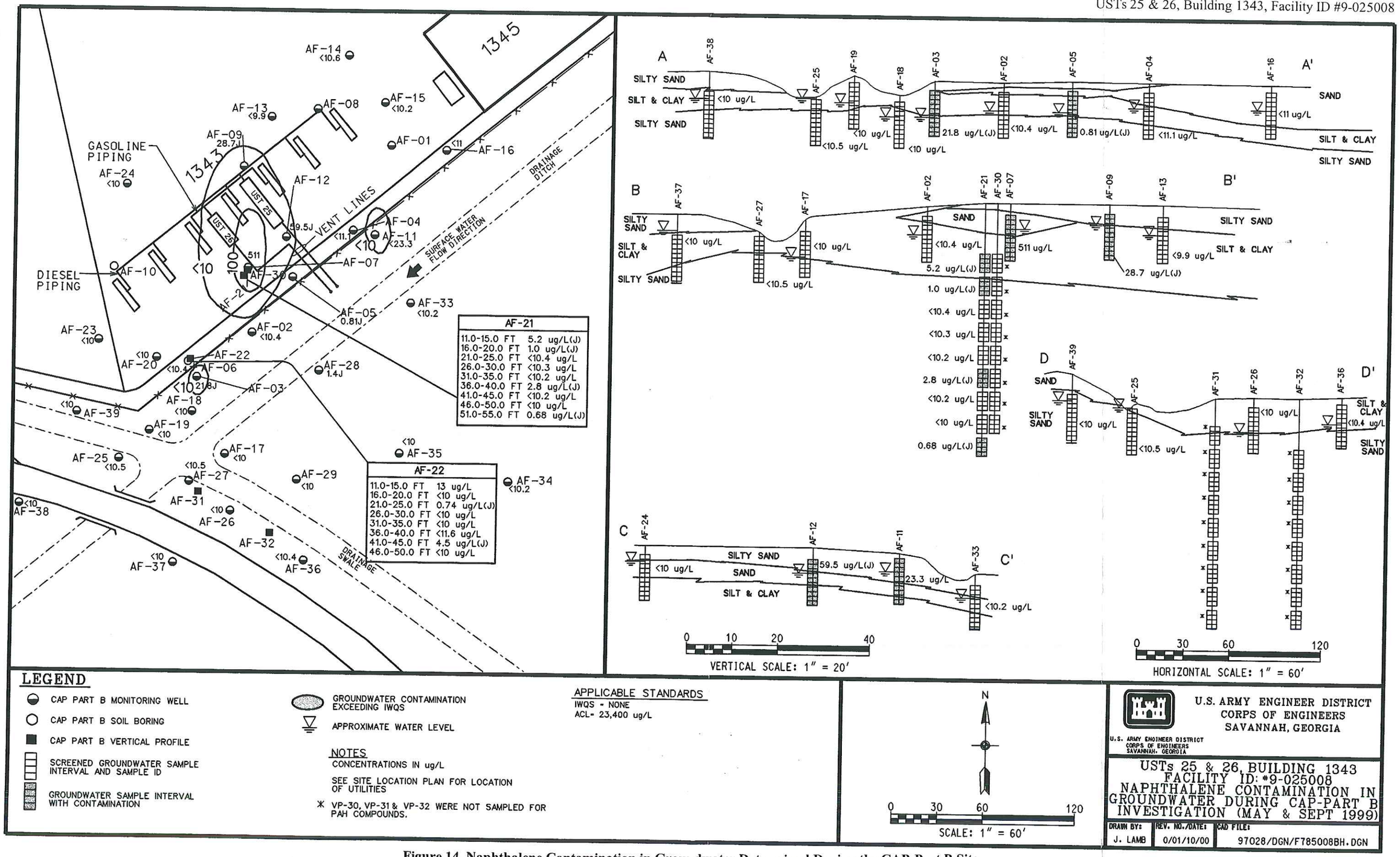

Figure 14. Naphthalene Contamination in Groundwater Determined During the CAP-Part B Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008

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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	

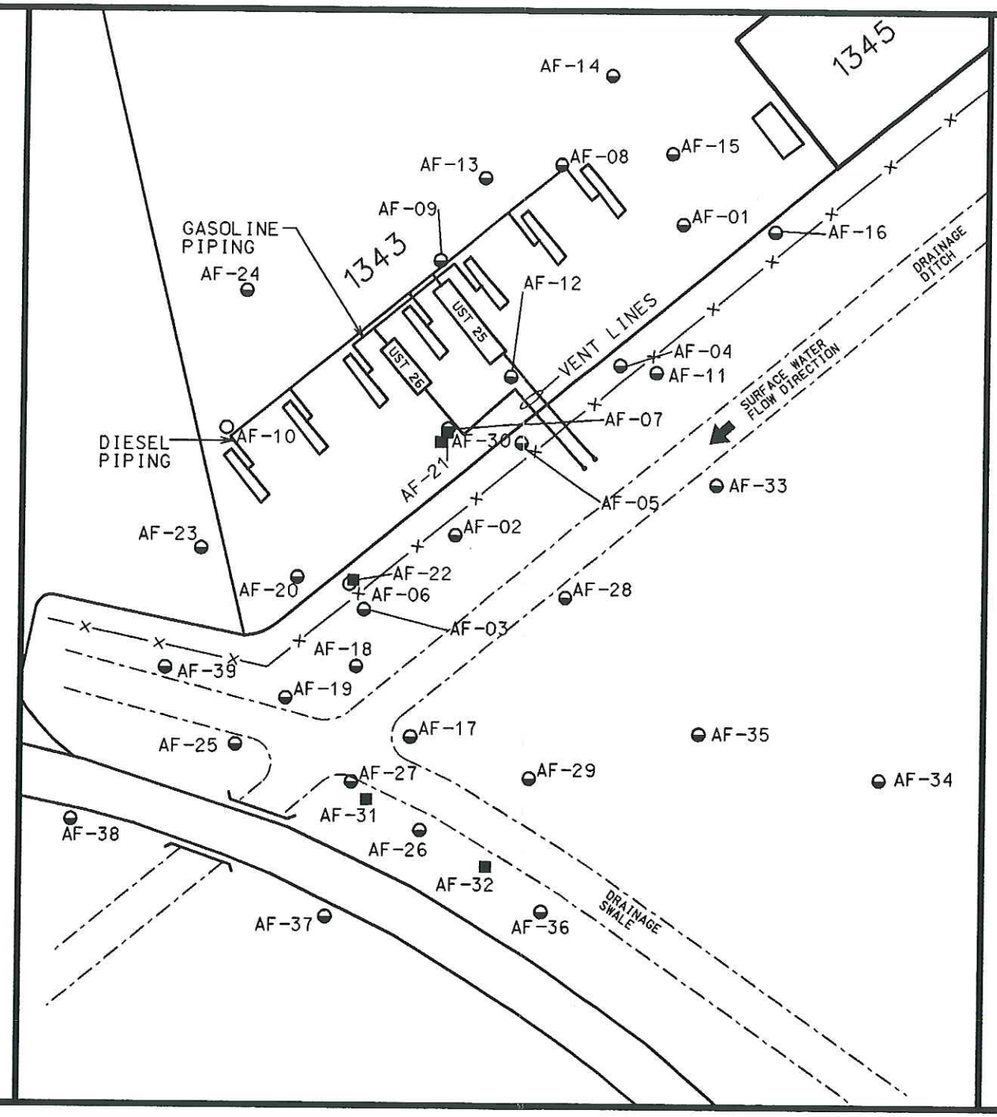
AF-18		
AF1822	1.5-11.5 FT	(ug/L)
1,2-Dichloroethene	13.2	
Benzene	10.3	
Trichloroethene	1.6J	

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.BJ	
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 MONITORING WELL
- CAP PART B VERTICAL PROFILE
- EXISTING MONITORING WELL
- CAP PART B SOIL BORING

NOTES
CONCENTRATIONS IN ug/L

SEE SITE LOCATION PLAN FOR LOCATION OF UTILITIES

N

0 30 60

SCALE: 1" = 60'

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

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SAVANNAH, GEORGIA

USTs 25 & 26, BUILDING 1343
FACILITY ID #9-025008
VOC GROUNDWATER ANALYTICAL RESULTS (SEPT 1999).

DRAWN BY:	REV. NO./DATE:	CAD FILE:
J. LAMB	0/12/02/99	97028/DGNS/F785008C.DGN

Figure 15a. VOCs in Groundwater During the CAP-Part B Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008

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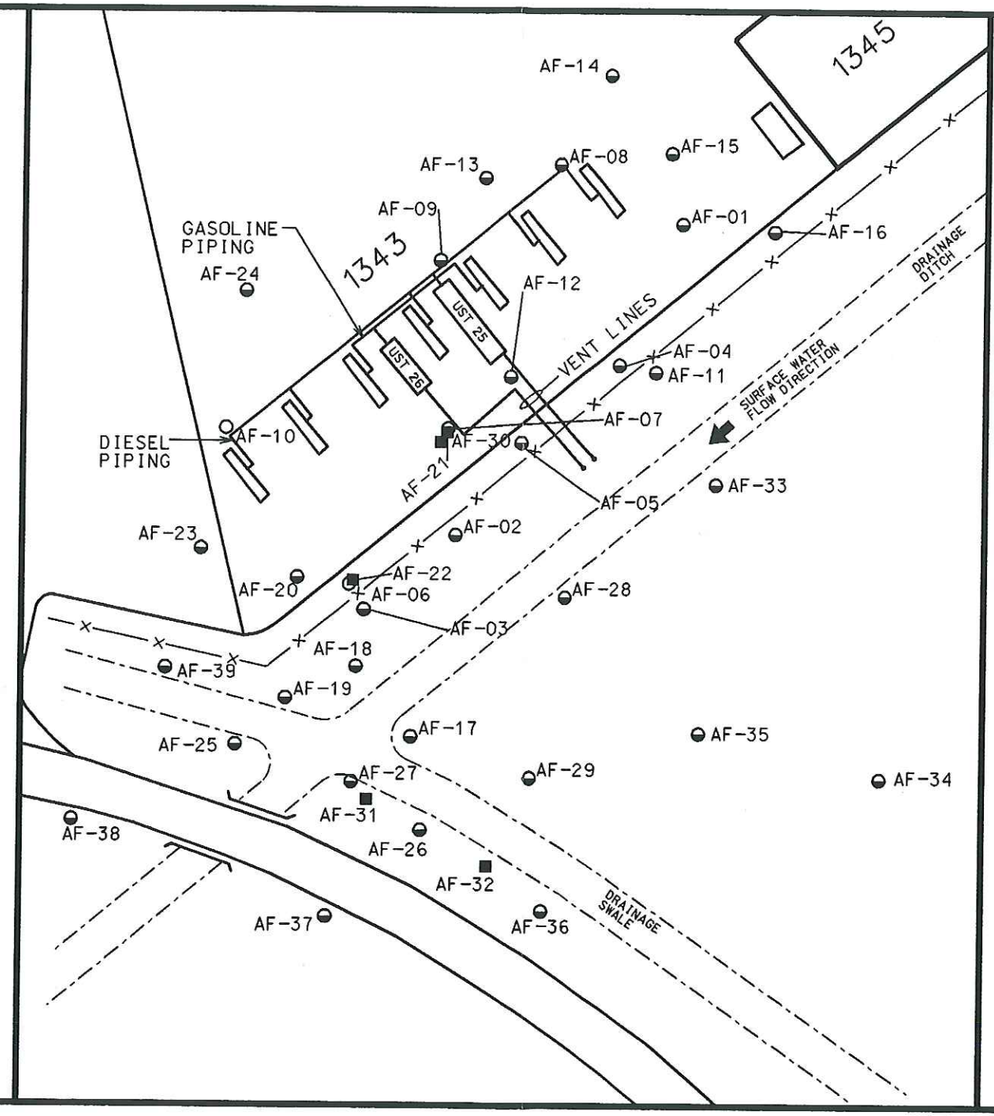
AF-30	
AF3012 11.0-15.0 FT (ug/L)	
1,2-Dichloroethene	3.3
2-Hexanone	14.2
Benzene	7670J
Ethylbenzene	500J
Methylene Chloride	2.2
Styrene	0.52J
Toluene	19
Trichloroethene	1.7J
Xylenes, Total	72.7
AF3022 16.0-20.0 FT(ug/L)	
1,2-Dichloroethene	24
2-Hexanone	15.5
Benzene	2290
Ethylbenzene	168
Toluene	5.5
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 MONITORING WELL
- CAP PART B VERTICAL PROFILE
- EXISTING MONITORING WELL
- CAP PART B SOIL BORING

NOTES
CONCENTRATIONS IN ug/L

SEE SITE LOCATION PLAN FOR LOCATION OF UTILITIES

N
0 30 60
SCALE: 1" = 60'

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SAVANNAH, GEORGIA

USTs 25 & 26, BUILDING 1343
FACILITY ID #9-025008
VOC GROUNDWATER ANALYTICAL RESULTS (SEPT 1999).

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J. LAMB	0/12/02/99	97028/DGNS/F785008D.DGN

Figure 15b. VOCs in Groundwater During the CAP-Part B Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008

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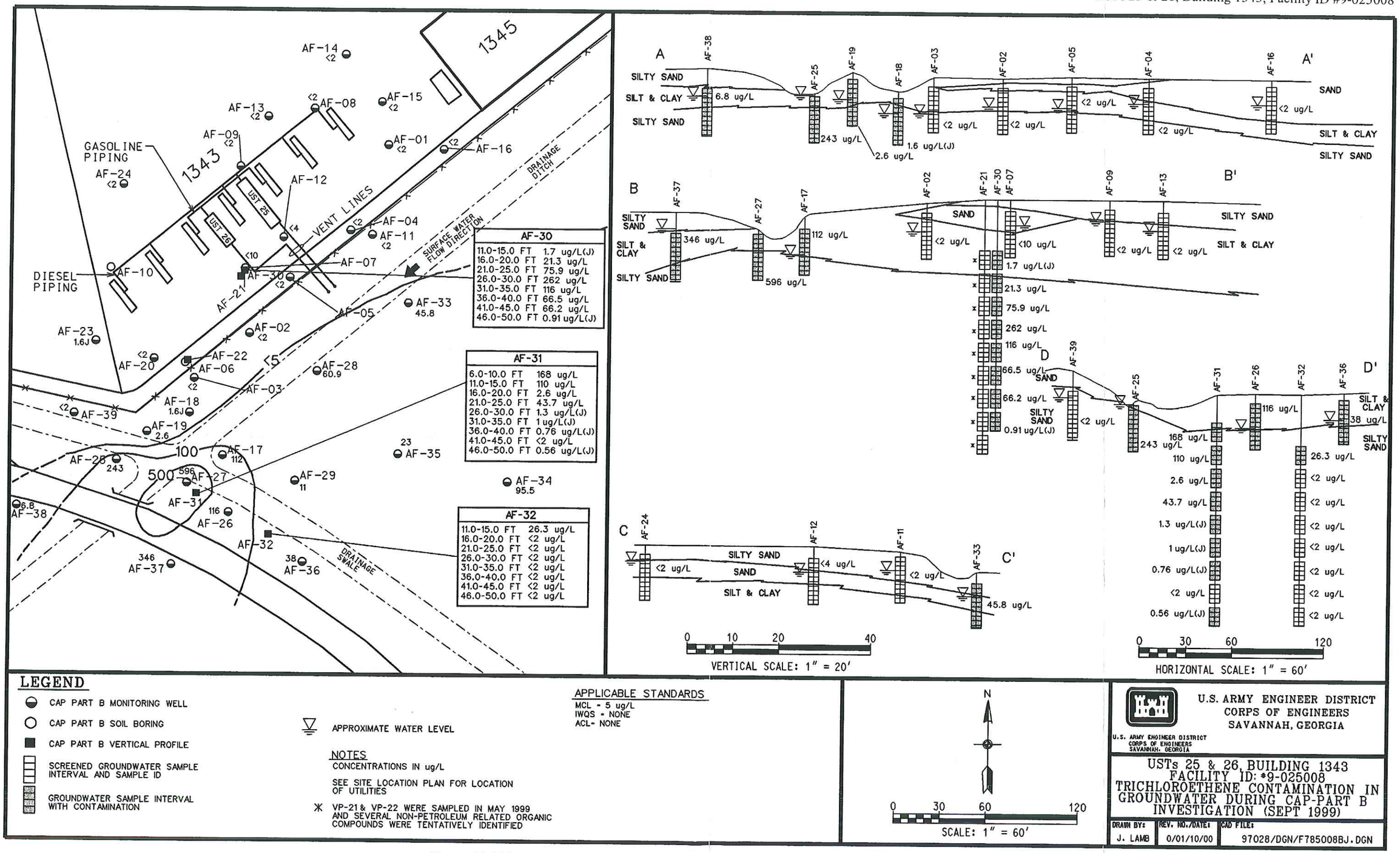

Figure 16. TCE Contamination in Groundwater Determined During the CAP-Part B Site Investigation at the USTs 25 & 26 Site, Facility ID #9-025008

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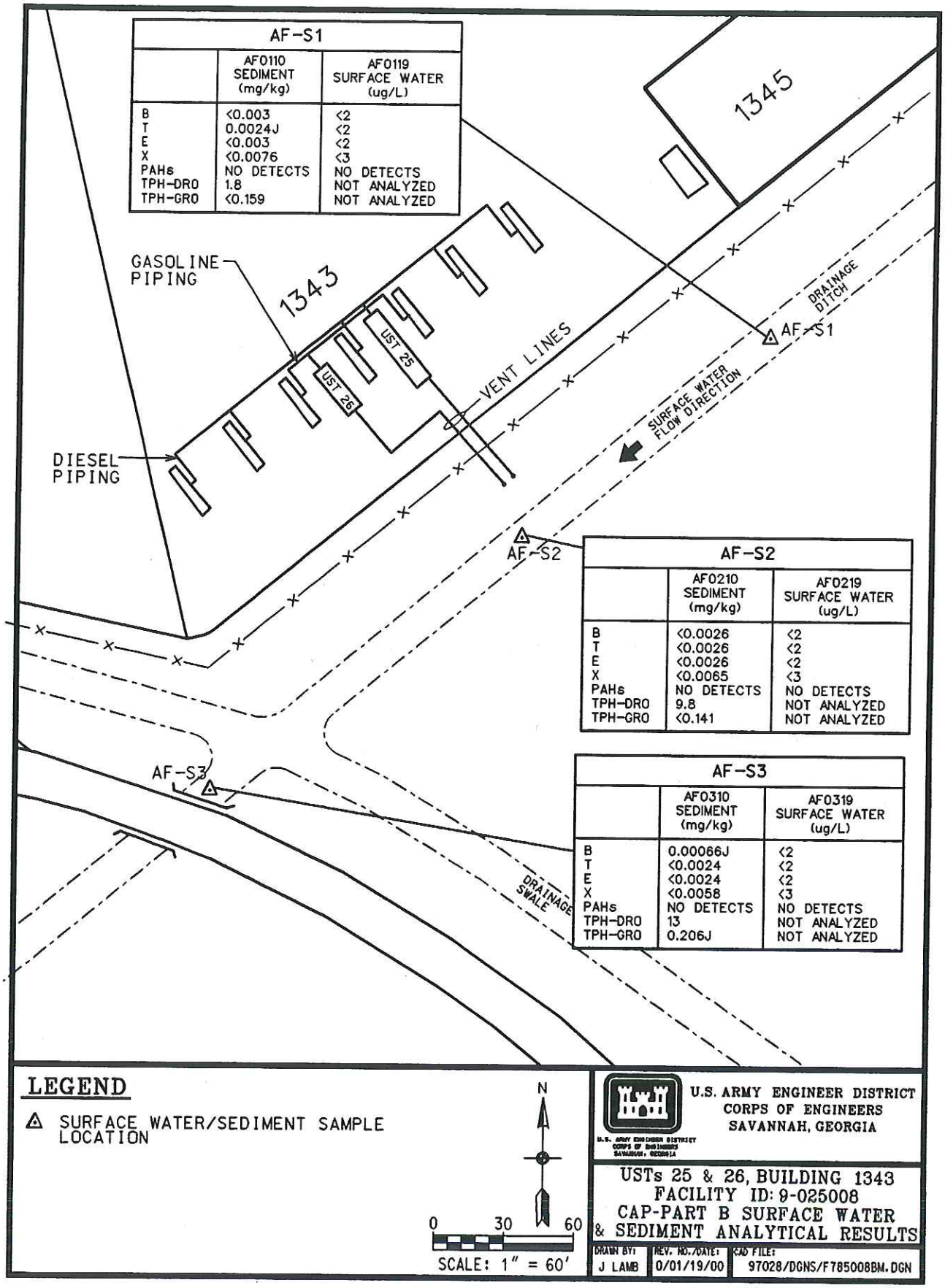

Figure 17. CAP-Part B Surface Water and Sediment Analytical Results at the USTs 25 & 26 Site, Facility ID #9-025008

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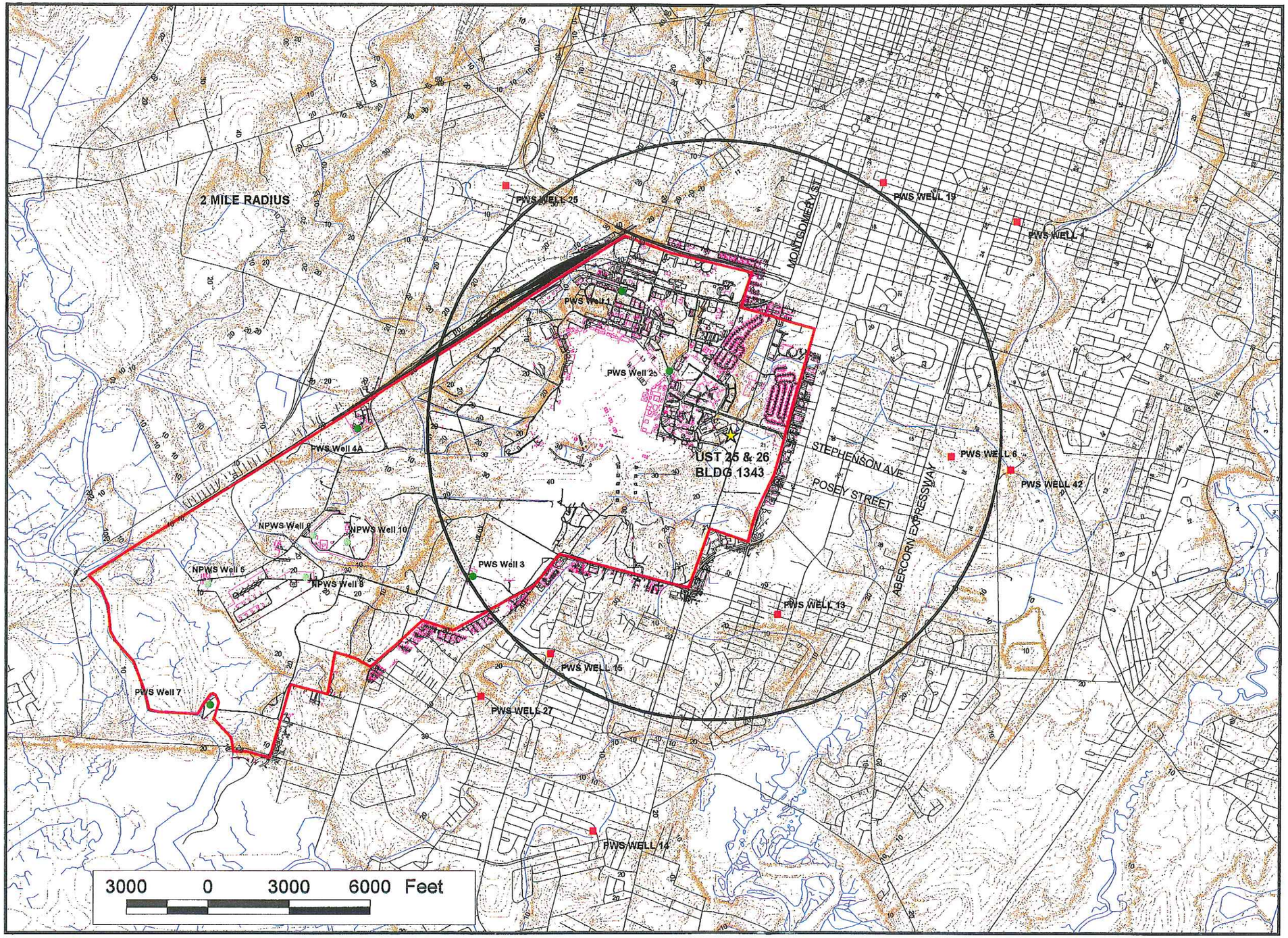

Legend:

- 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	burroughsotrf
051hyd_polyline	isleofhopeotrf
051rr	savannahctrf
hunterarea	gardencityotrf
	trveh.dgn
	bggen.dgn

SHT 1 of 1 — DRAWING #

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Figure 18. Locations of Public and Non-Public Supply Wells at Hunter Army Airfield and Surrounding Area

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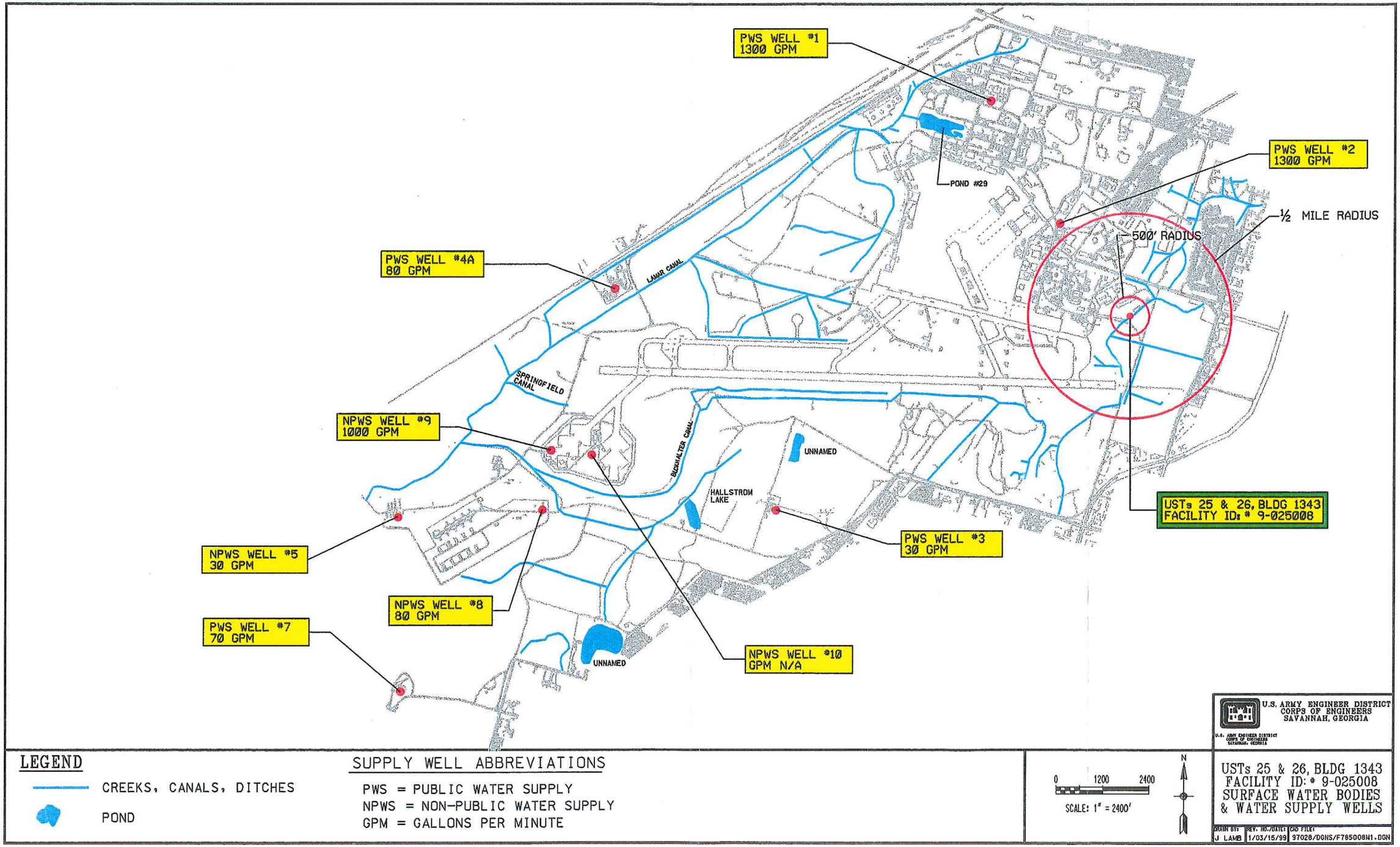

Figure 19. Locations of Surface Water Bodies and Water Supply Wells at Hunter Army Airfield

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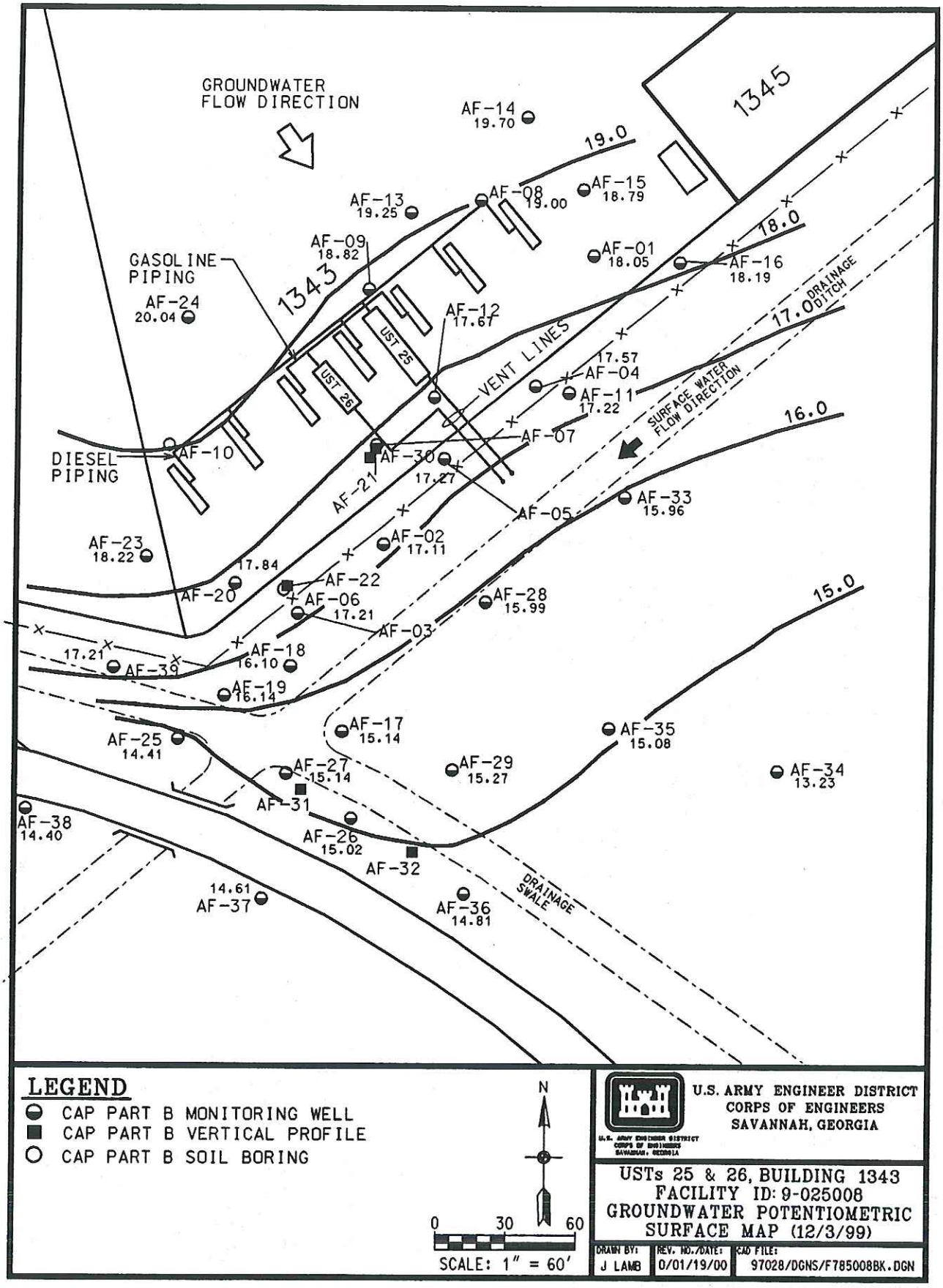

Figure 20. Groundwater Potentiometric Surface Map (December 1999) for the USTs 25 & 26 Site, Facility ID #9-025008

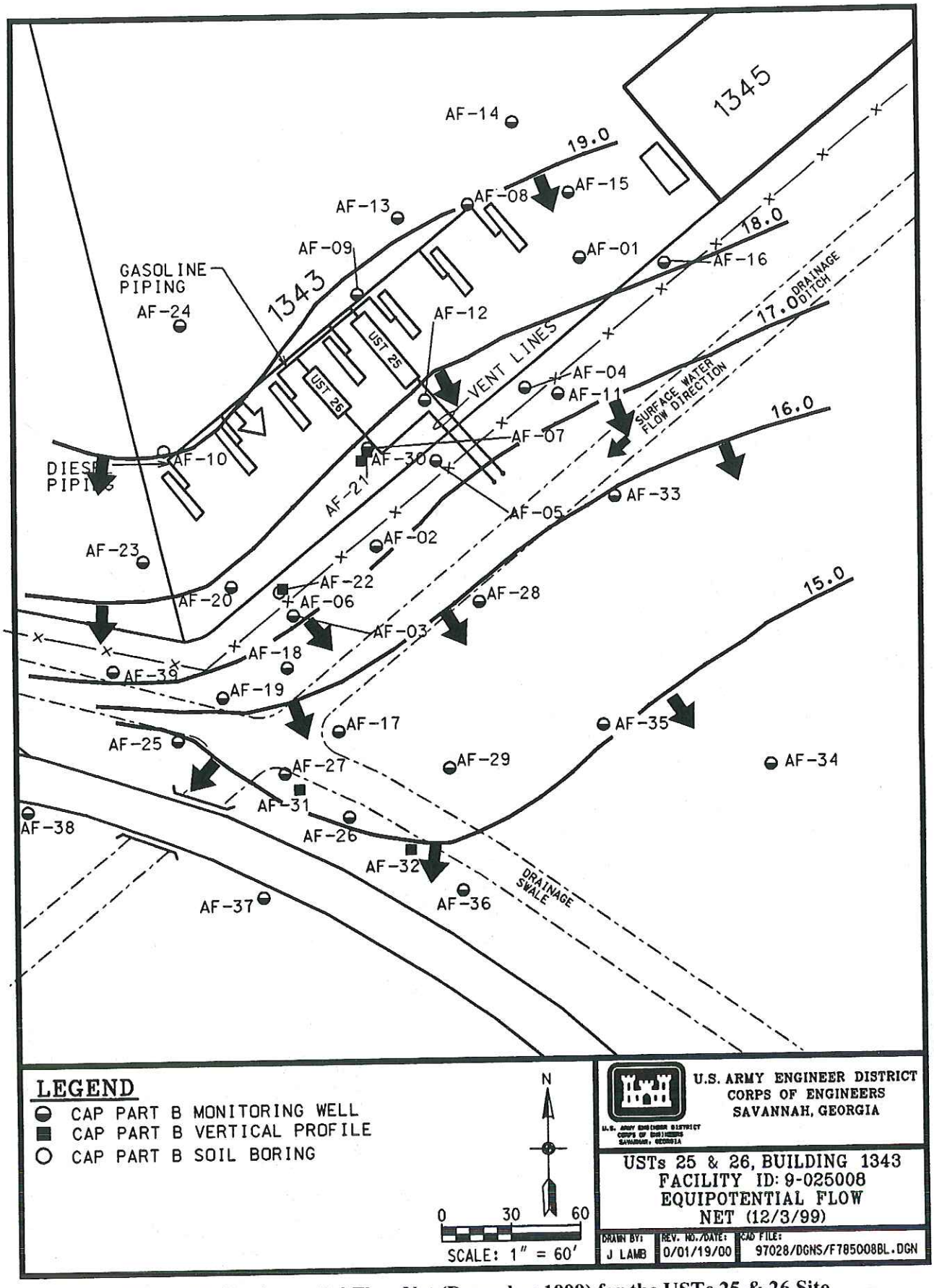

Figure 21. Equipotential Flow Net (December 1999) for the USTs 25 & 26 Site, Facility ID #9-025008

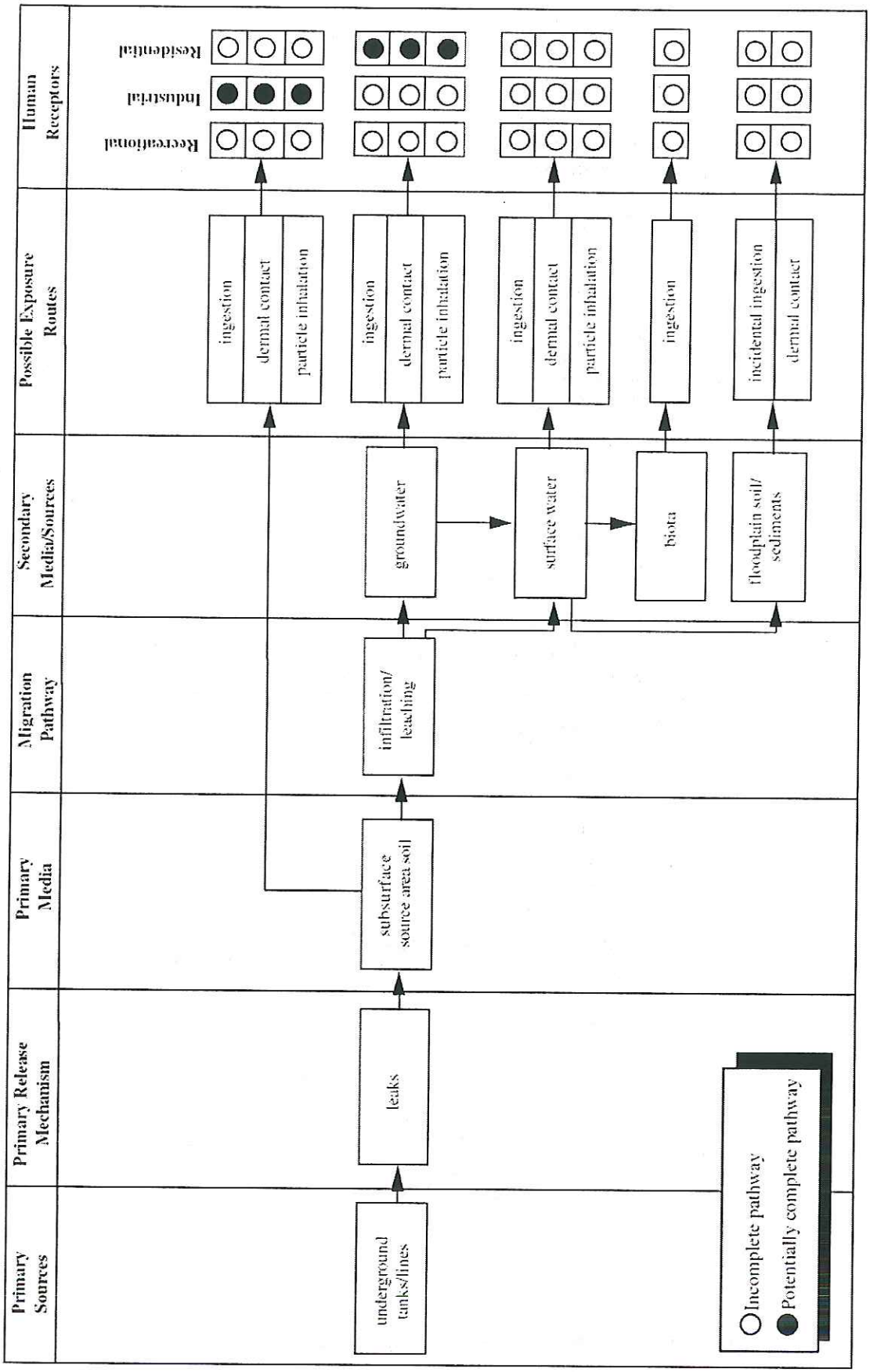

Figure 22. Conceptual Exposure Model for the USTs 25 & 26 Site, Facility ID #9-025008

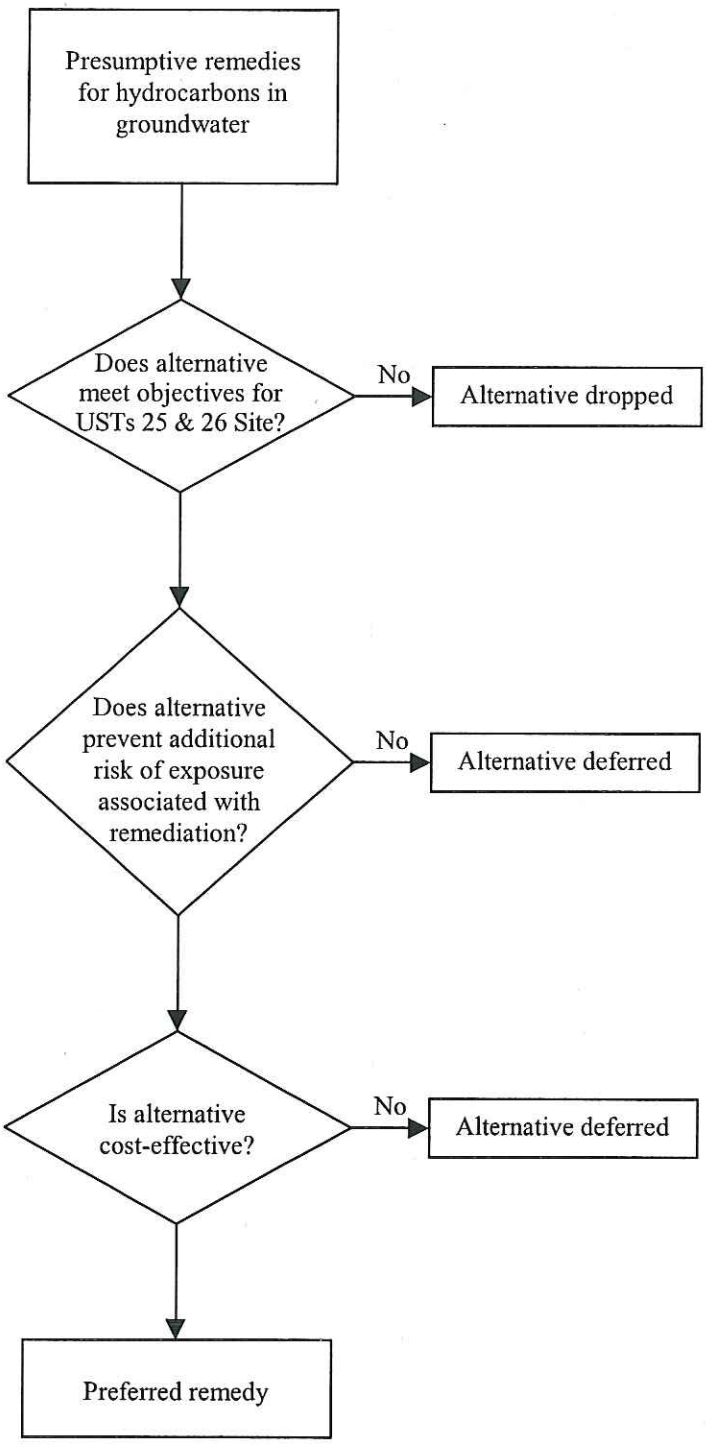

Figure 23. Remedial Alternatives Selection Process for the USTs 25 & 26 Site, Facility ID #9-025008

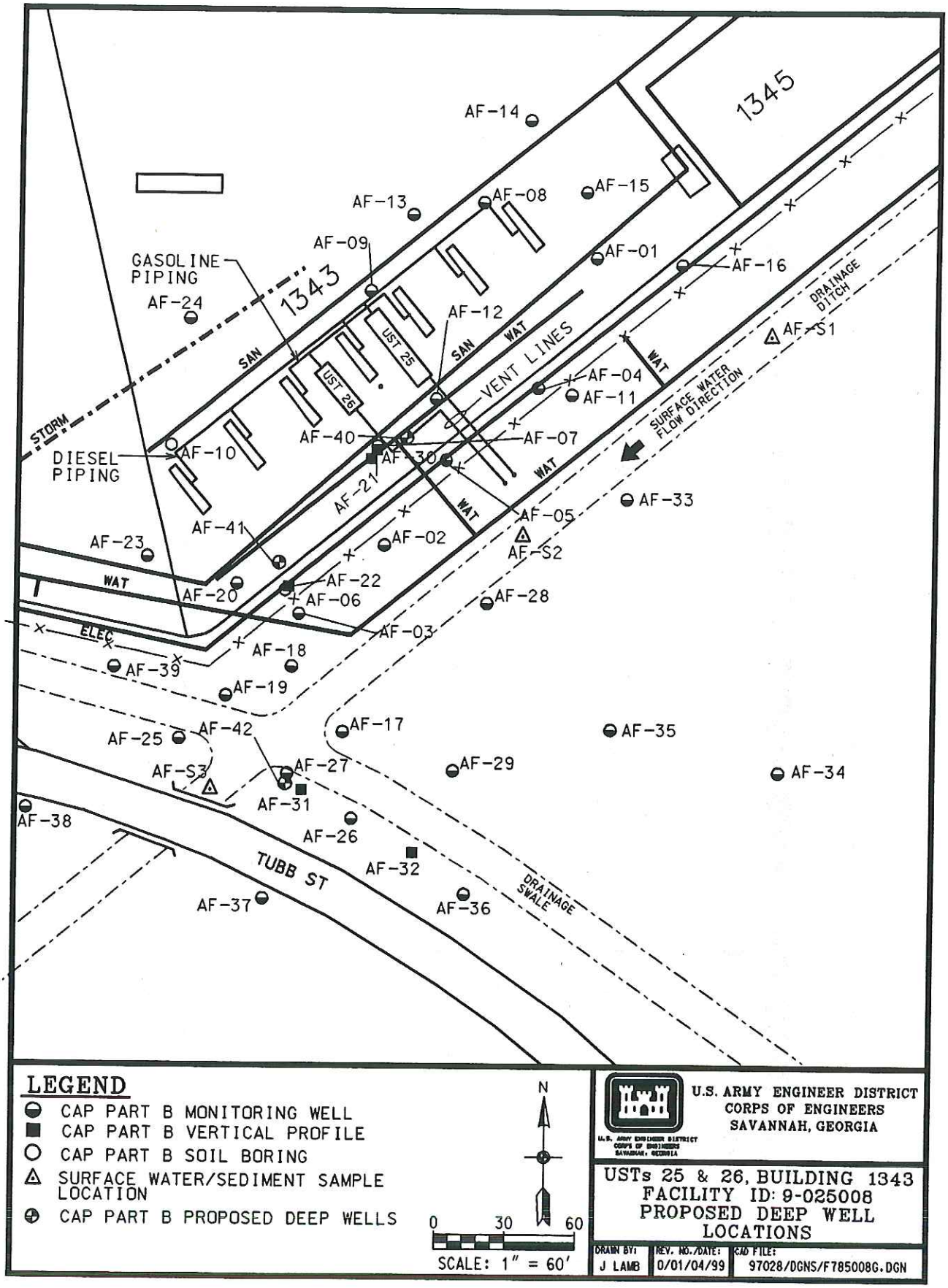

Figure 24. Proposed Deep Well Locations at the USTs 25 & 26 Site

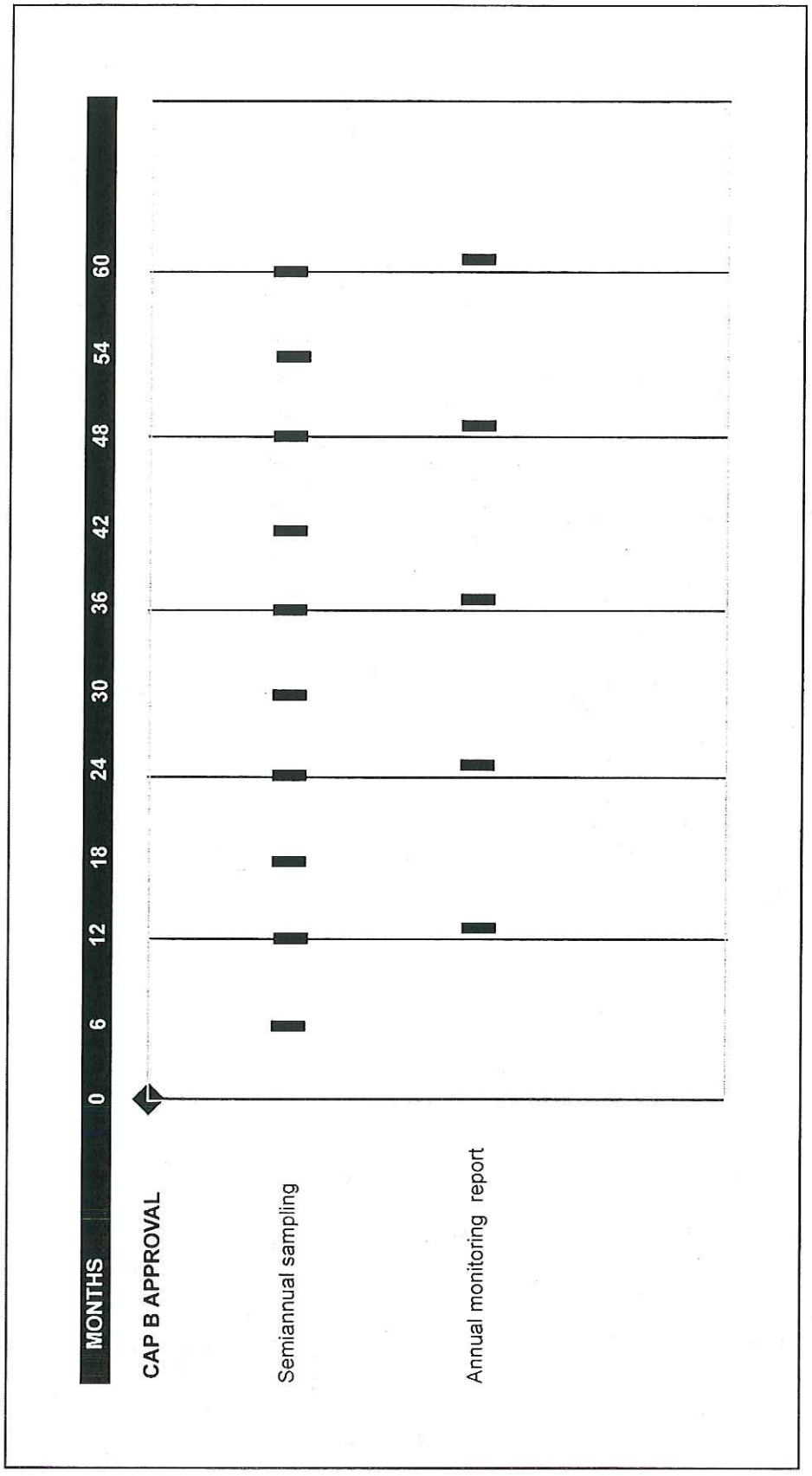

Figure 25. Milestone Schedule for the Remedial Action at the USTs 25 & 26 Site

APPENDIX II

REPORT TABLES

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Table 1a. UST System Closure[1] – Soil Analytical Results
(VOLATILE ORGANIC COMPOUNDS)

Sample Location	Depth (ft BGS)	Date Sampled	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)
UST 25									
HAAF-260-PIPE-D-1-S	2.5	7/22/98	0.006 U	0.006 U	0.006 U	0.012 U	ND	NA	9.4 =
HAAF-260-PIPE-D-2-S	2.5	7/22/98	**3.3 JD**	140 D	91 D	430 D	664.3	NA	6000 =
HAAF-260-PIPE-D-3-S	2.5	7/22/98	0.006 U	0.017 =	0.012 =	0.033 =	0.062	NA	4.5 =
HAAF-260-PIPE-D-4-S	2.5	7/22/98	0.005 U	0.005 U	0.005 U	0.010 U	ND	NA	5.1 =
HAAF-260-DIS-D-1-S	2.5	7/22/98	0.006 U	0.006 U	0.006 U	0.012 U	ND	NA	11.0 =
HAAF-260-DIS-D-2-S	2.5	7/22/98	0.006 U	0.006 U	0.006 U	0.012 U	ND	14* =	
HAAF-260-DIS-D-3-S	2.5	7/23/98	0.006 U	0.006 U	0.006 U	0.012 U	ND	NA	2.3 =
HAAF-260-DIS-D-4-S	2.5	7/23/98	0.005 U	0.005 U	0.005 U	0.010 U	ND	NA	4.5 =
HAAF-260-DIS-D-5-S	2.5	7/23/98	0.006 U	0.006 U	0.006 U	0.012 U	ND	NA	4.1 =
UST 26									
HAAF-260-PIPE-1-G-S	2.5	7/23/98	0.004 J	0.006 U	0.006 U	0.012 U	0.004	0.097 =	NA
HAAF-260-PIPE-2-G-S	2.5	7/23/98	0.670 U	0.480 J	0.280 J	1.35 J	2.11	490 =	NA
HAAF-260-DIS-1-G-S	2.5	7/23/98	0.006 =	0.005 U	0.002 J	0.003 J	0.011	0.12 =	NA
HAAF-260-DIS-2-G-S	2.5	7/23/98	**0.074 =**	0.004 J	1.8 D	4.2 D	6.078	800 =	21000 =
GUST Soil Threshold Levels (Table A, Column 2)			0.008	6	10	700	NRC	NRC	NRC

NOTES:

[1] Underground storage tank system closure and CAP-Part A SI performed by Earth Tech, Inc. (1999)

* TPH-GRO was inadvertently run on this sample.

Bold values exceed STLs.

BGS Below ground surface.

BTEX Benzene, toluene, ethylbenzene, and xylenes.

DRO Diesel range organics.

GRO Gasoline range organics.

NRC No regulatory criteria.

TPH Total petroleum hydrocarbons.

Laboratory Qualifiers

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

D Indicates the sample was diluted.

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

= Indicates the compound was detected at the concentration reported.

Table 1b. UST System Closure[1] – Soil Analytical Results
(POLYNUCLEAR AROMATIC HYDROCARBONS)

Sample Location	Depth (ft BGS)	Date Sampled	Detected PAH Compounds (mg/kg)															Total PAHs (mg/kg)
			acenaphthene	anthracene	benzo (a) anthracene	benzo (a) pyrene	benzo (g,h,i) perylene	benzo (b) fluoranthene	benzo(k) fluoranthene	chrysene	dibenzo(a,h) anthracene	fluoranthene	fluorene	indeno (1,2,3-cd) pyrene	naphthalene	phenanthrene	pyrene	
UST 25																		
HAAF-260-PIPE-D-1-S	2.5	7/22/98			0.018 J	0.020 =		0.047 J	0.012 =					0.027 J				0.124
HAAF-260-PIPE-D-2-S	2.5	7/22/98	9.15 DJ	6.06 DJ	4.24 DJ	2.22 DJ		4.56 DJ	1.6 DJP	3.6 DJ	3.69 DJP	15.7 DJ	7.92 DJP	1.33 DJ	99.5 DJ	19.0 DJ	16.0 DJ	207.74
HAAF-260-PIPE-D-3-S	2.5	7/22/98	0.141 J	0.054 DJ	0.004 JP	0.0035 J	0.0969 J	0.027 =				0.0063 J	0.157 =	0.057 P		0.047 J	0.007 JP	0.59542
HAAF-260-PIPE-D-4-S	2.5	7/22/98						0.048 P	0.003 J									0.051
HAAF-260-DIS-D-1-S	2.5	7/22/98			0.021 J	0.026 =		0.042 P	0.013 P									0.1022
HAAF-260-DIS-D-2-S	2.5	7/22/98																ND
HAAF-260-DIS-D-3-S	2.5	7/23/98																ND
HAAF-260-DIS-D-4-S	2.5	7/23/98																ND
HAAF-260-DIS-D-5-S	2.5	7/23/98			0.010 J													0.01
UST 26																		
HAAF-260-PIPE-1-G-S	2.5	7/23/98						0.0037 J										0.0036
HAAF-260-PIPE-2-G-S	2.5	7/23/98																ND
HAAF-260-DIS-1-G-S	2.5	7/23/98																ND
HAAF-260-DIS-2-G-S	2.5	7/23/98										24.9DJP					35.8DJP	60.7
GUST Soil Threshold Levels (Table A, Column 2)			NRC	NRC	NRC	NRC	NRC	NRC	NRC	NRC	NRC	NRC	NRC	NRC	NRC	NRC	NRC	NRC

NOTES:

1	Underground storage tank system closure and CAP-Part A SI performed by Earth Tech, Inc. (1999)
BGS	Below ground surface
BTEX	Benzene, toluene, ethylbenzene, and xylene
NRC	No regulatory criteria.
PAH	Polynuclear aromatic hydrocarbon.

Laboratory Qualifiers

D	Indicates that the sample was diluted
J	Indicates that the value for the compound is an estimated value
P	Indicates that the compound exceeded 40% deviation between the UV and fluorescent detectors
U	Indicates that the compound was not detected at the concentration reported
=	Indicates that the compound was detected at the concentration reported

Table 1c. UST System Closure[1] – Groundwater Analytical Results
(VOLATILE ORGANIC COMPOUNDS)

Sample Location	Depth (ft BGS)	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
UST 25							
HAAF-260-UST-D-1-GW	12	7/24/99	18 =	5 U	2 J	2 J	22
HAAF-260-UST-D-2-GW	12	7/24/99	1 J	5 U	5 U	10 U	1
HAAF-260-UST-D-3-GW	12	7/24/99	34 =	1 J	5 U	3 J	38
HAAF-260-UST-D-4-GW	12	7/24/99	4 J	5 U	5 U	10 U	4
UST 26							
HAAF-260-UST-1-G-GW	6	7/23/99	**3000 D**	8	300 D	17 =	3325
HAAF-260-UST-2-G-GW	6	7/23/99	**1600 D**	13	310 D	39 =	1962
In-Stream Water Quality Standards (Chapter 391-3-6)			71.28	200,000	28,718	NRC	NRC
Alternate Concentration Limits			340	—	—	—	—

Table 1d. UST System Closure[1] – Groundwater Analytical Results
(POLYNUCLEAR ANALYTICAL RESULTS)

Sample Location	Depth (ft BGS)	Date Sampled	Detected PAH Compounds (µg/L)						Total PAHs (µg/L)
			acenapthene	anthracene	fluorene	naphthalene	phenanthrene	pyrene	
UST 25									
HAAF-260-UST-D-1-GW	12	7/24/99	6 J	3 J	11 =	22 J	21 =	4 J	67
HAAF-260-UST-D-2-GW	12	7/24/99				4 J			4
HAAF-260-UST-D-3-GW	12	7/24/99				6 J	1 J		7
HAAF-260-UST-D-4-GW	12	7/24/99	2 J		4 J	10 J	5 J		23
UST 26									
HAAF-260-UST-1-G-GW	6	7/23/99				77 =			77
HAAF-260-UST-2-G-GW	6	7/23/99				67 =			67
In-Stream Water Quality Standards (Chapter 391-3-6)			NRC	110,000	14,000	NRC	NRC	11,000	NRC
Alternate Concentration Limits			—	—	—	23,400	—	—	—

NOTE:
[1] Underground storage tank system closure and CAP-Part A SI performed by Earth Tech, Inc. (1999)
Bold values exceed ACLs.
BGS Below ground surface
BTEX Benzene, toluene, ethylbenzene, and xylene
ND Not detected
NR Not required; PAH analysis was not requested for these samples.
NRC No regulatory criteria.

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

Table 2a. CAP-Part A/B – Soil Analytical Results
(VOLATILE ORGANIC COMPOUNDS)

Sample Location	Sample ID	Depth (ft BGS)	Date Sampled	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)
CAP-Part A Investigation										
No soil samples collected during CAP-Part A Investigation										
CAP-Part B Investigation										
AF-01	AF0111	4.1 – 6.1	05/04/99	0.00083 J	0.0025 U	0.0025 U	0.0038 U	0.00083	0.92 UJ	0.219 =
AF-02	AF0211	4.0 – 6.0	05/05/99	0.0129 =	0.0007 J	0.0024 U	0.006 U	0.0136	6.3 =	1.32 =
AF-03	AF0311	6.0 – 7.0	05/05/99	0.0022 =	0.0019 U	0.0019 U	0.0058 U	0.0022	0.49 U	0.735 =
AF-04	AF0411	5.5 – 7.0	05/05/99	0.0038 J	0.001 J	0.0027 R	0.0081 R	0.0048	2.9 =	0.938 =
AF-05	AF0511	2.0 – 4.0	05/05/99	0.0012 J	0.0074 J	0.0065 UJ	0.933 J	0.9416	1030 =	1130 =
AF-06	AF0611	2.0 – 4.0	05/05/99	0.0013 J	0.0031 U	0.0031 U	0.0079 U	0.0013	1.6 =	1.1 =
AF-07	AF0711	2.0 – 4.0	05/04/99	0.069 =	0.0006 J	0.0539 =	0.0526 =	0.1761	1510 J	4030 =
AF-08	AF0811	2.0 – 4.0	05/04/99	0.00072 J	0.0026 U	0.0026 U	0.0039 U	0.00072	0.24 UJ	0.223 =
AF-09	AF0911	2.0 – 4.0	05/04/99	0.0859 J	0.22 U	2.13 =	0.33 U	2.2159	13100 J	1270 =
AF-10	AF1011	2.0 – 4.0	05/04/99	0.0023 U	0.0023 U	0.0023 U	0.0034 U	ND	1.8 J	0.281 =
AF-11	AF1111	4.0 – 5.5	05/05/99	0.0032 U	0.002 J	0.0035 U	0.0085 U	0.002	0.51 U	0.637 =
AF-12	AF1211	2.0 – 4.0	05/04/99	0.0012 J	0.0025 U	0.0274 =	0.0018 J	0.0304	6420 J	1320 =
AF-13	AF1311	2.0 – 4.0	05/07/99	0.002 U	0.0013 J	0.0025 =	0.0014 J	0.0052	17.8 J	1.05 =
AF-14	AF1411	4.0 – 4.8	05/07/99	0.002 U	0.0007 J	0.0049 =	0.003 U	0.0056	14.4 =	0.112 U
AF-15	AF1511	4.0 – 5.1	05/07/99	0.0019 U	0.0019 U	0.0019 U	0.0048 U	ND	2.8 =	0.111 U
AF-16	AF1611	4.0 – 5.4	05/07/99	0.0021 U	0.0021 U	0.0021 U	0.0052 U	ND	0.65 U	0.118 U
AF-17	AF1711	4.0 – 6.0	05/08/99	0.0036 =	0.0021 U	0.0021 U	0.0054 U	0.0036	0.43 U	0.123 U
AF-18	AF1811	2.0 – 4.0	05/08/99	0.0024 U	0.0024 U	0.0024 U	0.006 U	ND	0.84 =	5.14 =
AF-19	AF1911	2.0 – 4.0	05/08/99	0.0022 U	0.0022 U	0.0022 U	0.0055 U	ND	0.47 U	0.274 =
AF-20	AF2011	6.0 – 7.0	05/08/99	0.0065 =	0.0033 =	0.021 =	0.0056 U	0.0308	2 =	0.186 =
AF-23	AF2311	4.0 – 5.0	05/08/99	0.0023 U	0.0023 U	0.0023 U	0.0034 U	ND	5.6 =	0.132 =
AF-24	AF2411	2.0 – 3.0	05/08/99	0.0021 U	0.00068 J	0.0021 U	0.0032 U	0.00068	21.5 =	0.109 U
AF-25	AF2511	0.0 – 0.6	05/11/99	0.0027 U	0.0015 J	0.0027 U	0.0068 U	0.0015	3.4 =	0.128 U
AF-26	AF2611	6.0 – 7.4	05/11/99	0.0078 =	0.0024 U	0.0024 U	0.006 U	0.0078	0.47 U	0.134 U
AF-27	AF2711	2.0 – 4.0	05/11/99	0.0021 U	0.0021 U	0.0021 U	0.0051 U	ND	0.36 U	0.123 U
AF-28	AF2811	4.0 – 4.9	05/11/99	0.002 U	0.002 U	0.002 U	0.0051 U	ND	2 =	0.12 U
AF-29	AF2911	0.0 – 2.4	05/11/99	0.0024 U	0.0024 U	0.0024 U	0.006 U	ND	2.5 =	0.216 J
GUST Soil Threshold Levels (Table A, Column 2)				0.008	6	10	700	NRC	NRC	NRC
Alternate Threshold Levels				0.159	—	—	—	—	—	—

NOTES:

BGS	Below ground surface	ND	Not detected
BTEX	Benzene, toluene, ethylbenzene, and xylene	NRC	No regulatory criteria
DRO	Diesel range organics	TPH	Total petroleum hydrocarbon
GRO	Gasoline range organics		

Laboratory Qualifiers

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

Table 2b. CAP-Part A/B – Soil Analytical Results
(POLYNUCLEAR AROMATIC HYDROCARBONS)

Sample Location	Sample ID	Depth (ft BGS)	Date Sampled	Detected PAH Compounds (mg/kg)													Total PAHs (mg/kg)
				anthracene	benzo (a) anthracene	benzo (a) pyrene	benzo (b) fluoranthene	benzo (k) fluoranthene	benzo (g,h,i) perylene	chrysene	fluoranthene	fluorene	indeno (1,2,3-cd) pyrene	naphthalene	phenanthrene	pyrene	
CAP-Part A Investigation																	
No soil samples collected during CAP-Part A Investigation																	
CAP-Part B Investigation																	
AF-01	AF0111	4.1 – 6.1	05/04/99														ND
AF-02	AF0211	4.0 – 6.0	05/05/99														ND
AF-03	AF0311	6.0 – 7.0	05/05/99														ND
AF-04	AF0411	5.5 – 7.0	05/05/99														ND
AF-05	AF0511	2.0 – 4.0	05/05/99				0.082 J					0.116 J		0.408 =	0.045 J		0.651
AF-06	AF0611	2.0 – 4.0	05/05/99														ND
AF-07	AF0711	2.0 – 4.0	05/04/99											0.489 J			0.489
AF-08	AF0811	2.0 – 4.0	05/04/99														ND
AF-09	AF0911	2.0 – 4.0	05/04/99	1.1 J			0.0833 J	0.0761 J		0.312 J				17.1 =		2.29 =	20.9614
AF-10	AF1011	2.0 – 4.0	05/04/99		0.278 J	0.242 J	0.264 J	0.274 J	0.157 J	0.292 J	0.467 J		0.138 J			0.436 J	2.548
AF-11	AF1111	4.0 – 5.5	05/05/99									0.136 J		0.449 =	0.052 J		0.637
AF-12	AF1211	2.0 – 4.0	05/04/99	17.6 J	0.164 J	0.113 J	0.0729 J			0.257 J	0.385 J			9.6 =		1.82 =	30.0119
GUST Soil Threshold Levels (Table A, Column 2)				NRC	NRC	NRC	NRC	NRC	NRC	NRC	NRC	NRC	NRC	NRC		NRC	NRC

NOTES:

ND Not detected; refer to Appendix V, Tables V-A and V-B, for complete list of PAH results.
BGS Below ground surface
N/A Not applicable
PAH Polynuclear aromatic hydrocarbon

Laboratory Qualifiers

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

Table 2b. CAP-Part A/B – Soil Analytical Results (continued)
(POLYNUCLEAR AROMATIC HYDROCARBONS)

Sample Location	Sample ID	Depth (ft BGS)	Date Sampled	Detected PAH Compounds (mg/kg)													Total PAHs (mg/kg)
				anthracene	benzo (a) anthracene	benzo (a) pyrene	benzo (b) fluoranthene	benzo (k) fluoranthene	benzo (g,h,i) perylene	chrysene	fluoranthene	fluorene	indeno (1,2,3-cd) pyrene	naphthalene	phenanthrene	pyrene	
AF-13	AF1311	2.0 – 4.0	05/07/99			0.0382 J											0.0382
AF-14	AF1411	4.0 – 4.8	05/07/99														ND
AF-15	AF1511	4.0 – 5.1	05/07/99														ND
AF-16	AF1611	4.0 – 5.4	05/07/99														ND
AF-17	AF1711	4.0 – 6.0	05/08/99														ND
AF-18	AF1811	2.0 – 4.0	05/08/99														ND
AF-19	AF1911	2.0 – 4.0	05/08/99		0.112 J	0.0842 J	0.0891 J	0.0826 J	0.0414 J	0.118 J	0.18 J		0.153 J				0.8603
AF-20	AF2011	6.0 – 7.0	05/08/99														ND
AF-23	AF2311	4.0 – 5.0	05/08/99														ND
AF-24	AF2411	2.0 – 3.0	05/08/99		0.156 J	0.159 J	0.137 J	0.19 J	0.129 J	0.184 J	0.115 J		0.498 J				1.568
AF-25	AF2511	0.0 – 0.6	05/11/99														ND
AF-26	AF2611	6.0 – 7.4	05/11/99														ND
AF-27	AF2711	2.0 – 4.0	05/11/99														ND
AF-28	AF2811	4.0 – 4.9	05/11/99														ND
AF-29	AF2911	0.0 – 2.4	05/11/99														ND
GUST Soil Threshold Levels (Table A, Column 2)				NRC	NRC	NRC	NRC	NRC	NRC	NRC	NRC	NRC	NRC	NRC		NRC	NRC

NOTES:

ND Not detected; refer to Appendix V, Tables V-A and V-B, for complete list of PAH results.
BGS Below ground surface
N/A Not applicable
PAH Polynuclear aromatic hydrocarbon

Laboratory Qualifiers

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

Table 3. CAP-Part B – Soil Field Screening (Headspace[1]) Data

Depth (ft BGS)	AF-01 (ppm)	AF-02 (ppm)	AF-03 (ppm)	AF-04 (ppm)	AF-05 (ppm)	AF-06 (ppm)	AF-07 (ppm)	AF-08 (ppm)	AF-09 (ppm)
0.0 – 2.0	5.9	2.2	0	1.4	653	15.4	31.0	17.0	651
2.0 – 4.0	6.1	3.0	0	1.0	864	16.0	1832	18.5	714
4.0 – 6.0	7.6	4.6	0	4.2	712	15.2	1712	9.7	607
6.0 – 8.0	NC	2.6	5.8	6.3	14.2	8.9	1631	4.2	303
8.0 – 10.0	NA	NA	4.8	NA	NA	NA	NA	NA	NA

Depth (ft BGS)	AF-10 (ppm)	AF-11 (ppm)	AF-12 (ppm)	AF-13 (ppm)	AF-14 (ppm)	AF-15 (ppm)	AF-16 (ppm)	AF-17 (ppm)	AF-18 (ppm)
0.0 – 2.0	28.4	2.0	36.0	35.2	0	0	0	1.4	0
2.0 – 4.0	28.2	2.0	534	265	0	0	0	0	99
4.0 – 6.0	27.8	2.9	513	81.5	0	0	0	12.0	92
6.0 – 8.0	20.7	1.9	NC	41.1	NA	NA	NA	1.9	NA
8.0 – 10.0	NA	NA	NA	18.3	NA	NA	NA	NC	NA
10.0 – 12.0	NA	NA	NA	0	NA	NA	NA	NA	NA

Depth (ft BGS)	AF-19 (ppm)	AF-20 (ppm)	AF-23 (ppm)	AF-24 (ppm)	AF-25 (ppm)	AF-26 (ppm)	AF-27 (ppm)	AF-28 (ppm)	AF-29 (ppm)
0.0 – 2.0	0	115	24.2	2.7	7	0	0	0	140
2.0 – 4.0	10.1	115	24.2	2.7	NA	0	0	0	NC
4.0 – 6.0	0	182	25.6	13.6	NA	0	NA	1.7	0
6.0 – 8.0	NA	223	24.2	21.7	NA	0	NA	NA	0
8.0 – 10.0	NA	50.5	27.0	NC	NA	NA	NA	NA	NC

Depth (ft BGS)	AF-33 (ppm)	AF-34 (ppm)	AF-35 (ppm)	AF-36 (ppm)	AF-37 (ppm)	AF-38 (ppm)	AF-39 (ppm)
0.0 – 2.0	5.1	4.4	1.3	1.3	0	0	0
2.0 – 4.0	5.1	4.4	1.3	1.3	0	0	0
4.0 – 6.0	2.3	2.7	1.4	1.4	1.5	0	0
6.0 – 8.0	2.3	2.7	1.4	1.4	NA	0	0
8.0 – 10.0	5.9	NA	NA	NA	NA	0	0
10.0 – 12.0	5.9	NA	NA	NA	NA	NA	NA

[1] headspace measured using a photoionization detector.
NA not applicable, interval is below the total depth of boring.
NC not collected due to no sample recovery, sample interval below the water table, or headspace measurements were not recorded.
Deep wells AF-40, AF-41, and AF-42 were installed in January 2000. Data is not available but will be provided in the boring logs presented in the First Annual Monitoring Report.

Table 4a. CAP-Part A/B – Groundwater Analytical Results
(VOLATILE ORGANIC COMPOUNDS)

Sample Location	Sample ID	Depth or Screened Interval (ft BGS)	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
CAP-Part A Investigation								
HAAF-260-PZ-1-GW		6	7/23/98	54 =	5 U	53 =	22 =	129
HAAF-260-PZ-2-GW		6	7/23/98	5 U	5 U	5 U	10 U	ND
HAAF-260-PZ-3-GW		6	7/23/98	26 =	5 U	2 J	2 J	30
HAAF-260-PZ-4-GW		6	7/23/98	250 D	3 J	130 =	20 =	403
CAP-Part B Investigation – Round 1								
AF-01	AF0112	2.5 – 12.5	05/04/99	13.2 =	0.82 J	2 U	3 U	14.02
AF-02	AF0212	2.0 – 12.0	05/05/99	27.4 =	1.8 J	3.4 =	1.1 J	33.7
AF-03	AF0312	2.0 – 12.0	05/05/99	51.8 =	1.6 J	112 =	2.6 J	168.0
AF-04	AF0412	2.0 – 12.0	05/05/99	1.5 J	1.4 J	2 U	5 U	2.9
AF-05	AF0512	2.0 – 12.0	05/05/99	8.2 =	2 U	5.2 =	5 U	13.4
AF-06	AF0612	2.0 – 12.0	05/05/99	490 =	20 =	31.6 =	24.6 J	566.2
AF-07	AF0712	2.5 – 12.5	05/04/99	**9940 =**	200 U	952 =	792 =	11,984
AF-08	AF0812	2.5 – 12.5	05/04/99	7.4 =	0.56 J	2 U	3 U	7.96
AF-09	AF0912	2.0 – 12.0	05/04/99	2.1 =	0.98 J	17.3 =	0.68 J	21.06
AF-10	AF1012	2.5 – 12.5	05/04/99	1.1 J	2 U	2 U	3 U	1.1
AF-11	AF1112	1.0 – 11.0	05/05/99	2 U	2 U	2 U	5 U	ND
AF-12	AF1212	2.5 – 12.5	05/04/99	79.3 =	20 U	92.3 =	27.4 J	199.0
AF-13	AF1312	2.5 – 12.5	05/07/99	0.98 J	2 U	0.57 J	0.93 J	2.48
AF-14	AF1412	1.4 – 11.4	05/07/99	2 U	2 U	2 U	3 U	ND
AF-15	AF1512	1.5 – 11.5	05/07/99	2 U	2 U	2 U	3 U	ND
AF-16	AF1612	1.5 – 11.5	05/07/99	2 U	2 U	2 U	3 U	ND
AF-17	AF1712	2.5 – 12.5	05/08/99	24.5 =	2 U	2 U	3 U	24.5
AF-18	AF1812	1.5 – 11.5	05/08/99	9.6 =	2 U	2 U	3 U	9.6
AF-19	AF1912	1.5 – 11.5	05/08/99	3.5 =	2 U	2 U	3 U	3.5
AF-20	AF2012	3.0 – 13.0	05/08/99	1.6 J	2.8 U	2 U	2 J	3.6
AF-21	AF2112	11.0 – 15.0	05/07/99	**6520 =**	17.9 =	144 J	18.5 =	6700.4
AF-21	AF2122	16.0 – 20.0	05/07/99	233 =	0.92 J	21.3 =	2.9 J	258.12
AF-21	AF2132	21.0 – 25.0	05/07/99	32.7 =	2 U	2 U	3 U	32.7
AF-21	AF2142	26.0 – 30.0	05/07/99	15.6 =	2 U	2 U	3 U	15.6
AF-21	AF2152	31.0 – 35.0	05/07/99	10.6 =	2 U	2 U	3 U	10.6
In-Stream Water Quality Standards (GA Chapter 391-3-6)				71.28	200,000	28,718	NRC	NRC
Alternate Concentration Limits				340	—	—	—	—

NOTES:

Bold values exceed ACLs.

BGS Below ground surface
BTEX Benzene, toluene, ethylbenzene, and xylene
ND Not detected
NRC No regulatory criteria

Laboratory Qualifiers

D Indicates that the sample was diluted.
U Indicates that the compound was not detected above the reported sample quantitation limit.
UJ Indicates that the compound was not detected above an approximated sample quantitation limit.
J Indicates that the value for the compound was an estimated value.
= Indicates that the compound was detected at the concentration reported.

Table 4a. CAP-Part A/B – Groundwater Analytical Results (continued)
(VOLATILE ORGANIC COMPOUNDS)

Sample Location	Sample ID	Screened Interval (ft BGS)	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
AF-21	AF2162	36.0 – 40.0	05/07/99	22.1 =	2 U	3 =	1.8 J	26.9
AF-21	AF2172	41.0 – 45.0	05/07/99	7 =	2 U	7.1 =	6.2 =	20.3
AF-21	AF2182	46.0 – 50.0	05/07/99	0.86 J	2 U	2 U	3 U	0.86
AF-21	AF2192	51.0 – 55.0	05/07/99	1.9 J	2 U	1.2 J	1.2 J	4.3
AF-22	AF2212	11.0 – 15.0	05/08/99	57.2 =	2.4 =	3.4 =	2.4 J	65.4
AF-22	AF2222	16.0 – 20.0	05/08/99	5 =	1.3 J	2 U	0.65 J	6.95
AF-22	AF2232	21.0 – 25.0	05/08/99	0.83 J	0.88 J	2 U	3 U	1.71
AF-22	AF2242	26.0 – 30.0	05/08/99	2 U	0.76 J	2 U	3 U	0.76
AF-22	AF2252	31.0 – 35.0	05/08/99	2 U	0.68 J	2 U	3 U	0.68
AF-22	AF2262	36.0 – 40.0	05/08/99	2 U	2 U	2 U	3 U	ND
AF-22	AF2272	41.0 – 45.0	05/08/99	8.2 =	0.83 J	0.33 J	0.76 J	10.12
AF-22	AF2282	46.0 – 50.0	05/08/99	2 U	2 U	2 U	3 U	ND
AF-23	AF2312	3.0 – 13.0	05/08/99	0.64 J	2 U	2 U	3 U	0.64
AF-24	AF2412	2.0 – 12.0	05/08/99	2 U	2 U	2 U	3 U	ND
AF-25	AF2512	0.5 – 10.5	05/11/99	2 =	2 U	2 U	0.58 J	2.58
AF-26	AF2612	2.0 – 12.0	05/11/99	15.3 =	2 U	2 U	3 U	15.3
AF-27	AF2712	1.0 – 11.0	05/11/99	2.4 =	2 U	2 U	3 U	2.4
AF-28	AF2812	2.0 – 12.0	05/11/99	32.4 =	2 U	2.4 =	3 U	24.8
AF-29	AF2912	2.0 – 12.0	05/11/99	11.3 =	2 U	2 U	3 U	11.3
CAP-Part B Investigation – Round 2								
AF-01	AF0122	2.5 – 12.5	09/26/99	2 U	2 U	2 U	6 U	ND
AF-02	AF0222	2.0 – 12.0	09/26/99	8.4 =	0.65 J	2 U	6 U	9.05
AF-03	AF0322	2.0 – 12.0	09/26/99	2.2 =	2 U	1.6 J	0.96 J	4.76
AF-04	AF0422	2.0 – 12.0	09/26/99	2 U	2 U	2 U	6 U	ND
AF-05	AF0522	2.0 – 12.0	09/26/99	11.8 =	3 =	9.5 =	46.5 =	70.8
AF-07	AF0722	2.5 – 12.5	09/26/99	**9130** =	24.8 =	493 =	246 =	9893.8
AF-08	AF0822	2.5 – 12.5	09/26/99	2 U	2 U	2 U	6 U	ND
AF-09	AF0922	2.0 – 12.0	09/26/99	11.8 =	2 U	27.7 =	1.4 J	40.9
AF-11	AF1122	1.0 – 11.0	09/26/99	2 U	2 U	2 U	6 U	ND
AF-12	AF1222	2.5 – 12.5	09/26/99	23.4 =	4 U	54.8 =	8.5 J	86.7
In-Stream Water Quality Standards (GA Chapter 391-3-6)				71.28	200,000	28,718	NRC	NRC
Alternate Concentration Limits				340	—	—	—	—

NOTES:
Bold values exceed ACLs.
BGS Below ground surface
BTEX Benzene, toluene, ethylbenzene, and xylene
ND Not detected
NRC No regulatory criteria

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

Table 4a. CAP-Part A/B – Groundwater Analytical Results (continued)
(VOLATILE ORGANIC COMPOUNDS)

Sample Location	Sample ID	Screened Interval (ft BGS)	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl - benzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
AF-13	AF1322	2.5 – 12.5	09/26/99	2 U	2 U	2 U	6 U	ND
AF-14	AF1422	1.4 – 11.4	09/26/99	2 U	2 U	2 U	6 U	ND
AF-15	AF1522	1.5 – 11.5	09/26/99	2 U	2 U	2 U	6 U	ND
AF-16	AF1622	1.5 – 11.5	09/26/99	2 U	2 U	2 U	6 U	ND
AF-17	AF1722	2.5 – 12.5	09/26/99	14 =	2 U	2 U	6 U	14.0
AF-18	AF1822	1.5 – 11.5	09/26/99	10.3 =	2 U	2 U	6 U	10.3
AF-19	AF1922	1.5 – 11.5	09/26/99	3.5 =	2 U	2 U	6 U	3.5
AF-20	AF2022	3.0 – 13.0	09/26/99	2.1 =	2 U	2 U	6 U	2.1
AF-23	AF2322	3.0 – 13.0	09/26/99	1.1 J	2 U	2 U	6 U	1.1
AF-24	AF2422	2.0 – 12.0	09/26/99	2 U	2 U	2 U	6 U	ND
AF-25	AF2522	0.5 – 10.5	09/26/99	4.8 =	2 U	0.59 J	6 U	5.49
AF-26	AF2622	2.0 – 12.0	09/26/99	16.6 =	4 U	4 U	12 U	16.6
AF-27	AF2722	1.0 – 11.0	09/26/99	5.1 J	20 U	20 U	60 U	5.1
AF-28	AF2822	2.0 – 12.0	09/26/99	3.9 =	2 U	2 U	6 U	3.9
AF-29	AF2922	2.0 – 12.0	09/26/99	53.6 =	2 U	2 U	6 U	53.6
AF-30	AF3012	11.0 – 15.0	09/26/99	**7670 J**	19 =	500 J	72.7 =	8261.7
AF-30	AF3022	16.0 – 20.0	09/26/99	**2290** =	5.5 =	168 =	9.6 =	2473.1
AF-30	AF3032	21.0 – 25.0	09/26/99	37.9 =	0.55 J	2.7 =	1.8 J	42.95
AF-30	AF3042	26.0 – 30.0	09/26/99	16.2 =	2 U	1.3 J	6 U	17.5
AF-30	AF3052	31.0 – 35.0	09/26/99	11 =	2 U	0.53 J	0.51 J	12.04
AF-30	AF3062	36.0 – 40.0	09/26/99	6.4 =	2 U	0.67 J	0.67 J	7.74
AF-30	AF3072	41.0 – 45.0	09/26/99	5.5 =	0.78 J	5.5 =	9.3 =	21.08
AF-30	AF3082	46.0 – 50.0	09/26/99	6.8 =	0.5 J	1.8 J	2.9 J	12.0
AF-31	AF3112	6.0 – 10.0	09/25/99	11.1 =	10 U	10 U	30 U	1.1
AF-31	AF3122	11.0 – 15.0	09/25/99	0.99 J	2 U	2 U	6 U	0.99
AF-31	AF3132	16.0 – 20.0	09/25/99	2 U	2 U	2 U	6 U	ND
AF-31	AF3142	21.0 – 25.0	09/25/99	2 U	2 U	2 U	6 U	ND
AF-31	AF3152	26.0 – 30.0	09/25/99	2 U	2 U	2 U	6 U	ND
AF-31	AF3162	31.0 – 35.0	09/25/99	2 U	2 U	2 U	6 U	ND
In-Stream Water Quality Standards (GA Chapter 391-3-6)				71.28	200,000	28,718	NRC	NRC
Alternate Concentration Limits				340	—	—	—	—

NOTES:

Bold values exceed ACLs.

BGS Below ground surface
BTEX Benzene, toluene, ethylbenzene, and xylene
ND Not detected
NRC No regulatory criteria

Laboratory Qualifiers

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

Table 4a. CAP-Part A/B – Groundwater Analytical Results (continued)
(VOLATILE ORGANIC COMPOUNDS)

Sample Location	Sample ID	Screened Interval (ft BGS)	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl - benzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
AF-31	AF3172	36.0 – 40.0	09/25/99	2 U	2 U	2 U	6 U	ND
AF-31	AF3182	41.0 – 45.0	09/25/99	2 U	2 U	2 U	6 U	ND
AF-31	AF3192	46.0 – 50.0	09/25/99	2 U	2 U	2 U	6 U	ND
AF-32	AF3212	11.0 – 15.0	09/25/99	2.1 =	2 U	2 U	6 U	2.1
AF-32	AF3222	16.0 – 20.0	09/25/99	2 U	0.52 J	2 U	6 U	0.52
AF-32	AF3232	21.0 – 25.0	09/25/99	2 U	2 U	2 U	6 U	ND
AF-32	AF3242	26.0 – 30.0	09/25/99	2 U	2 U	2 U	6 U	ND
AF-32	AF3252	31.0 – 35.0	09/25/99	2 U	2 U	2 U	6 U	ND
AF-32	AF3262	36.0 – 40.0	09/25/99	2 U	2 U	2 U	6 U	ND
AF-32	AF3272	41.0 – 45.0	09/25/99	2 U	2 U	2 U	6 U	ND
AF-32	AF3282	46.0 – 50.0	09/25/99	2 U	2 U	2 U	6 U	ND
AF-33	AF3312	2.3 – 11.8	09/25/99	2 U	2 U	2 U	6 U	ND
AF-34	AF3412	1.4 – 10.9	09/25/99	2 U	2 U	2 U	6 U	ND
AF-35	AF3512	1.2 – 10.7	09/25/99	2.1 =	2 U	2 U	6 U	2.1
AF-36	AF3612	1.4 – 10.9	09/25/99	2.4 =	2 U	2 U	6 U	2.4
AF-37	AF3712	4.4 – 14.3	09/25/99	4.2 =	0.69 J	0.63 J	3.4 J	8.92
AF-38	AF3812	4.1 – 14.1	09/25/99	2 =	2 =	1.6 J	9.4 =	15.0
AF-39	AF3912	4.4 – 14.3	09/25/99	0.92 J	2 U	2 U	6 U	0.92
In-Stream Water Quality Standards (GA Chapter 391-3-6)				71.28	200,000	28,718	NRC	NRC
Alternate Concentration Limits				340	—	—	—	—

NOTES:

Bold values exceed ACLs.

BGS Below ground surface
BTEX Benzene, toluene, ethylbenzene, and xylene
ND Not detected
NRC No regulatory criteria

Laboratory Qualifiers

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

Table 4b. CAP-Part A/B – Groundwater Analytical Results
(POLYNUCLEAR AROMATIC HYDROCARBONS)

Sample Location	Sample ID	Depth or Screened Interval (ft BGS)	Date Sampled	Detected PAH Compounds (µg/L)								Total PAH (µg/L)
				acenaphthene	anthracene	benzo(a)pyrene	chrysene	fluorene	naphthalene	phenanthrene	pyrene	
CAP-Part A Investigation												
HAAF-260-PZ-1-GW		6	7/23/98	40 =	25 =		2 J	82 =	290 E	180 =	28 =	647
HAAF-260-PZ-2-GW		6	7/23/98						1 J			1
HAAF-260-PZ-3-GW		6	7/23/98						13 =			13
HAAF-260-PZ-4-GW		6	7/23/98						90 =			90
CAP-Part B Investigation												
AF-01	AF0112	2.5 – 12.5	05/04/99									ND
AF-02	AF0212	2.0 – 12.0	05/05/99									ND
AF-03	AF0312	2.0 – 12.0	05/05/99						21.8 J			21.8
AF-04	AF0412	2.0 – 12.0	05/05/99									ND
AF-05	AF0512	2.0 – 12.0	05/05/99						0.81 J			0.81
AF-06	AF0612	2.0 – 12.0	05/05/99									ND
AF-07	AF0712	2.5 – 12.5	05/04/99						511 =			511
AF-08	AF0812	2.5 – 12.5	05/04/99			4.9 J		1.5 J				6.4
AF-09	AF0912	2.0 – 12.0	05/04/99	2.4 J				4.3 J	28.7 J	1.9 J	0.59 J	37.89
AF-10	AF1012	2.5 – 12.5	05/04/99			2.5 J						2.5
AF-11	AF1112	1.0 – 11.0	05/05/99						23.3 =			23.3
AF-12	AF1212	2.5 – 12.5	05/04/99						59.5 J			59.5
AF-13	AF1312	2.5 – 12.5	05/07/99									ND
AF-14	AF1412	1.4 – 11.4	05/07/99									ND
AF-15	AF1512	1.5 – 11.5	05/07/99			1.6 J						1.6
AF-16	AF1612	1.5 – 11.5	05/07/99									ND
AF-17	AF1712	2.5 – 12.5	05/08/99									ND
AF-18	AF1812	1.5 – 11.5	05/08/99									ND
In-Stream Water Quality Standards (GA Chapter 391-3-6)				NRC	0.0311	0.0311	NRC	370	NRC	NRC	NRC	NRC
Alternate Concentration Limits				—	—	936	—	—	23,400	—	—	—

NOTES:

BGS	Below ground surface
ND	Not detected
NRC	No regulatory criteria
PAH	Polynuclear aromatic hydrocarbons

Laboratory Qualifiers

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

Table 4b. CAP-Part A/B – Groundwater Analytical Results (continued)
(POLYNUCLEAR AROMATIC HYDROCARBONS)

Sample Location	Sample ID	Screened Interval (ft BGS)	Date Sampled	Detected PAH Compounds (µg/L)								Total PAH (µg/L)
				acenaphthene	anthracene	benzo(a)pyrene	chrysene	fluorene	naphthalene	phenanthrene	pyrene	
AF-19	AF1912	1.5 – 11.5	05/08/99									ND
AF-20	AF2012	3.0 – 13.0	05/08/99									ND
AF-21	AF2112	11.0 – 15.0	05/07/99						5.2 J			5.2
AF-21	AF2122	16.0 – 20.0	05/07/99						1.0 J			1.0
AF-21	AF2132	21.0 – 25.0	05/07/99									ND
AF-21	AF2142	26.0 – 30.0	05/07/99									ND
AF-21	AF2152	31.0 – 35.0	05/07/99									ND
AF-21	AF2162	36.0 – 40.0	05/07/99						2.8 J	1.9 J		4.7
AF-21	AF2172	41.0 – 45.0	05/07/99									ND
AF-21	AF2182	46.0 – 50.0	05/07/99									ND
AF-21	AF2192	51.0 – 55.0	05/07/99						0.68 J			0.68
AF-22	AF2212	11.0 – 15.0	05/08/99						13.0 =			13.0
AF-22	AF2222	16.0 – 20.0	05/08/99									ND
AF-22	AF2232	21.0 – 25.0	05/08/99						0.74 J			0.74
AF-22	AF2242	26.0 – 30.0	05/08/99									ND
AF-22	AF2252	31.0 – 35.0	05/08/99									ND
AF-22	AF2262	36.0 – 40.0	05/08/99									ND
AF-22	AF2272	41.0 – 45.0	05/08/99						4.5 J			4.5
AF-22	AF2282	46.0 – 50.0	05/08/99									ND
AF-23	AF2312	3.0 – 13.0	05/08/99			18.6 J						18.6
AF-24	AF2412	2.0 – 12.0	05/08/99									ND
AF-25	AF2512	0.5 – 10.5	05/11/99									ND
AF-26	AF2612	2.0 – 12.0	05/11/99									ND
AF-27	AF2712	1.0 – 11.0	05/11/99									ND
In-Stream Water Quality Standards (GA Chapter 391-3-6)				NRC	0.0311	0.0311	NRC	370	NRC	NRC	NRC	NRC
Alternate Concentration Limits				—	—	936	—	—	23,400	—	—	—

NOTES:
- BGS Below ground surface
- ND Not detected
- NRC No regulatory criteria
- PAH Polynuclear aromatic hydrocarbons

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

Table 4b. CAP-Part A/B – Groundwater Analytical Results (continued)
(POLYNUCLEAR AROMATIC HYDROCARBONS)

Sample Location	Sample ID	Screened Interval (ft BGS)	Date Sampled	Detected PAH Compounds (µg/L)								Total PAH (µg/L)
				acenaphthene	anthracene	benzo(a)pyrene	chrysene	fluorene	naphthalene	phenanthrene	pyrene	
AF-28	AF2812	2.0 – 12.0	05/11/99	0.79 J					1.4 J			2.19
AF-29	AF2912	2.0 – 12.0	05/11/99									ND
AF-33	AF3312	2.3 – 11.8	09/25/99									ND
AF-34	AF3412	1.4 – 10.9	09/25/99									ND
AF-35	AF3512	1.2 – 10.7	09/25/99									ND
AF-36	AF3612	1.4 – 10.9	09/25/99									ND
AF-37	AF3712	4.4 – 14.3	09/25/99									ND
AF-38	AF3812	4.1 – 14.1	09/25/99									ND
AF-39	AF3912	4.4 – 14.3	09/25/99									ND
In-Stream Water Quality Standards (GA Chapter 391-3-6)				NRC	0.0311	0.0311	NRC	370	NRC	NRC	NRC	NRC
Alternate Concentration Limits				—	—	936	—	—	23,400	—	—	—

NOTES:

May 1998 sampling was performed prior to the new CAP-Part A guidance that was published in May 1998. Thus, the new SW-846 analytical methods were not used during that sampling event; however, the new SW-846 analytical methods were used on all samples collected in 1999.

BGS Below ground surface
ND Not detected
NRC No regulatory criteria
PAH Polynuclear aromatic hydrocarbons

Laboratory Qualifiers

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

Table 5. CAP-Part B – Surface Water Analytical Results

Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)	Total PAH (µg/L)
AF-S1	AF0119	5/11/99	2 U	2 U	2 U	3 U	ND	ND
AF-S2	AF0219	5/11/99	2 U	2 U	2 U	3 U	ND	ND
AF-S3	AF0319	5/12/99	2 U	2 U	2 U	3 U	ND	ND
In Stream Water Quality Standard			71.28	200,000	28,718	NRC	NRC	NRC

NOTES:

BGS	Below ground surface
BTEX	Benzene, toluene, ethylbenzene, and xylene
NA	Not analyzed
ND	Not detected
NRC	No regulatory criteria
PAH	Polynuclear aromatic hydrocarbons

Laboratory Qualifiers

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

Table 6. CAP-Part B – Sediment Analytical Results

Sample Location	Sample ID	Date Sampled	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	Total PAH (mg/kg)
AF-S1	AF0110	5/11/99	0.003 U	0.0024 J	0.003 U	0.0076 U	0.0024	1.8 =	0.159 U	ND
AF-S2	AF0210	5/11/99	0.0026 U	0.0026 U	0.0026 U	0.0065 U	ND	9.8 =	0.141 U	ND
AF-S3	AF0310	5/12/99	0.00066 J	0.0024 U	0.0024 U	0.0058 U	0.00066	13.0 =	0.206 J	ND
GA UST Soil Threshold Levels (Table A, Column 2)			0.008	6	10	700	NRC	NRC	NRC	NRC

NOTES:

BGS	Below ground surface
BTEX	Benzene, toluene, ethylbenzene, and xylene
ND	Not detected
NRC	No regulatory criteria
PAH	Polynuclear aromatic hydrocarbons

Laboratory Qualifiers

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

Table 7. CAP-Part B – Geotechnical Results

Boring ID	Sample ID	Depth Interval (ft BGS)	Grain size analysis - % Fines	Grain size analysis - % Sand	Grain size analysis - % Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Natural Moisture Content (%)	Porosity	Specific Gravity	Permeability (cm/sec)
AF-01	AF0131	7.0 – 9.0	16	84	0	NP	NP	NP	18.3	0.47	2.65	1.41×10^{-4}
AF-03	AF0331	8.0 – 10.0	15	85	0	NP	NP	NP	23.4	—	—	—
AF-05	AF0531	4.0 – 7.0	39	61	0	23	18.2	4.8	19.2	—	—	—
AF-11	AF1131	4.0 – 7.0	22	78	0	NP	NP	NP	13.1	—	—	—
AF-12	AF1231	4.0 – 6.0	15	85	0	NP	NP	NP	16.5	—	—	—
AF-16	AF1631	0.0 – 8.0	14	86	0	NP	NP	NP	19.9	—	—	—
AF-18	AF1831	1.5 – 7.5	24	76	0	22.5	20	2.5	23.9	—	—	—
AF-19	AF1931	1.5 – 7.5	22	78	0	NP	NP	NP	24.4	—	—	—
AF-20	AF2031	7.0 – 13.0	23	75	2	NP	NP	NP	17.8	—	—	—
AF-23	AF2331	7.5 – 13.0	12	87	1	NP	NP	NP	16.7	—	—	—
AF-24	AF2431	2.0 – 8.0	17	83	0	NP	NP	NP	15.1	—	—	—

NP nonplastic

Table 8. CAP-Part B – Well Construction Details

Boring/Well Number	Date Installed	Boring Depth (ft BGS)	Screened Interval (ft BGS)	Type of Completion	Coordinates (NAD 88)	Ground Surface Elevation (NGVD 29)	Top of Casing Elevation (NGVD 29)
CAP-Part B Investigation							
AF-01	5/4/99	12.7	2.5 – 12.5	¾-inch PVC shallow well	N 734225.90 E 979645.78	23.28	23.02
AF-02	5/5/99	12.2	2.0 – 12.0	¾-inch PVC shallow well	N 734103.05 E 979556.81	22.10	21.97
AF-03	5/5/99	12.2	2.0 – 12.0	¾-inch PVC shallow well	N 734073.65 E 979520.84	22.30	22.30
AF-04	5/5/99	12.2	2.0 – 12.0	¾-inch PVC shallow well	N 734170.32 E 979621.51	22.32	22.24
AF-05	5/5/99	12.2	2.0 – 12.0	¾-inch PVC shallow well	N 734139.42 E 979582.77	22.46	22.21
AF-06	5/5/99	12.2	2.0 – 12.0	temporary piezometer	N 734083.64 E 979514.88	22.70	N/A
AF-07	5/4/99	12.7	2.5 – 12.5	¾-inch PVC shallow well	N 734145.20 E 979553.53	23.13	22.90
AF-08	5/4/99	12.7	2.5 – 12.5	¾-inch PVC shallow well	N 734249.25 E 979597.57	23.30	23.10
AF-09	5/4/99	12.2	2.0 – 12.0	¾-inch PVC shallow well	N 734211.34 E 979549.77	23.11	22.93
AF-10	5/4/99	12.7	2.5 – 12.5	temporary piezometer	N 734145.04 E 979465.65	23.23	N/A
AF-11	5/5/99	11.2	1.0 – 11.0	¾-inch PVC shallow well	N 734167.54 E 979635.77	22.03	21.93
AF-12	5/4/99	12.7	2.5 – 12.5	¾-inch PVC shallow well	N 734165.46 E 979578.22	23.05	22.86
AF-13	5/7/99	12.7	2.5 – 12.5	¾-inch PVC shallow well	N 734243.82 E 979567.47	23.01	22.79
AF-14	5/7/99	11.5	1.4 – 11.4	¾-inch PVC shallow well	N 734284.56 E 979617.09	23.33	23.04
AF-15	5/7/99	11.6	1.5 – 11.5	¾-inch PVC shallow well	N 734253.79 E 979641.17	23.30	23.28
AF-16	5/7/99	12.0	1.6 – 11.6	¾-inch PVC shallow well	N 734223.09 E 979682.24	22.06	22.17
AF-17	5/8/99	12.2	2.0 – 12.0	¾-inch PVC shallow well	N 734023.58 E 979539.92	18.64	18.93
AF-18	5/8/99	11.5	1.3 – 11.3	¾-inch PVC shallow well	N 734051.22 E 979517.96	19.06	19.33

Table 8. CAP-Part B – Well Construction Details (continued)

Boring/Well Number	Date Installed	Boring Depth (ft BGS)	Screened Interval (ft BGS)	Type of Completion	Coordinates (NAD 88)	Ground Surface Elevation (NGVD 29)	Top of Casing Elevation (NGVD 29)
AF-19	5/8/99	11.5	1.4 – 11.4	¾-inch PVC shallow well	N 734038.69 E 979490.11	19.52	19.70
AF-20	5/8/99	13.2	3.0 – 13.0	¾-inch PVC shallow well	N 734086.22 E 979494.33	23.03	22.84
AF-21	5/7/99	55.0	N/A	vertical profile	N 734143.75 E 979553.06	23.05	N/A
AF-22	5/8/99	55.0	N/A	vertical profile	N 734085.32 E 979516.34	22.61	N/A
AF-23	5/8/99	13.2	3.0 – 13.0	¾-inch PVC shallow well	N 734097.56 E 979456.29	23.43	23.25
AF-24	5/8/99	12.2	2.0 – 12.0	¾-inch PVC shallow well	N 734199.08 E 979473.21	23.10	22.85
AF-25	5/11/99	10.5	0.1 – 10.1	¾-inch PVC shallow well	N 734020.29 E 979470.48	14.75	15.01
AF-26	5/11/99	12.2	2.0 – 12.0	¾-inch PVC shallow well	N 733986.65 E 979544.00	16.90	17.04
AF-27	5/11/99	11.5	1.0 – 11.0	¾-inch PVC shallow well	N 734005.71 E 979516.52	16.40	16.55
AF-28	5/11/99	12.2	2.0 – 12.0	¾-inch PVC shallow well	N 734078.69 E 979600.87	16.80	17.13
AF-29	5/11/99	12.2	2.0 – 12.0	¾-inch PVC shallow well	N 734007.36 E 979587.21	18.90	19.06
AF-30	9/26/99	50.0	N/A	vertical profile	N 734139.86 E 979550.68	23.10	N/A
AF-31	9/25/99	50.0	N/A	vertical profile	N 733998.85 E 979522.67	16.70	N/A
AF-32	9/25/99	50.0	N/A	vertical profile	N 733972.47 E 979570.12	17.00	N/A
AF-33	9/25/99	12.0	2.3 – 11.8	¾-inch PVC shallow well	N 734123.31 E 979659.91	17.60	18.02
AF-34	9/25/99	11.0	1.4 – 10.9	¾-inch PVC shallow well	N 734007.30 E 979725.81	17.60	17.85
AF-35	9/25/99	11.0	1.2 – 10.7	¾-inch PVC shallow well	N 734025.16 E 979653.95	17.30	17.63
AF-36	9/25/99	11.0	1.4 – 10.9	¾-inch PVC shallow well	N 733954.70 E 979592.53	17.40	17.52
AF-37	9/25/99	15.0	4.4 – 14.3	¾-inch PVC shallow well	N 733952.49 E 979506.73	19.80	20.07
AF-38	9/25/99	14.5	4.1 – 14.0	¾-inch PVC shallow well	N 733990.35 E 979405.78	20.00	20.24
AF-39	9/25/99	15.0	4.4 – 14.3	¾-inch PVC shallow well	N 734050.46 E 979442.65	21.70	22.14

Table 9. CAP-Part A/B – Groundwater Elevations

Well Number	Date Measured	Ground Surface Elev. (ft MSL)	Top of Casing Elev. (ft MSL)	Depth of Screened Interval (ft BGS)	Depth of Free Product (ft BTOC)	Water Depth (ft BTOC)	Product Thickness (ft)	Specific Gravity Adjustment	Corrected Groundwater Elev. (ft MSL)
CAP-Part A Investigation									
MW-3	11/19/98	not reported	21.44	3.0 – 7.0	N/A	4.72	N/A	N/A	16.72
MW-4	11/19/98	not reported	22.80	2.5 – 6.5	N/A	2.65	N/A	N/A	20.15
MW-5	11/19/98	not reported	21.51	3.5 – 7.5	N/A	5.00	N/A	N/A	16.51
CAP-Part B Investigation – Round 1									
AF-01	06/02/99	23.28	23.02	2.5 – 12.5	N/A	4.88	N/A	N/A	18.14
AF-02	06/02/99	22.10	21.97	2.0 – 12.0	N/A	4.91	N/A	N/A	17.06
AF-03	06/02/99	22.30	22.30	2.0 – 12.0	N/A	5.11	N/A	N/A	17.19
AF-04	06/02/99	22.32	22.24	2.0 – 12.0	N/A	4.66	N/A	N/A	17.58
AF-05	06/02/99	22.46	22.21	2.0 – 12.0	N/A	4.97	N/A	N/A	17.25
AF-07	06/02/99	23.13	22.9	2.5 – 12.5	N/A	5.01	N/A	N/A	17.89
AF-08	06/02/99	23.30	23.1	2.5 – 12.5	N/A	3.94	N/A	N/A	19.16
AF-09	06/02/99	23.11	22.93	2.0 – 12.0	N/A	4.01	N/A	N/A	18.92
AF-11	06/02/99	22.03	21.93	1.0 – 11.0	N/A	4.72	N/A	N/A	17.21
AF-12	06/02/99	23.05	22.86	2.5 – 12.5	N/A	5.29	N/A	N/A	17.57
AF-13	06/02/99	23.01	22.79	2.5 – 12.5	N/A	3.34	N/A	N/A	19.45
AF-14	06/02/99	23.33	23.04	1.4 – 11.4	N/A	3.12	N/A	N/A	19.92
AF-15	06/02/99	23.30	23.28	1.5 – 11.5	N/A	4.46	N/A	N/A	18.82
AF-16	06/02/99	22.06	22.17	1.6 – 11.6	N/A	4.22	N/A	N/A	17.95
AF-17	06/02/99	18.64	18.93	2.0 – 12.0	N/A	4.46	N/A	N/A	14.47
AF-18	06/02/99	19.06	19.33	1.3 – 11.3	N/A	3.40	N/A	N/A	15.93
AF-19	06/02/99	19.52	19.70	1.4 – 11.4	N/A	3.85	N/A	N/A	15.85
AF-20	06/02/99	23.03	22.84	3.0 – 13.0	N/A	4.91	N/A	N/A	17.93

NOTE:

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

Table 9. CAP-Part A/B – Groundwater Elevations (continued)

Well Number	Date Measured	Ground Surface Elev. (ft MSL)	Top of Casing Elev. (ft MSL)	Depth of Screened Interval (ft BGS)	Depth of Free Product (ft BTOC)	Water Depth (ft BTOC)	Product Thickness (ft)	Specific Gravity Adjustment	Corrected Groundwater Elev. (ft MSL)
AF-23	06/02/99	23.43	23.25	3.0 – 13.0	N/A	4.91	N/A	N/A	18.34
AF-24	06/02/99	23.10	22.85	2.0 – 12.0	N/A	2.66	N/A	N/A	20.19
AF-25	06/02/99	14.75	15.01	0.1 – 10.1	N/A	0.87	N/A	N/A	14.14
AF-26	06/02/99	16.90	17.04	2.0 – 12.0	N/A	2.76	N/A	N/A	14.28
AF-27	06/02/99	16.40	16.55	1.0 – 11.0	N/A	1.98	N/A	N/A	14.57
AF-28	06/02/99	16.80	17.13	2.0 – 12.0	N/A	1.74	N/A	N/A	15.39
AF-29	06/02/99	18.90	19.06	2.0 – 12.0	N/A	4.67	N/A	N/A	14.39
CAP-Part B Investigation – Round 2									
AF-01	12/03/99	23.28	23.02	2.5 – 12.5	N/A	4.97	N/A	N/A	18.05
AF-02	12/03/99	22.10	21.97	2.0 – 12.0	N/A	4.86	N/A	N/A	17.11
AF-03	12/03/99	22.30	22.30	2.0 – 12.0	N/A	5.09	N/A	N/A	17.21
AF-04	12/03/99	22.32	22.24	2.0 – 12.0	N/A	4.67	N/A	N/A	17.57
AF-05	12/03/99	22.46	22.21	2.0 – 12.0	N/A	4.94	N/A	N/A	17.27
AF-07	12/03/99	23.13	22.9	2.5 – 12.5	5.00	5.02	002	N/A	17.88
AF-08	12/03/99	23.30	23.1	2.5 – 12.5	N/A	4.10	N/A	N/A	19.00
AF-09	12/03/99	23.11	22.93	2.0 – 12.0	N/A	4.11	N/A	N/A	18.82
AF-11	12/03/99	22.03	21.93	1.0 – 11.0	N/A	4.71	N/A	N/A	17.22
AF-12	12/03/99	23.05	22.86	2.5 – 12.5	N/A	5.19	N/A	N/A	17.67
AF-13	12/03/99	23.01	22.79	2.5 – 12.5	N/A	3.54	N/A	N/A	19.25
AF-14	12/03/99	23.33	23.04	1.4 – 11.4	N/A	3.34	N/A	N/A	19.70
AF-15	12/03/99	23.30	23.28	1.5 – 11.5	N/A	4.49	N/A	N/A	18.79
AF-16	12/03/99	22.06	22.17	1.6 – 11.6	N/A	3.98	N/A	N/A	18.19
AF-17	12/03/99	18.64	18.93	2.0 – 12.0	N/A	3.79	N/A	N/A	15.14
AF-18	12/03/99	19.06	19.33	1.3 – 11.3	N/A	3.23	N/A	N/A	16.10
AF-19	12/03/99	19.52	19.70	1.4 – 11.4	N/A	3.56	N/A	N/A	16.14
AF-20	12/03/99	23.03	22.84	3.0 – 13.0	N/A	5.00	N/A	N/A	17.84
AF-23	12/03/99	23.43	23.25	3.0 – 13.0	N/A	5.03	N/A	N/A	18.22

NOTE:

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

Table 9. CAP-Part A/B – Groundwater Elevations (continued)

Well Number	Date Measured	Ground Surface Elev. (ft MSL)	Top of Casing Elev. (ft MSL)	Depth of Screened Interval (ft BGS)	Depth of Free Product (ft BTOC)	Water Depth (ft BTOC)	Product Thickness (ft)	Specific Gravity Adjustment	Corrected Groundwater Elev. (ft MSL)
AF-24	12/03/99	23.10	22.85	2.0 – 12.0	N/A	2.81	N/A	N/A	20.04
AF-25	12/03/99	14.75	15.01	0.1 – 10.1	N/A	0.60	N/A	N/A	14.41
AF-26	12/03/99	16.90	17.04	2.0 – 12.0	N/A	2.02	N/A	N/A	15.02
AF-27	12/03/99	16.40	16.55	1.0 – 11.0	N/A	1.41	N/A	N/A	15.14
AF-28	12/03/99	16.80	17.13	2.0 – 12.0	N/A	1.14	N/A	N/A	15.99
AF-29	12/03/99	18.90	19.06	2.0 – 12.0	N/A	3.79	N/A	N/A	15.27
AF-33	12/03/99	17.6	18.02	2.3 – 11.8	N/A	2.06	N/A	N/A	15.96
AF-34	12/03/99	17.6	17.85	1.4 – 10.9	N/A	4.62	N/A	N/A	13.23
AF-35	12/03/99	17.3	17.63	1.2 – 10.7	N/A	2.55	N/A	N/A	15.08
AF-36	12/03/99	17.4	17.52	1.4 – 10.9	N/A	2.71	N/A	N/A	14.81
AF-37	12/03/99	19.8	20.07	4.4 – 14.3	N/A	5.46	N/A	N/A	14.61
AF-38	12/03/99	20.0	20.24	4.1 – 14.0	N/A	5.84	N/A	N/A	14.40
AF-39	12/03/99	21.7	22.14	4.4 – 14.3	N/A	4.93	N/A	N/A	17.21

NOTE:

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

Table 10. CAP-Part B - Soil Data Risk-based Screening Results

Station:	Screening Levels			AF-01	AF-02	AF-03	AF-04	AF-05	AF-06	AF-07
Sample ID:	GA UST	Risk-based		AF0111	AF0211	AF0311	AF0411	AF0511	AF0611	AF0711
Sample Interval (ft BGS):	Soil Threshold	Screening	Leaching to	4.1 - 6.1	4.0 - 6.0	6.0 - 7.0	5.5 - 7.0	2.0 - 4.0	2.0 - 4.0	2.0 - 4.0
Collection Date:	Levels[a]	Level[b]	Groundwater[c]	04-May-99	05-May-99	05-May-99	05-May-99	05-May-99	05-May-99	04-May-99
Units:	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
VOLATILE ORGANIC COMPOUNDS										
Benzene	8	197,400	30	0.83 J	**12.9** =	2.2 =	3.8 J	1.2 J	1.3 J	69 =
Toluene	6,000	408,800,000	12,000	2.5 U	0.7 J	1.9 U	1 J	7.4 J	3.1 U	0.6 J
Ethylbenzene	10,000	204,400,000	13,000	2.5 U	2.4 U	1.9 U	2.7 R	6.5 UJ	3.1 U	53.9 =
Xylenes, Total	700,000	1,000,000,000	190,000	3.8 U	6 U	5.8 U	8.1 R	933 J	7.9 U	52.6 =
POLYNUCLEAR AROMATIC HYDROCARBONS										
2-Chloronaphthalene[d]	N/A[e]	40,880,000	84,000	374 U	388 U	388 U	402 U	355 U	362 U	1450 U
Acenaphthene	N/A[e]	12,264,000	570,000	374 U	388 U	388 U	402 U	355 U	362 U	1450 U
Acenaphthylene	N/A[e]	61,320,000	4,200,000	374 U	388 U	388 U	402 U	355 U	362 U	1450 U
Anthracene	N/A[e]	613,200,000	12,000,000	374 U	388 U	388 U	402 U	355 U	362 U	1450 U
Benzo(a)anthracene	N/A[e]	7,840	2,000	374 U	388 U	388 U	402 U	355 U	362 U	1450 U
Benzo(a)pyrene	N/A[e]	784	8,000	374 U	388 U	388 U	402 U	355 U	362 U	*1450 U*
Benzo(b)fluoranthene	N/A[e]	7,840	5,000	374 U	388 U	388 U	402 U	82 J	362 U	1450 U
Benzo(g,h,i)perylene	N/A[e]	--	--	374 U	388 U	388 U	402 U	355 U	362 U	1450 U
Benzo(k)fluoranthene	N/A[e]	78,400	49,000	374 U	388 U	388 U	402 U	355 U	362 U	1450 U
Chrysene	N/A[e]	784,000	160,000	374 U	388 U	388 U	402 U	355 U	362 U	1450 U
Dibenzo(a,h)anthracene	N/A[e]	784	2,000	374 U	388 U	388 U	402 U	355 U	362 U	*1450 U*
Fluoranthene	N/A[e]	81,760,000	4,300,000	374 U	388 U	388 U	402 U	355 U	362 U	1450 U
Fluorene	N/A[e]	81,760,000	560,000	374 U	388 U	388 U	402 U	116 J	362 U	1450 U
Indeno(1,2,3-cd)pyrene	N/A[e]	7,840	14,000	374 U	388 U	388 U	402 U	355 U	362 U	1450 U
Naphthalene	N/A[e]	40,880,000	84,000	374 U	388 U	388 U	402 U	408 =	362 U	489 J
Phenanthrene[f]	N/A[e]	61,320,000	4,200,000	374 U	388 U	388 U	402 U	45 J	362 U	1450 U
Pyrene	N/A[e]	61,320,000	4,200,000	374 U	388 U	388 U	402 U	355 U	362 U	1450 U
OTHER ANALYTES										
Total Organic Carbon	--	--	--	1710000 =						
TPH-Diesel Range Organics	--	--	--	920 UJ	6300 =	490 U	2900 =	1030000 =	1600 =	1510000 J
TPH-Gasoline Range Organics	--	--	--	219 =	1320 =	735 =	938 =	1130000 =	1100 =	4030000 =

[a] Average or higher groundwater pollution susceptibility area (where public water supply is within 2.0 mi.).
[b] Protective of soil exposure during Industrial Land Use.
[c] Protective of groundwater ingestion. Used a dilution attenuation factor of 20.
[d] Values based on naphthalene as a surrogate chemical.
[e] Not applicable. The screening level exceeds the expected soil concentration under free product condition.
[f] Values based on pyrene as a surrogate chemical.
Bold values indicate results exceeding Georgia UST action levels.

Italicized values indicate results exceeding risk-based screening levels.
Underlined values indicate results exceeding leaching to groundwater screening levels.
U Indicates that the compound was not detected above the reported sample quantitation limit.
J Indicates that the value for the compound was an estimated value.
UJ Indicates that the sample was not detected above an approximate sample quantitation limit.
R Indicates that the sample results are unusable and the presence or absence of the compound could not be verified.
= Indicates that the compound was detected at the concentration reported.

Table 10. CAP-Part B - Soil Data Risk-based Screening Results (continued)

Station:	Screening Levels			AF-08	AF-09	AF-10	AF-11	AF-12	AF-13	AF-14
Sample ID:	GA UST	Risk-based		AF0811	AF0911	AF1011	AF1111	AF1211	AF1311	AF1411
Sample Interval (ft BGS):	Soil Threshold	Screening	Leaching to	2.0 - 4.0	2.0 - 4.0	2.0 - 4.0	4.0 - 5.5	2.0 - 4.0	2.0 - 4.0	4.0 - 4.8
Collection Date:	Levels[a]	Level[b]	Groundwater[c]	04-May-99	04-May-99	04-May-99	05-May-99	04-May-99	07-May-99	07-May-99
Units:	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
VOLATILE ORGANIC COMPOUNDS										
Benzene	8	197,400	30	0.72 J	**<u>85.9 J</u>**	2.3 U	3.2 U	1.2 J	2 U	2 U
Toluene	6,000	408,800,000	12,000	2.6 U	220 U	2.3 U	2 J	2.5 U	1.3 J	0.7 J
Ethylbenzene	10,000	204,400,000	13,000	2.6 U	2130 =	2.3 U	3.5 U	27.4 =	2.5 =	4.9 =
Xylenes, Total	700,000	1,000,000,000	190,000	3.9 U	330 U	3.4 U	8.5 U	1.8 J	1.4 J	3 U
POLYNUCLEAR AROMATIC HYDROCARBONS										
2-Chloronaphthalene[d]	N/A[e]	40,880,000	84,000	355 U	1460 U	1530 U	392 U	1450 U	379 U	1500 U
Acenaphthene	N/A[e]	12,264,000	570,000	355 U	1460 U	1530 U	392 U	1450 U	379 U	1500 U
Acenaphthylene	N/A[e]	61,320,000	4,200,000	355 U	1460 U	1530 U	392 U	1450 U	379 U	1500 U
Anthracene	N/A[e]	613,200,000	12,000,000	355 U	1100 J	1530 U	392 U	17600 J	379 U	1500 U
Benzo(a)anthracene	N/A[e]	7,840	2,000	355 U	1460 U	278 J	392 U	164 J	379 U	1500 U
Benzo(a)pyrene	N/A[e]	784	8,000	355 U	*1460 U*	242 J	392 U	113 J	38.2 J	*1500 U*
Benzo(b)fluoranthene	N/A[e]	7,840	5,000	355 U	83.3 J	264 J	392 U	72.9 J	379 U	1500 U
Benzo(g,h,i)perylene	N/A[e]	--	--	355 U	1460 U	157 J	392 U	1450 U	379 U	1500 U
Benzo(k)fluoranthene	N/A[e]	78,400	49,000	355 U	76.1 J	274 J	392 U	1450 U	379 U	1500 U
Chrysene	N/A[e]	784,000	160,000	355 U	312 J	292 J	392 U	257 J	379 U	1500 U
Dibenzo(a,h)anthracene	N/A[e]	784	2,000	355 U	*1460 U*	*1530 U*	392 U	*1450 U*	379 U	*1500 U*
Fluoranthene	N/A[e]	81,760,000	4,300,000	355 U	1460 U	467 J	392 U	385 J	379 U	1500 U
Fluorene	N/A[e]	81,760,000	560,000	355 U	1460 U	1530 U	136 J	1450 U	379 U	1500 U
Indeno(1,2,3-cd)pyrene	N/A[e]	7,840	14,000	355 U	1460 U	138 J	392 U	1450 U	379 U	1500 U
Naphthalene	N/A[e]	40,880,000	84,000	355 U	17100 =	1530 U	449 =	9600 =	379 U	1500 U
Phenanthrene[f]	N/A[e]	61,320,000	4,200,000	355 U	1460 U	1530 U	52 J	1450 U	379 U	1500 U
Pyrene	N/A[e]	61,320,000	4,200,000	355 U	2290 =	436 J	392 U	1820 =	379 U	1500 U
OTHER ANALYTES										
Total Organic Carbon	--	--	--							
TPH-Diesel Range Organics	--	--	--	240 UJ	13100000 J	1800 J	510 U	6420000 J	17800 J	14400 =
TPH-Gasoline Range Organics	--	--	--	223 =	1270000 =	281 =	637 =	1320000 =	1050 =	112 U

[a] Average or higher groundwater pollution susceptibility area (where public water supply is within 2.0 mi.).
[b] Protective of soil exposure during Industrial Land Use.
[c] Protective of groundwater ingestion. Used a dilution attenuation factor of 20.
[d] Values based on naphthalene as a surrogate chemical.
[e] Not applicable. The screening level exceeds the expected soil concentration under free product condition.
[f] Values based on pyrene as a surrogate chemical.

Bold values indicate results exceeding Georgia UST action levels.

Italicized values indicate results exceeding risk-based screening levels.
Underlined values indicate results exceeding leaching to groundwater screening levels.

U Indicates that the compound was not detected above the reported sample quantitation limit.
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UJ Indicates that the sample was not detected above an approximate sample quantitation limit.
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= Indicates that the compound was detected at the concentration reported.

Table 10. CAP-Part B - Soil Data Risk-based Screening Results (continued)

Station:	Screening Levels			AF-15	AF-16	AF-17	AF-18	AF-19	AF-20	AF-23
Sample ID:	GA UST	Risk-based		AF1511	AF1611	AF1711	AF1811	AF1911	AF2011	AF2311
Sample Interval (ft BGS):	Soil Threshold Levels[a]	Screening Level[b]	Leaching to Groundwater[c]	4.0 - 5.1	4.0 - 5.4	4.0 - 6.0	2,0 - 4.0	2,0 - 4.0	6.0 - 7.0	4.0 - 5.0
Collection Date:				07-May-99	07-May-99	08-May-99	08-May-99	08-May-99	08-May-99	08-May-99
Units:	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
VOLATILE ORGANIC COMPOUNDS										
Benzene	8	197,400	30	1.9 U	2.1 U	3.6 =	2.4 U	2.2 U	6.5 =	2.3 U
Toluene	6,000	408,800,000	12,000	1.9 U	2.1 U	2.1 U	2.4 U	2.2 U	3.3 =	2.3 U
Ethylbenzene	10,000	204,400,000	13,000	1.9 U	2.1 U	2.1 U	2.4 U	2.2 U	21 =	2.3 U
Xylenes, Total	700,000	1,000,000,000	190,000	4.8 U	5.2 U	5.4 U	6 U	5.5 U	5.6 U	3.4 U
POLYNUCLEAR AROMATIC HYDROCARBONS										
2-Chloronaphthalene[d]	N/A[e]	40,880,000	84,000	374 U	397 U	417 U	402 U	412 U	406 U	3660 U
Acenaphthene	N/A[e]	12,264,000	570,000	374 U	397 U	417 U	402 U	412 U	406 U	3660 U
Acenaphthylene	N/A[e]	61,320,000	4,200,000	374 U	397 U	417 U	402 U	412 U	406 U	3660 U
Anthracene	N/A[e]	613,200,000	12,000,000	374 U	397 U	417 U	402 U	412 U	406 U	3660 U
Benzo(a)anthracene	N/A[e]	7,840	2,000	374 U	397 U	417 U	402 U	112 J	406 U	3660 U
Benzo(a)pyrene	N/A[e]	784	8,000	374 U	397 U	417 U	402 U	84.2 J	406 U	*3660 U*
Benzo(b)fluoranthene	N/A[e]	7,840	5,000	374 U	397 U	417 U	402 U	89.1 J	406 U	3660 U
Benzo(g,h,i)perylene	N/A[e]	--	--	374 U	397 U	417 U	402 U	41.4 J	406 U	3660 U
Benzo(k)fluoranthene	N/A[e]	78,400	49,000	374 U	397 U	417 U	402 U	82.6 J	406 U	3660 U
Chrysene	N/A[e]	784,000	160,000	374 U	397 U	417 U	402 U	118 J	406 U	3660 U
Dibenzo(a,h)anthracene	N/A[e]	784	2,000	374 U	397 U	417 U	402 U	412 U	406 U	3660 U
Fluoranthene	N/A[e]	81,760,000	4,300,000	374 U	397 U	417 U	402 U	180 J	406 U	3660 U
Fluorene	N/A[e]	81,760,000	560,000	374 U	397 U	417 U	402 U	412 U	406 U	3660 U
Indeno(1,2,3-cd)pyrene	N/A[e]	7,840	14,000	374 U	397 U	417 U	402 U	153 J	406 U	3660 U
Naphthalene	N/A[e]	40,880,000	84,000	374 U	397 U	417 U	402 U	412 U	406 U	3660 U
Phenanthrene[f]	N/A[e]	61,320,000	4,200,000	374 U	397 U	417 U	402 U	412 U	406 U	3660 U
Pyrene	N/A[e]	61,320,000	4,200,000	374 U	397 U	417 U	402 U	412 U	406 U	3660 U
OTHER ANALYTES										
Total Organic Carbon	--	--	--							
TPH-Diesel Range Organics	--	--	--	2800 =	650 U	430 U	840 =	470 U	2000 =	5600 =
TPH-Gasoline Range Organics	--	--	--	111 U	118 U	123 U	5140 =	274 =	186 =	132 =

[a] Average or higher groundwater pollution susceptibility area (where public water supply is within 2.0 mi.).
[b] Protective of soil exposure during Industrial Land Use.
[c] Protective of groundwater ingestion. Used a dilution attenuation factor of 20.
[d] Values based on naphthalene as a surrogate chemical.
[e] Not applicable. The screening level exceeds the expected soil concentration under free product condition.
[f] Values based on pyrene as a surrogate chemical.

Bold values indicate results exceeding Georgia UST action levels.
Italicized values indicate results exceeding risk-based screening levels.
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R Indicates that the sample results are unusable and the presence or absence of the compound could not be verified.
= Indicates that the compound was detected at the concentration reported.

Table 10. CAP-Part B - Soil Data Risk-based Screening Results (continued)

Station:	Screening Levels			AF-24	AF-25	AF-26	AF-27	AF-28	AF-29
Sample ID:	GA UST	Risk-based		AF2411	AF2511	AF2611	AF2711	AF2811	AF2911
Sample Interval (ft BGS):	Soil Threshold	Screening	Leaching to	2.0 - 3.0	0.0 - 0.6	6.0 - 7.4	2.0 - 4.0	4.0 - 4.9	0.0 - 2.4
Collection Date:	Levels[a]	Level[b]	Groundwater[c]	08-May-99	11-May-99	11-May-99	11-May-99	11-May-99	11-May-99
Units:	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
VOLATILE ORGANIC COMPOUNDS									
Benzene	8	197,400	30	2.1 U	2.7 U	7.8 =	2.1 U	2 U	2.4 U
Toluene	6,000	408,800,000	12,000	0.68 J	1.5 J	2.4 U	2.1 U	2 U	2.4 U
Ethylbenzene	10,000	204,400,000	13,000	2.1 U	2.7 U	2.4 U	2.1 U	2 U	2.4 U
Xylenes, Total	700,000	1,000,000,000	190,000	3.2 U	6.8 U	6 U	5.1 U	5.1 U	6 U
POLYNUCLEAR AROMATIC HYDROCARBONS									
2-Chloronaphthalene[d]	N/A[e]	40,880,000	84,000	1460 U	420 U	443 U	410 U	395 U	1470 U
Acenaphthene	N/A[e]	12,264,000	570,000	1460 U	420 U	443 U	410 U	395 U	1470 U
Acenaphthylene	N/A[e]	61,320,000	4,200,000	1460 U	420 U	443 U	410 U	395 U	1470 U
Anthracene	N/A[e]	613,200,000	12,000,000	1460 U	420 U	443 U	410 U	395 U	1470 U
Benzo(a)anthracene	N/A[e]	7,840	2,000	156 J	420 U	443 U	410 U	395 U	1470 U
Benzo(a)pyrene	N/A[e]	784	8,000	159 J	420 U	443 U	410 U	395 U	*1470 U*
Benzo(b)fluoranthene	N/A[e]	7,840	5,000	137 J	420 U	443 U	410 U	395 U	1470 U
Benzo(g,h,i)perylene	N/A[e]	--	--	129 J	420 U	443 U	410 U	395 U	1470 U
Benzo(k)fluoranthene	N/A[e]	78,400	49,000	190 J	420 U	443 U	410 U	395 U	1470 U
Chrysene	N/A[e]	784,000	160,000	184 J	420 U	443 U	410 U	395 U	1470 U
Dibenzo(a,h)anthracene	N/A[e]	784	2,000	*1460 U*	420 U	443 U	410 U	395 U	*1470 U*
Fluoranthene	N/A[e]	81,760,000	4,300,000	115 J	420 U	443 U	410 U	395 U	1470 U
Fluorene	N/A[e]	81,760,000	560,000	1460 U	420 U	443 U	410 U	395 U	1470 U
Indeno(1,2,3-cd)pyrene	N/A[e]	7,840	14,000	498 J	420 U	443 U	410 U	395 U	1470 U
Naphthalene	N/A[e]	40,880,000	84,000	1460 U	420 U	443 U	410 U	395 U	1470 U
Phenanthrene[f]	N/A[e]	61,320,000	4,200,000	1460 U	420 U	443 U	410 U	395 U	1470 U
Pyrene	N/A[e]	61,320,000	4,200,000	1460 U	420 U	443 U	410 U	395 U	1470 U
OTHER ANALYTES									
Total Organic Carbon	--	--	--						
TPH-Diesel Range Organics	--	--	--	21500 =	3400 =	470 U	360 U	2000 =	2500 =
TPH-Gasoline Range Organics	--	--	--	109 U	128 U	134 U	123 U	120 U	216 J

[a] Average or higher groundwater pollution susceptibility area (where public water supply is within 2.0 mi.).
[b] Protective of soil exposure during Industrial Land Use.
[c] Protective of groundwater ingestion. Used a dilution attenuation factor of 20.
[d] Values based on naphthalene as a surrogate chemical.
[e] Not applicable. The screening level exceeds the expected soil concentration under free product condition.
[f] Values based on pyrene as a surrogate chemical.
Bold values indicate results exceeding Georgia UST action levels.

Italicized values indicate results exceeding risk-based screening levels.
Underlined values indicate results exceeding leaching to groundwater screening levels.
U Indicates that the compound was not detected above the reported sample quantitation limit.
J Indicates that the value for the compound was an estimated value.
UJ Indicates that the sample was not detected above an approximate sample quantitation limit.
R Indicates that the sample results are unusable and the presence or absence of the compound could not be verified.
= Indicates that the compound was detected at the concentration reported.

Table 11. CAP-Part B - Groundwater Data Risk-based Screening Results

Station:	Screening Levels		AF-01	AF-02	AF-03	AF-04	AF-05	AF-06	AF-07	AF-08
Sample ID:	In-Stream		AF0112	AF0212	AF0312	AF0412	AF0512	AF0612	AF0712	AF0812
Screened Interval (ft BGS):	Water Quality		2.5 - 12.5	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.5 - 12.5	2.5 - 12.5
Collection Date:	Standards	Risk-based[a]	04-May-99	05-May-99	05-May-99	05-May-99	05-May-99	05-May-99	04-May-99	04-May-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS										
Benzene	71.28	0.36	13.2 =	27.4 =	51.8 =	1.5 J	8.2 =	**490** =	**9940** =	7.4 =
Toluene	200,000	750	0.82 J	1.8 J	1.6 J	1.4 J	2 U	20 =	200 U	0.56 J
Ethylbenzene	28,718	1,300	2 U	3.4 =	112 =	2 U	5.2 =	31.6 =	952 =	2 U
Xylenes, Total	-	12,000	3 U	1.1 J	2.6 J	5 U	5 U	24.6 J	792 =	3 U
POLYNUCLEAR HYDROCARBONS										
2-Chloronaphthalene[b]	-	6.5	10 R	10.4 U	10 UJ	11.1 U	11.1 U	10.4 U	400 U	10 R
Acenaphthene	-	365	10 R	10.4 U	10 UJ	11.1 U	11.1 U	10.4 U	400 U	10 R
Acenaphthylene	-	182.5	10 R	10.4 U	10 UJ	11.1 U	11.1 U	10.4 U	400 U	10 R
Anthracene	110000	182.5	10 R	10.4 U	10 UJ	11.1 U	11.1 U	10.4 U	400 U	10 R
Benzo(a)anthracene	0.0311	0.092	**10 R**	**10.4 U**	**10 UJ**	**11.1 U**	**11.1 U**	**10.4 U**	**400 U**	**10 R**
Benzo(a)pyrene	0.0311	0.0092	**10 R**	**10.4 U**	**10 UJ**	**11.1 U**	**11.1 U**	**10.4 U**	**400 U**	**4.9 J**
Benzo(b)fluoranthene	-	0.092	10 R	10.4 U	10 UJ	11.1 U	11.1 U	10.4 U	400 U	10 R
Benzo(g,h,i)perylene	-	-	10 R	10.4 U	10 UJ	11.1 U	11.1 U	10.4 U	400 U	10 R
Benzo(k)fluoranthene	0.0311	0.92	**10 R**	**10.4 U**	**10 UJ**	**11.1 U**	**11.1 U**	**10.4 U**	**400 U**	**10 R**
Chrysene	0.0311	9.2	**10 R**	**10.4 U**	**10 UJ**	**11.1 U**	**11.1 U**	**10.4 U**	**400 U**	**10 R**
Dibenzo(a,h)anthracene	0.0311	0.0092	**10 R**	**10.4 U**	**10 UJ**	**11.1 U**	**11.1 U**	**10.4 U**	**400 U**	**10 R**
Fluoranthene	370	1,460	10 R	10.4 U	10 UJ	11.1 U	11.1 U	10.4 U	**400 U**	10 R
Fluorene	14,000	243	10 R	10.4 U	10 UJ	11.1 U	11.1 U	10.4 U	400 U	1.5 J
Indeno(1,2,3-cd)pyrene	0.0311	0.092	**10 R**	**10.4 U**	**10 UJ**	**11.1 U**	**11.1 U**	**10.4 U**	**400 U**	**10 R**
Naphthalene	-	6.5	10 R	10.4 U	21.8 J	11.1 U	0.81 J	10.4 U	511 =	10 R
Phenanthrene[c]	-	182.5	10 R	10.4 U	10 UJ	11.1 U	11.1 U	10.4 U	400 U	10 R
Pyrene	11,000	182.5	10 R	10.4 U	10 UJ	11.1 U	11.1 U	10.4 U	400 U	10 R
OTHER ANALYTES										
Iron (dissolved)	-	-	177000 =	64800 =	49700 =	297000 =	45000 =	30000 =	73700 =	128000 =

[a] Protective of tap water ingestion by a resident.
[b] Values based on naphthalene as a surrogate chemical.
[c] Values based on pyrene as a surrogate chemical.
* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.

Bold values indicate results exceeding Georgia In-Stream Water Quality Standards.
Underlined values indicate results exceeding risk-based screening levels.

U Indicates that the compound was not detected above the reported sample quantitation limit.
J Indicates that the value for the compound was an estimated value.
UJ Indicates that the sample was not detected above an approximate sample quantitation limit.
R Indicates that the sample results are unusable and the presence or absence of the compound could not be verified.
= Indicates that the compound was detected at the concentration reported.

Table 11. CAP-Part B - Groundwater Data Risk-based Screening Results (continued)

Station:	Screening Levels		AF-09	AF-10	AF-11	AF-12	AF-13	AF-14	AF-15	AF-16
Sample ID:	In-Stream		AF0912	AF1012	AF1112	AF1212	AF1312	AF1412	AF1512	AF1612
Screened Interval (ft BGS):	Water Quality		2.0 - 12.0	2.5 - 12.5	1.0 - 11.0	2.5 - 12.5	2.5 - 12.5	1.4 - 11.4	1.5 - 11.5	1.5 - 11.5
Collection Date:	Standards	Risk-based[a]	04-May-99	04-May-99	05-May-99	04-May-99	07-May-99	07-May-99	07-May-99	07-May-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS										
Benzene	71.28	0.36	2.1 =	1.1 J	2 U	**79.3 =**	0.98 J	2 U	2 U	2 U
Toluene	200,000	750	0.98 J	2 U	2 U	20 U	2 U	2 U	2 U	2 U
Ethylbenzene	28,718	1,300	17.3 =	2 U	2 U	92.3 =	0.57 J	2 U	2 U	2 U
Xylenes, Total	-	12,000	0.68 J	3 U	5 U	27.4 J	0.93 J	3 U	3 U	3 U
POLYNUCLEAR HYDROCARBONS										
2-Chloronaphthalene[b]	-	6.5	10 R	10 R	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ	11 UJ
Acenaphthene	-	365	2.4 J	10 R	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ	11 UJ
Acenaphthylene	-	182.5	10 R	10 R	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ	11 UJ
Anthracene	110,000	182.5	10 R	10 R	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ	11 UJ
Benzo(a)anthracene	0.0311	0.092	**10 R**	**10 R**	**10.8 U**	**400 U**	**9.9 U**	**10.6 UJ**	**10.2 UJ**	**11 UJ**
Benzo(a)pyrene	0.0311	0.0092	**10 R**	**2.5 J**	**10.8 U**	**400 U**	**9.9 U**	**10.6 UJ**	**1.6 J**	**11 UJ**
Benzo(b)fluoranthene	-	0.092	10 R	10 R	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ	11 UJ
Benzo(g,h,i)perylene	-	-	10 R	10 R	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ	11 UJ
Benzo(k)fluoranthene	0.0311	0.92	**10 R**	**10 R**	**10.8 U**	**400 U**	**9.9 U**	**10.6 UJ**	**10.2 UJ**	**11 UJ**
Chrysene	0.0311	9.2	**10 R**	**10 R**	**10.8 U**	**400 U**	**9.9 U**	**10.6 UJ**	**10.2 UJ**	**11 UJ**
Dibenzo(a,h)anthracene	0.0311	0.0092	**10 R**	**10 R**	**10.8 U**	**400 U**	**9.9 U**	**10.6 UJ**	**10.2 UJ**	**11 UJ**
Fluoranthene	370	1,460	10 R	10 R	10.8 U	**400 U**	9.9 U	10.6 UJ	10.2 UJ	11 UJ
Fluorene	14,000	243	4.3 J	10 R	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ	11 UJ
Indeno(1,2,3-cd)pyrene	0.0311	0.092	**10 R**	**10 R**	**10.8 U**	**400 U**	**9.9 U**	**10.6 UJ**	**10.2 UJ**	**11 UJ**
Naphthalene	-	6.5	28.7 J	10 R	23.3 =	59.5 J	9.9 U	10.6 UJ	10.2 UJ	11 UJ
Phenanthrene[c]	-	182.5	1.9 J	10 R	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ	11 UJ
Pyrene	11,000	182.5	0.59 J	10 R	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ	11 UJ
OTHER ANALYTES										
Iron (dissolved)	-	-	56300 =	78100 =	97800 =	176000 =	160000 =	56100 =	101000 =	104000 =

[a] Protective of tap water ingestion by a resident.
[b] Values based on naphthalene as a surrogate chemical.
[c] Values based on pyrene as a surrogate chemical.
* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.

Bold values indicate results exceeding Georgia In-Stream Water Quality Standards.
Underlined values indicate results exceeding risk-based screening levels.

U Indicates that the compound was not detected above the reported sample quantitation limit.
J Indicates that the value for the compound was an estimated value.
UJ Indicates that the sample was not detected above an approximate sample quantitation limit.
R Indicates that the sample results are unusable and the presence or absence of the compound could not be verified.
= Indicates that the compound was detected at the concentration reported.

Table 11. CAP-Part B - Groundwater Data Risk-based Screening Results (continued)

Station:	Screening Levels		AF-17	AF-18	AF-19	AF-20	AF-21	AF-21	AF-21	AF-21
Sample ID:	In-Stream		AF1712	AF1812	AF1912	AF2012	AF2112	AF2122	AF2132	AF2142
Screened Interval (ft BGS):	Water Quality		2.5 - 12.5	1.5 - 11.5	1.5 - 11.5	3.0 - 13.0	11.0 - 15.0	16.0 - 20.0	21.0 - 25.0	26.0 - 30.0
Collection Date:	Standards	Risk-based[a]	08-May-99	08-May-99	08-May-99	08-May-99	07-May-99	07-May-99	07-May-99	07-May-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS										
Benzene	71.28	0.36	24.5 =	9.6 =	3.5 =	1.6 J	**6520** =	**233** =	32.7 =	15.6 =
Toluene	200,000	750	2 U	2 U	2 U	2.8 U	17.9 =	0.92 J	2 U	2 U
Ethylbenzene	28,718	1,300	2 U	2 U	2 U	2 U	144 J	21.3 =	2 U	2 U
Xylenes, Total	-	12,000	3 U	3 U	3 U	2 J	18.5 =	2.9 J	3 U	3 U
POLYNUCLEAR HYDROCARBONS										
2-Chloronaphthalene[b]	-	6.5	10 U	10 U	10 U	10 U	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ
Acenaphthene	-	365	10 U	10 U	10 U	10 U	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ
Acenaphthylene	-	182.5	10 U	10 U	10 U	10 U	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ
Anthracene	110,000	182.5	10 U	10 U	10 U	10 U	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ
Benzo(a)anthracene	0.0311	0.092	**10 U**	**10 U**	**10 U**	**10 U**	**10.3 UJ**	**11.2 U**	**10.4 UJ**	**10.3 UJ**
Benzo(a)pyrene	0.0311	0.0092	**10 U**	**10 U**	**10 U**	**10 U**	**10.3 UJ**	**11.2 U**	**10.4 UJ**	**10.3 UJ**
Benzo(b)fluoranthene	-	0.092	10 U	10 U	10 U	10 U	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ
Benzo(g,h,i)perylene	-	-	10 U	10 U	10 U	10 U	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ
Benzo(k)fluoranthene	0.0311	0.92	**10 U**	**10 U**	**10 U**	**10 U**	**10.3 UJ**	**11.2 U**	**10.4 UJ**	**10.3 UJ**
Chrysene	0.0311	9.2	**10 U**	**10 U**	**10 U**	**10 U**	**10.3 UJ**	**11.2 U**	**10.4 UJ**	**10.3 UJ**
Dibenzo(a,h)anthracene	0.0311	0.0092	**10 U**	**10 U**	**10 U**	**10 U**	**10.3 UJ**	**11.2 U**	**10.4 UJ**	**10.3 UJ**
Fluoranthene	370	1,460	10 U	10 U	10 U	10 U	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ
Fluorene	14,000	243	10 U	10 U	10 U	10 U	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ
Indeno(1,2,3-cd)pyrene	0.0311	0.092	**10 U**	**10 U**	**10 U**	**10 U**	**10.3 UJ**	**11.2 U**	**10.4 UJ**	**10.3 UJ**
Naphthalene	-	6.5	10 U	10 U	10 U	10 U	5.2 J	1 J	10.4 UJ	10.3 UJ
Phenanthrene[c]	-	182.5	10 U	10 U	10 U	10 U	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ
Pyrene	11,000	182.5	10 U	10 U	10 U	10 U	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ
OTHER ANALYTES										
Iron (dissolved)	-	-	155000 =	59900 =	23400 =	28900 =				

[a] Protective of tap water ingestion by a resident.
[b] Values based on naphthalene as a surrogate chemical.
[c] Values based on pyrene as a surrogate chemical.
* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.
Bold values indicate results exceeding Georgia In-Stream Water Quality Standards.
Underlined values indicate results exceeding risk-based screening levels.

U Indicates that the compound was not detected above the reported sample quantitation limit.
J Indicates that the value for the compound was an estimated value.
UJ Indicates that the sample was not detected above an approximate sample quantitation limit.
R Indicates that the sample results are unusable and the presence or absence of the compound could not be verified.
= Indicates that the compound was detected at the concentration reported.

Table 11. CAP-Part B - Groundwater Data Risk-based Screening Results (continued)

Station:	Screening Levels		AF-21	AF-21	AF-21	AF-21	AF-21	AF-22	AF-22	AF-22
Sample ID:	In-Stream		AF2152	AF2162	AF2172	AF2182	AF2192	AF2212	AF2222	AF2232
Screened Interval (ft BGS):	Water Quality		31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	46.0 - 50.0	51.0 - 55.0	11.0 - 15.0	16.0 - 20.0	21.0 - 25.0
Collection Date:	Standards	Risk-based[a]	07-May-99	07-May-99	07-May-99	07-May-99	07-May-99	08-May-99	08-May-99	08-May-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS										
Benzene	71.28	0.36	10.6 =	22.1 =	7 =	0.86 J	1.9 J	57.2 =	5 =	0.83 J
Toluene	200,000	750	2 U	2 U	2 U	2 U	2 U	2.4 =	1.3 J	0.88 J
Ethylbenzene	28,718	1,300	2 U	3 =	7.1 =	2 U	1.2 J	3.4 =	2 U	2 U
Xylenes, Total	-	12,000	3 U	1.8 J	6.2 =	3 U	1.2 J	2.4 J	0.65 J	3 U
POLYNUCLEAR HYDROCARBONS										
2-Chloronaphthalene[b]	-	6.5	10.2 U	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U	10 U	10 U
Acenaphthene	-	365	10.2 U	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U	10 U	10 U
Acenaphthylene	-	182.5	10.2 U	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U	10 U	10 U
Anthracene	110,000	182.5	10.2 U	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U	10 U	10 U
Benzo(a)anthracene	0.0311	0.092	**10.2 U**	**10.6 UJ**	**10.2 UJ**	**10 U**	**10.4 U**	**10 U**	**10 U**	**10 U**
Benzo(a)pyrene	0.0311	0.0092	**10.2 U**	**10.6 UJ**	**10.2 UJ**	**10 U**	**10.4 U**	**10 U**	**10 U**	**10 U**
Benzo(b)fluoranthene	-	0.092	10.2 U	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	-	-	10.2 U	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U	10 U	10 U
Benzo(k)fluoranthene	0.0311	0.92	**10.2 U**	**10.6 UJ**	**10.2 UJ**	**10 U**	**10.4 U**	**10 U**	**10 U**	**10 U**
Chrysene	0.0311	9.2	**10.2 U**	**10.6 UJ**	**10.2 UJ**	**10 U**	**10.4 U**	**10 U**	**10 U**	**10 U**
Dibenzo(a,h)anthracene	0.0311	0.0092	**10.2 U**	**10.6 UJ**	**10.2 UJ**	**10 U**	**10.4 U**	**10 U**	**10 U**	**10 U**
Fluoranthene	370	1,460	10.2 U	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U	10 U	10 U
Fluorene	14,000	243	10.2 U	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.0311	0.092	**10.2 U**	**10.6 UJ**	**10.2 UJ**	**10 U**	**10.4 U**	**10 U**	**10 U**	**10 U**
Naphthalene	-	6.5	10.2 U	2.8 J	10.2 UJ	10 U	0.68 J	13 =	10 U	0.74 J
Phenanthrene[c]	-	182.5	10.2 U	1.9 J	10.2 UJ	10 U	10.4 U	10 U	10 U	10 U
Pyrene	11,000	182.5	10.2 U	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U	10 U	10 U
OTHER ANALYTES										
Iron (dissolved)	-	-								

[a] Protective of tap water ingestion by a resident.
[b] Values based on naphthalene as a surrogate chemical.
[c] Values based on pyrene as a surrogate chemical.
* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.
Bold values indicate results exceeding Georgia In-Stream Water Quality Standards.
Underlined values indicate results exceeding risk-based screening levels.

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Table 11. CAP-Part B - Groundwater Data Risk-based Screening Results (continued)

Station: / Sample ID: / Screened Interval (ft BGS): / Collection Date: / Units:	Screening Levels: In-Stream Water Quality Standards (µg/L)	Screening Levels: Risk-based[a] (µg/L)	AF-22 AF2242 26.0 - 30.0 08-May-99 (µg/L)	AF-22 AF2252 31.0 - 35.0 08-May-99 (µg/L)	AF-22 AF2262 36.0 - 40.0 08-May-99 (µg/L)	AF-22 AF2272 41.0 - 45.0 08-May-99 (µg/L)	AF-22 AF2282 46.0 - 50.0 08-May-99 (µg/L)	AF-23 AF2312 3.0 - 13.0 08-May-99 (µg/L)	AF-24 AF2412 2.0 - 12.0 08-May-99 (µg/L)	AF-25 AF2512 0.5 - 10.5 11-May-99 (µg/L)
VOLATILE ORGANIC COMPOUNDS										
Benzene	71.28	0.36	2 U	2 U	2 U	8.2 =	2 U	0.64 J	2 U	2 =
Toluene	200,000	750	0.76 J	0.68 J	2 U	0.83 J	2 U	2 U	2 U	2 U
Ethylbenzene	28,718	1,300	2 U	2 U	2 U	0.33 J	2 U	2 U	2 U	2 U
Xylenes, Total	-	12,000	3 U	3 U	3 U	0.76 J	3 U	3 U	3 U	0.58 J
POLYNUCLEAR HYDROCARBONS										
2-Chloronaphthalene[b]	-	6.5	10 U	10 UJ	11.6 U	40 U	10 U	10 UJ	10 U	10.5 U
Acenaphthene	-	365	10 U	10 UJ	11.6 U	40 U	10 U	10 UJ	10 U	10.5 U
Acenaphthylene	-	182.5	10 U	10 UJ	11.6 U	40 U	10 U	10 UJ	10 U	10.5 U
Anthracene	110,000	182.5	10 U	10 UJ	11.6 U	40 U	10 U	10 UJ	10 U	10.5 U
Benzo(a)anthracene	0.0311	0.092	**10 U**	**10 UJ**	**11.6 U**	**40 U**	**10 U**	**10 UJ**	**10 U**	**10.5 U**
Benzo(a)pyrene	0.0311	0.0092	**10 U**	**10 UJ**	**11.6 U**	**40 U**	**10 U**	**18.6 J**	**10 U**	**10.5 U**
Benzo(b)fluoranthene	-	0.092	10 U	10 UJ	11.6 U	40 U	10 U	10 UJ	10 U	10.5 U
Benzo(g,h,i)perylene	-	-	10 U	10 UJ	11.6 U	40 U	10 U	10 UJ	10 U	10.5 U
Benzo(k)fluoranthene	0.0311	0.92	**10 U**	**10 UJ**	**11.6 U**	**40 U**	**10 U**	**10 UJ**	**10 U**	**10.5 U**
Chrysene	0.0311	9.2	**10 U**	**10 UJ**	**11.6 U**	**40 U**	**10 U**	**10 UJ**	**10 U**	**10.5 U**
Dibenzo(a,h)anthracene	0.0311	0.0092	**10 U**	**10 UJ**	**11.6 U**	**40 U**	**10 U**	**10 UJ**	**10 U**	**10.5 U**
Fluoranthene	370	1,460	10 U	10 UJ	11.6 U	40 U	10 U	10 UJ	10 U	10.5 U
Fluorene	14,000	243	10 U	10 UJ	11.6 U	40 U	10 U	10 UJ	10 U	10.5 U
Indeno(1,2,3-cd)pyrene	0.0311	0.092	**10 U**	**10 UJ**	**11.6 U**	**40 U**	**10 U**	**10 UJ**	**10 U**	**10.5 U**
Naphthalene	-	6.5	10 U	10 UJ	11.6 U	4.5 J	10 U	10 UJ	10 U	10.5 U
Phenanthrene[c]	-	182.5	10 U	10 UJ	11.6 U	40 U	10 U	10 UJ	10 U	10.5 U
Pyrene	11,000	182.5	10 U	10 UJ	11.6 U	40 U	10 U	10 UJ	10 U	10.5 U
OTHER ANALYTES										
Iron (dissolved)	-	-						95500 =	270 =	59300 =

[a] Protective of tap water ingestion by a resident.
[b] Values based on naphthalene as a surrogate chemical.
[c] Values based on pyrene as a surrogate chemical.
* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.
Bold values indicate results exceeding Georgia In-Stream Water Quality Standards.
Underlined values indicate results exceeding risk-based screening levels.

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Table 11. CAP-Part B - Groundwater Data Risk-based Screening Results (continued)

Station:	Screening Levels		AF-26	AF-27	AF-28	AF-29	AF-01	AF-02	AF-03	AF-04
Sample ID:	In-Stream		AF2612	AF2712	AF2812	AF2912	AF0122	AF0222	AF0322	AF0422
Screened Interval (ft BGS):	Water Quality		2.0 - 12.0	1.0 - 11.0	2.0 - 12.0	2.0 - 12.0	2.5 - 12.5	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0
Collection Date:	Standards	Risk-based[a]	11-May-99	11-May-99	11-May-99	11-May-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS										
Benzene	71.28	0.36	15.3 =	2.4 =	32.4 =	11.3 =	2 U	8.4 =	2.2 =	2 U
Toluene	200,000	750	2 U	2 U	2 U	2 U	2 U	0.65 J	2 U	2 U
Ethylbenzene	28,718	1,300	2 U	2 U	2.4 =	2 U	2 U	2 U	1.6 J	2 U
Xylenes, Total	-	12,000	3 U	3 U	3 U	3 U	6 U	6 U	0.96 J	6 U
POLYNUCLEAR HYDROCARBONS										
2-Chloronaphthalene[b]	-	6.5	10 U	10.5 U	10 U	10 U	*	*	*	*
Acenaphthene	-	365	10 U	10.5 U	0.79 J	10 U	*	*	*	*
Acenaphthylene	-	182.5	10 U	10.5 U	10 U	10 U	*	*	*	*
Anthracene	110,000	182.5	10 U	10.5 U	10 U	10 U	*	*	*	*
Benzo(a)anthracene	0.0311	0.092	**10 U**	**10.5 U**	**10 U**	**10 U**	*	*	*	*
Benzo(a)pyrene	0.0311	0.0092	**10 U**	**10.5 U**	**10 U**	**10 U**	*	*	*	*
Benzo(b)fluoranthene	-	0.092	10 U	10.5 U	10 U	10 U	*	*	*	*
Benzo(g,h,i)perylene	-	-	10 U	10.5 U	10 U	10 U	*	*	*	*
Benzo(k)fluoranthene	0.0311	0.92	**10 U**	**10.5 U**	**10 U**	**10 U**	*	*	*	*
Chrysene	0.0311	9.2	**10 U**	**10.5 U**	**10 U**	**10 U**	*	*	*	*
Dibenzo(a,h)anthracene	0.0311	0.0092	**10 U**	**10.5 U**	**10 U**	**10 U**	*	*	*	*
Fluoranthene	370	1,460	10 U	10.5 U	10 U	10 U	*	*	*	*
Fluorene	14,000	243	10 U	10.5 U	10 U	10 U	*	*	*	*
Indeno(1,2,3-cd)pyrene	0.0311	0.092	**10 U**	**10.5 U**	**10 U**	**10 U**	*	*	*	*
Naphthalene	-	6.5	10 U	10.5 U	1.4 J	10 U	*	*	*	*
Phenanthrene[c]	-	182.5	10 U	10.5 U	10 U	10 U	*	*	*	*
Pyrene	11,000	182.5	10 U	10.5 U	10 U	10 U	*	*	*	*
OTHER ANALYTES										
Iron (dissolved)	-	-	79700 =	72100 =	56000 =	25800 =				

[a] Protective of tap water ingestion by a resident.
[b] Values based on naphthalene as a surrogate chemical.
[c] Values based on pyrene as a surrogate chemical.
* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.
Bold values indicate results exceeding Georgia In-Stream Water Quality Standards.
Underlined values indicate results exceeding risk-based screening levels.

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Table 11. CAP-Part B - Groundwater Data Risk-based Screening Results (continued)

Station:	Screening Levels		AF-05	AF-07	AF-08	AF-09	AF-11	AF-12	AF-13	AF-14
Sample ID:	In-Stream		AF0522	AF0722	AF0822	AF0922	AF1122	AF1222	AF1322	AF1422
Screened Interval (ft BGS):	Water Quality		2.0 - 12.0	2.5 - 12.5	2.5 - 12.5	2.0 - 12.0	1.0 - 11.0	2.5 - 12.5	2.5 - 12.5	1.4 - 11.4
Collection Date:	Standards	Risk-based[a]	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS										
Benzene	71.28	0.36	11.8 =	**9130** =	2 U	11.8 =	2 U	23.4 =	2 U	2 U
Toluene	200,000	750	3 =	24.8 =	2 U	2 U	2 U	4 U	2 U	2 U
Ethylbenzene	28,718	1,300	9.5 =	493 =	2 U	27.7 =	2 U	54.8 =	2 U	2 U
Xylenes, Total	-	12,000	46.5 =	246 =	6 U	1.4 J	6 U	8.5 J	6 U	6 U
POLYNUCLEAR HYDROCARBONS										
2-Chloronaphthalene[b]	-	6.5	*	*	*	*	*	*	*	*
Acenaphthene	-	365	*	*	*	*	*	*	*	*
Acenaphthylene	-	182.5	*	*	*	*	*	*	*	*
Anthracene	110,000	182.5	*	*	*	*	*	*	*	*
Benzo(a)anthracene	0.0311	0.092	*	*	*	*	*	*	*	*
Benzo(a)pyrene	0.0311	0.0092	*	*	*	*	*	*	*	*
Benzo(b)fluoranthene	-	0.092	*	*	*	*	*	*	*	*
Benzo(g,h,i)perylene	-	-	*	*	*	*	*	*	*	*
Benzo(k)fluoranthene	0.0311	0.92	*	*	*	*	*	*	*	*
Chrysene	0.0311	9.2	*	*	*	*	*	*	*	*
Dibenzo(a,h)anthracene	0.0311	0.0092	*	*	*	*	*	*	*	*
Fluoranthene	370	1,460	*	*	*	*	*	*	*	*
Fluorene	14,000	243	*	*	*	*	*	*	*	*
Indeno(1,2,3-cd)pyrene	0.0311	0.092	*	*	*	*	*	*	*	*
Naphthalene	-	6.5	*	*	*	*	*	*	*	*
Phenanthrene[c]	-	182.5	*	*	*	*	*	*	*	*
Pyrene	11,000	182.5	*	*	*	*	*	*	*	*
OTHER ANALYTES										
Iron (dissolved)	-	-								

[a] Protective of tap water ingestion by a resident.
[b] Values based on naphthalene as a surrogate chemical.
[c] Values based on pyrene as a surrogate chemical.
* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.
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Table 11. CAP-Part B - Groundwater Data Risk-based Screening Results (continued)

Station:	Screening Levels		AF-15	AF-16	AF-17	AF-18	AF-19	AF-20	AF-23	AF-24
Sample ID:	In-Stream		AF1522	AF1622	AF1722	AF1822	AF1922	AF2022	AF2322	AF2422
Screened Interval (ft BGS):	Water Quality		1.5 - 11.5	1.5 - 11.5	2.5 - 12.5	1.5 - 11.5	1.5 - 11.5	3.0 - 13.0	3.0 - 13.0	2.0 - 12.0
Collection Date:	Standards	Risk-based[a]	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS										
Benzene	71.28	0.36	2 U	2 U	14 =	10.3 =	3.5 =	2.1 =	1.1 J	2 U
Toluene	200,000	750	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	28,718	1,300	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Xylenes, Total	-	12,000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
POLYNUCLEAR HYDROCARBONS										
2-Chloronaphthalene[b]	-	6.5	*	*	*	*	*	*	*	*
Acenaphthene	-	365	*	*	*	*	*	*	*	*
Acenaphthylene	-	182.5	*	*	*	*	*	*	*	*
Anthracene	110,000	182.5	*	*	*	*	*	*	*	*
Benzo(a)anthracene	0.0311	0.092	*	*	*	*	*	*	*	*
Benzo(a)pyrene	0.0311	0.0092	*	*	*	*	*	*	*	*
Benzo(b)fluoranthene	-	0.092	*	*	*	*	*	*	*	*
Benzo(g,h,i)perylene	-	-	*	*	*	*	*	*	*	*
Benzo(k)fluoranthene	0.0311	0.92	*	*	*	*	*	*	*	*
Chrysene	0.0311	9.2	*	*	*	*	*	*	*	*
Dibenzo(a,h)anthracene	0.0311	0.0092	*	*	*	*	*	*	*	*
Fluoranthene	370	1,460	*	*	*	*	*	*	*	*
Fluorene	14,000	243	*	*	*	*	*	*	*	*
Indeno(1,2,3-cd)pyrene	0.0311	0.092	*	*	*	*	*	*	*	*
Naphthalene	-	6.5	*	*	*	*	*	*	*	*
Phenanthrene[c]	-	182.5	*	*	*	*	*	*	*	*
Pyrene	11,000	182.5	*	*	*	*	*	*	*	*
OTHER ANALYTES										
Iron (dissolved)	-	-								

[a] Protective of tap water ingestion by a resident.
[b] Values based on naphthalene as a surrogate chemical.
[c] Values based on pyrene as a surrogate chemical.
* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.
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Table 11. CAP-Part B - Groundwater Data Risk-based Screening Results (continued)

Station:	Screening Levels		AF-25	AF-26	AF-27	AF-28	AF-29	AF-30	AF-30	AF-30
Sample ID:	In-Stream		AF2522	AF2622	AF2722	AF2822	AF2922	AF3012	AF3022	AF3032
Screened Interval (ft BGS):	Water Quality		0.5 - 10.5	2.0 - 12.0	1.0 - 11.0	2.0 - 12.0	2.0 - 12.0	11.0 - 15.0	16.0 - 20.0	21.0 - 25.0
Collection Date:	Standards	Risk-based[a]	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS										
Benzene	71.28	0.36	4.8 =	16.6 =	5.1 J	3.9 =	53.6 =	**7670 J**	**2290 =**	37.9 =
Toluene	200,000	750	2 U	4 U	20 U	2 U	2 U	19 =	5.5 =	0.55 J
Ethylbenzene	28,718	1,300	0.59 J	4 U	20 U	2 U	2 U	500 J	168 =	2.7 =
Xylenes, Total	-	12,000	6 U	12 U	60 U	6 U	6 U	72.7 =	9.6 =	1.8 J
POLYNUCLEAR HYDROCARBONS										
2-Chloronaphthalene[b]	-	6.5	*	*	*	*	*	*	*	*
Acenaphthene	-	365	*	*	*	*	*	*	*	*
Acenaphthylene	-	182.5	*	*	*	*	*	*	*	*
Anthracene	110,000	182.5	*	*	*	*	*	*	*	*
Benzo(a)anthracene	0.0311	0.092	*	*	*	*	*	*	*	*
Benzo(a)pyrene	0.0311	0.0092	*	*	*	*	*	*	*	*
Benzo(b)fluoranthene	-	0.092	*	*	*	*	*	*	*	*
Benzo(g,h,i)perylene	-	-	*	*	*	*	*	*	*	*
Benzo(k)fluoranthene	0.0311	0.92	*	*	*	*	*	*	*	*
Chrysene	0.0311	9.2	*	*	*	*	*	*	*	*
Dibenzo(a,h)anthracene	0.0311	0.0092	*	*	*	*	*	*	*	*
Fluoranthene	370	1,460	*	*	*	*	*	*	*	*
Fluorene	14,000	243	*	*	*	*	*	*	*	*
Indeno(1,2,3-cd)pyrene	0.0311	0.092	*	*	*	*	*	*	*	*
Naphthalene	-	6.5	*	*	*	*	*	*	*	*
Phenanthrene[c]	-	182.5	*	*	*	*	*	*	*	*
Pyrene	11,000	182.5	*	*	*	*	*	*	*	*
OTHER ANALYTES										
Iron (dissolved)	-	-								

[a] Protective of tap water ingestion by a resident.
[b] Values based on naphthalene as a surrogate chemical.
[c] Values based on pyrene as a surrogate chemical.
* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.
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Table 11. CAP-Part B - Groundwater Data Risk-based Screening Results (continued)

Station:	Screening Levels		AF-30	AF-30	AF-30	AF-30	AF-30	AF-31	AF-31	AF-31
Sample ID:	In-Stream		AF3042	AF3052	AF3062	AF3072	AF3082	AF3112	AF3122	AF3132
Screened Interval (ft BGS):	Water Quality		26.0 - 30.0	31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	46.0 - 50.0	6.0 - 10.0	11.0 - 15.0	16.0 - 20.0
Collection Date:	Standards	Risk-based[a]	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS										
Benzene	71.28	0.36	16.2 =	11 =	6.4 =	5.5 =	6.8 =	11.1 =	0.99 J	2 U
Toluene	200,000	750	2 U	2 U	2 U	0.78 J	0.5 J	10 U	2 U	2 U
Ethylbenzene	28,718	1,300	1.3 J	0.53 J	0.67 J	5.5 =	1.8 J	10 U	2 U	2 U
Xylenes, Total	-	12,000	6 U	0.51 J	0.67 J	9.3 =	2.9 J	30 U	6 U	6 U
POLYNUCLEAR HYDROCARBONS										
2-Chloronaphthalene[b]	-	6.5	*	*	*	*	*	*	*	*
Acenaphthene	-	365	*	*	*	*	*	*	*	*
Acenaphthylene	-	182.5	*	*	*	*	*	*	*	*
Anthracene	110,000	182.5	*	*	*	*	*	*	*	*
Benzo(a)anthracene	0.0311	0.092	*	*	*	*	*	*	*	*
Benzo(a)pyrene	0.0311	0.0092	*	*	*	*	*	*	*	*
Benzo(b)fluoranthene	-	0.092	*	*	*	*	*	*	*	*
Benzo(g,h,i)perylene	-	-	*	*	*	*	*	*	*	*
Benzo(k)fluoranthene	0.0311	0.92	*	*	*	*	*	*	*	*
Chrysene	0.0311	9.2	*	*	*	*	*	*	*	*
Dibenzo(a,h)anthracene	0.0311	0.0092	*	*	*	*	*	*	*	*
Fluoranthene	370	1,460	*	*	*	*	*	*	*	*
Fluorene	14,000	243	*	*	*	*	*	*	*	*
Indeno(1,2,3-cd)pyrene	0.0311	0.092	*	*	*	*	*	*	*	*
Naphthalene	-	6.5	*	*	*	*	*	*	*	*
Phenanthrene[c]	-	182.5	*	*	*	*	*	*	*	*
Pyrene	11,000	182.5	*	*	*	*	*	*	*	*
OTHER ANALYTES										
Iron (dissolved)	-	-								

[a] Protective of tap water ingestion by a resident.
[b] Values based on naphthalene as a surrogate chemical.
[c] Values based on pyrene as a surrogate chemical.
* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.
Bold values indicate results exceeding Georgia In-Stream Water Quality Standards.
Underlined values indicate results exceeding risk-based screening levels.

U Indicates that the compound was not detected above the reported sample quantitation limit.
J Indicates that the value for the compound was an estimated value.
UJ Indicates that the sample was not detected above an approximate sample quantitation limit.
R Indicates that the sample results are unusable and the presence or absence of the compound could not be verified.
= Indicates that the compound was detected at the concentration reported.

Table 11. CAP-Part B - Groundwater Data Risk-based Screening Results (continued)

Station:	Screening Levels		AF-31	AF-31	AF-31	AF-31	AF-31	AF-31	AF-32	AF-32
Sample ID:	In-Stream		AF3142	AF3152	AF3162	AF3172	AF3182	AF3192	AF3212	AF3222
Screened Interval (ft BGS):	Water Quality		21.0 - 25.0	26.0 - 30.0	31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	46.0 - 50.0	11.0 - 15.0	16.0 - 20.0
Collection Date:	Standards	Risk-based[a]	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS										
Benzene	71.28	0.36	2 U	2 U	2 U	2 U	2 U	2 U	2.1 =	2 U
Toluene	200,000	750	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.52 J
Ethylbenzene	28,718	1,300	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Xylenes, Total	-	12,000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
POLYNUCLEAR HYDROCARBONS										
2-Chloronaphthalene[b]	-	6.5	*	*	*	*	*	*	*	*
Acenaphthene	-	365	*	*	*	*	*	*	*	*
Acenaphthylene	-	182.5	*	*	*	*	*	*	*	*
Anthracene	110,000	182.5	*	*	*	*	*	*	*	*
Benzo(a)anthracene	0.0311	0.092	*	*	*	*	*	*	*	*
Benzo(a)pyrene	0.0311	0.0092	*	*	*	*	*	*	*	*
Benzo(b)fluoranthene	-	0.092	*	*	*	*	*	*	*	*
Benzo(g,h,i)perylene	-	-	*	*	*	*	*	*	*	*
Benzo(k)fluoranthene	0.0311	0.92	*	*	*	*	*	*	*	*
Chrysene	0.0311	9.2	*	*	*	*	*	*	*	*
Dibenzo(a,h)anthracene	0.0311	0.0092	*	*	*	*	*	*	*	*
Fluoranthene	370	1,460	*	*	*	*	*	*	*	*
Fluorene	14,000	243	*	*	*	*	*	*	*	*
Indeno(1,2,3-cd)pyrene	0.0311	0.092	*	*	*	*	*	*	*	*
Naphthalene	-	6.5	*	*	*	*	*	*	*	*
Phenanthrene[c]	-	182.5	*	*	*	*	*	*	*	*
Pyrene	11,000	182.5	*	*	*	*	*	*	*	*
OTHER ANALYTES										
Iron (dissolved)	-	-								

[a] Protective of tap water ingestion by a resident.
[b] Values based on naphthalene as a surrogate chemical.
[c] Values based on pyrene as a surrogate chemical.

Bold values indicate results exceeding Georgia In-Stream Water Quality Standards.
Underlined values indicate results exceeding risk-based screening levels.

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= Indicates that the compound was detected at the concentration reported.

Table 11. CAP-Part B - Groundwater Data Risk-based Screening Results (continued)

Station:	Screening Levels		AF-32	AF-32	AF-32	AF-32	AF-32	AF-32	AF-33	AF-34
Sample ID:	In-Stream		AF3232	AF3242	AF3252	AF3262	AF3272	AF3282	AF3312	AF3412
Screened Interval (ft BGS):	Water Quality		21.0 - 25.0	26.0 - 30.0	31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	46.0 - 50.0	2.3 - 11.8	1.4 - 10.9
Collection Date:	Standards	Risk-based[a]	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS										
Benzene	71.28	0.36	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Toluene	200,000	750	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	28,718	1,300	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Xylenes, Total	-	12,000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
POLYNUCLEAR HYDROCARBONS										
2-Chloronaphthalene[b]	-	6.5	*	*	*	*	*	*	10.2 U	10.2 U
Acenaphthene	-	365	*	*	*	*	*	*	10.2 U	10.2 U
Acenaphthylene	-	182.5	*	*	*	*	*	*	10.2 U	10.2 U
Anthracene	110,000	182.5	*	*	*	*	*	*	10.2 U	10.2 U
Benzo(a)anthracene	0.0311	0.092	*	*	*	*	*	*	**10.2 U**	**10.2 U**
Benzo(a)pyrene	0.0311	0.0092	*	*	*	*	*	*	**10.2 U**	**10.2 U**
Benzo(b)fluoranthene	-	0.092	*	*	*	*	*	*	10.2 U	10.2 U
Benzo(g,h,i)perylene	-	-	*	*	*	*	*	*	10.2 U	10.2 U
Benzo(k)fluoranthene	0.0311	0.92	*	*	*	*	*	*	**10.2 U**	**10.2 U**
Chrysene	0.0311	9.2	*	*	*	*	*	*	**10.2 U**	**10.2 U**
Dibenzo(a,h)anthracene	0.0311	0.0092	*	*	*	*	*	*	**10.2 U**	**10.2 U**
Fluoranthene	370	1,460	*	*	*	*	*	*	10.2 U	10.2 U
Fluorene	14,000	243	*	*	*	*	*	*	10.2 U	10.2 U
Indeno(1,2,3-cd)pyrene	0.0311	0.092	*	*	*	*	*	*	**10.2 U**	**10.2 U**
Naphthalene	-	6.5	*	*	*	*	*	*	10.2 U	10.2 U
Phenanthrene[c]	-	182.5	*	*	*	*	*	*	10.2 U	10.2 U
Pyrene	11,000	182.5	*	*	*	*	*	*	10.2 U	10.2 U
OTHER ANALYTES										
Iron (dissolved)	-	-								

[a] Protective of tap water ingestion by a resident.
[b] Values based on naphthalene as a surrogate chemical.
[c] Values based on pyrene as a surrogate chemical.
* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.
Bold values indicate results exceeding Georgia In-Stream Water Quality Standards.
Underlined values indicate results exceeding risk-based screening levels.

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UJ Indicates that the sample was not detected above an approximate sample quantitation limit.
R Indicates that the sample results are unusable and the presence or absence of the compound could not be verified.
= Indicates that the compound was detected at the concentration reported.

Table 11. CAP-Part B - Groundwater Data Risk-based Screening Results (continued)

Station:	Screening Levels		AF-35	AF-36	AF-37	AF-38	AF-39
Sample ID:	In-Stream		AF3512	AF3612	AF3712	AF3812	AF3912
Screened Interval (ft BGS):	Water Quality		1.2 - 10.7	1.4 - 10.9	4.4 - 14.3	4.1 - 14.1	4.4 - 14.3
Collection Date:	Standards	Risk-based[a]	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	71.28	0.36	2.1 =	2.4 =	4.2 =	2 =	0.92 J
Toluene	200,000	750	2 U	2 U	0.69 J	2 =	2 U
Ethylbenzene	28,718	1,300	2 U	2 U	0.63 J	1.6 J	2 U
Xylenes, Total	-	12,000	6 U	6 U	3.4 J	9.4 =	6 U
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene[b]	-	6.5	10 U	10.4 U	10 U	10 U	10 U
Acenaphthene	-	365	10 U	10.4 U	10 U	10 U	10 U
Acenaphthylene	-	182.5	10 U	10.4 U	10 U	10 U	10 U
Anthracene	110,000	182.5	10 U	10.4 U	10 U	10 U	10 U
Benzo(a)anthracene	0.0311	0.092	**10 U**	**10.4 U**	**10 U**	**10 U**	**10 U**
Benzo(a)pyrene	0.0311	0.0092	**10 U**	**10.4 U**	**10 U**	**10 U**	**10 U**
Benzo(b)fluoranthene	-	0.092	10 U	10.4 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	-	-	10 U	10.4 U	10 U	10 U	10 U
Benzo(k)fluoranthene	0.0311	0.92	**10 U**	**10.4 U**	**10 U**	**10 U**	**10 U**
Chrysene	0.0311	9.2	**10 U**	**10.4 U**	**10 U**	**10 U**	**10 U**
Dibenzo(a,h)anthracene	0.0311	0.0092	**10 U**	**10.4 U**	**10 U**	**10 U**	**10 U**
Fluoranthene	370	1,460	10 U	10.4 U	10 U	10 U	10 U
Fluorene	14,000	243	10 U	10.4 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.0311	0.092	**10 U**	**10.4 U**	**10 U**	**10 U**	**10 U**
Naphthalene	-	6.5	10 U	10.4 U	10 U	10 U	10 U
Phenanthrene[c]	-	182.5	10 U	10.4 U	10 U	10 U	10 U
Pyrene	11,000	182.5	10 U	10.4 U	10 U	10 U	10 U
OTHER ANALYTES							
Iron (dissolved)	-	-					

[a] Protective of tap water ingestion by a resident.
[b] Values based on naphthalene as a surrogate chemical.
[c] Values based on pyrene as a surrogate chemical.
* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.
Bold values indicate results exceeding Georgia In-Stream Water Quality Standards.
Underlined values indicate results exceeding risk-based screening levels.

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R Indicates that the sample results are unusable and the presence or absence of the compound could not be verified.
= Indicates that the compound was detected at the concentration reported.

Table 12. AT123D Predicted Maximum 2-Year Concentrations at the USTs 25 & 26 Monitoring Well Locations

Station ID	Distance from the source (ft)	Predicted 2-Yr Maximum Benzene Concentration In Groundwater[1] (µg/L)	September 1999 Observed Benzene Concentration in Groundwater (µg/L)
AF-01	90.0	1,580	<2
AF-02	15.0	6,380	8.4
AF-03	52.5	3,160	2.2
AF-04	52.5	3,160	<2
AF-05	15.0	6,380	11.8
AF-07	0.0	9,940	9130
AF-08	70.0	2,240	<2
AF-09	15.0	6,380	11.8
AF-11	70.0	2,240	<2
AF-12	10.0	7,510	23.4
AF-13	50.0	3,340	<2
AF-14	105.0	1,170	<2
AF-15	97.5	1,360	<2
AF-16	120.0	843	<2
AF-17	90.0	1,580	14
AF-18	70.0	2,240	10.3
AF-19	97.5	1,360	3.5
AF-20	60.0	2,690	2.1
AF-23	70.0	2,240	1.1
AF-24	70.0	2,240	<2
AF-25	120.0	843	4.8
AF-26	130.0	675	16.6
AF-27	112.5	996	5.1
AF-28	52.5	3,160	3.9
AF-29	112.5	996	53.6
AF-33	90.0	1,580	<2
AF-34	195.0	149	<2
AF-35	130.0	675	2.1
AF-36	165.0	298	2.4
AF-37	165.0	298	4.2
AF-38	180.0	209	2
AF-39	120.0	843	0.92

[1] It should be noted here that the predicted maximum concentrations at the well locations is based on the assumption of a continuous, steady-state source of 9940 µg/L and that groundwater is moving towards the well. This is a highly conservative assumption for many well locations (e.g., AF-14, AF-15, AF-01, AF-16, etc.) that are upgradient of the source based on groundwater flow direction.

Table 13. Evaluation of Corrective Action Technologies

Action/ Technology	Description	Effectiveness	Implementability	Costs
No Action	The "No Action" alternative provides a baseline against which other actions can be compared. Under the "No Action" alternative, all source units, surface water, and groundwater would be left "as is," without implementing any removal, treatment, or other mitigating actions to reduce existing or potential future exposure.	This alternative would not address remedial response objectives of the site. This alternative does not provide protection of human health or the environment. In addition, site specific ATLs or ACLs would not be achieved.	There is no implementability involved for this alternative because no action is taken.	There would be no cost associated with the "No Action" alternative.
Monitored Natural Attenuation	This action would require the monitoring of contaminant levels to ensure that the mass of contamination is being reduced over time. A total of 7 wells would be sampled semiannually until benzene concentrations were below the ACL of 340 µg/L.	Natural attenuation of BTEX constituents through biodegradation is known to be occurring at the site and would be effective. However, this action would require approximately 7 years to successfully meet the site objectives (i.e., ACLs).	This alternative is readily implementable and would only require the monitoring of 4 wells for BTEX and 3 wells for VOCs at the site.	Low to moderate; semiannual sampling/ monitoring of 7 wells are required.
Enhanced Bioremediation (Pure Oxygen Injection)	Enhanced biodegradation is the enhancement of one aspect of natural attenuation. The activity of naturally occurring microbes is stimulated by injecting 98 percent pure oxygen to enhance in situ biological degradation of organic contaminants. Nutrients or other additives may be used to encourage the natural biodegradation process.	Technology proven for site contaminants and is most effective for dissolved phase groundwater and low to moderate level soil contamination. Site specific ACLs would be achieved.	Equipment readily available, applicable to small site. Bioremediation process may require continuous monitoring and maintenance to prevent plugging of injection wells by microbial growth or mineral precipitation.	Low to Moderate; Fort Stewart owns an oxygen injection system.

Table 13. Evaluation of Corrective Action Technologies (continued)

Action/ Technology	Description	Effectiveness	Implementability	Costs
Air Sparging	Air sparging involves injecting a gas, usually air under pressure, into the subsurface to volatilize groundwater contaminants and to promote biodegradation by increasing subsurface oxygen concentrations. Volatilized vapors migrate into the vadose zone where they can be extracted via vacuum, generally by a soil vapor extraction system.	Technology proven for light petroleum products such as those present at the site. Air sparging has been used to address a broad range of volatile and semivolatile groundwater and soil contaminants, including gasoline and other fuels and the associated BTEX components. Site specific ACLs would be achieved.	Equipment readily available. Compressors and other air injection system components would need to be operated for two or more years. Bioremediation process may require continuous monitoring and maintenance to prevent plugging of injection wells by microbial growth or mineral precipitation.	Moderate; $20 to $50 per ton of saturated soil (EPA 1995)
Enhanced Bioremediation (PHOSter® II)	Similar to pure oxygen injection, the PHOSter® II technology enhances natural attenuation through injection of vapor-phase phosphorous, nitrogen, and air. In soils, enhanced Bioremediation using air/nutrient injection is referred to as "bioventing."	PHOSter® II is an innovative technology that has been demonstrated at other sites to be effective for fuels and related BTEX components. Technical performance is highly uncertain due to limited full-scale implementation. Site specific ACLs would be achieved.	Equipment readily available and applicable to small sites. Because this technology is innovative and relatively new, there is a relatively high uncertainty regarding the radius of influence and the treatment time required. Longer-term operations may require monitoring to prevent plugging of injection wells by microbial growth or mineral precipitation.	Moderate; similar to enhanced bioremediation using pure oxygen injections; costs dependent on required treatment time.

APPENDIX III

WATER RESOURCES SURVEY DOCUMENTATION

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WATER RESOURCES SURVEY DOCUMENTATION

1.0 LOCAL WATER RESOURCES

As required by the GA EPD Underground Storage Tank Corrective Action Plan (CAP)-Part A Guidance (GA EPD 1998b), 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.

1.1 WATER SUPPLY WELL SURVEY

The water supply well survey was conducted using 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).
- Locate all public supply wells, as defined by the GA EPD, that exist within 2 miles of the investigation sites.
- Locate all non-public supply wells that exist within 0.5 miles of the investigation sites.
- Locate all supply wells nearest the investigation sites.
- Locate all wells downgradient of the investigation sites.

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 an EPA site map displaying Public Water Supply for HAAF, and conducting a 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 3890 gallons per minute (gpm) of water to occupants of the HAAF installation. The FS 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 three 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 two 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-hp 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-hp 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 5000 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-hp 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 two 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 1998a), 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 using the following GA EPD guidelines/requirements:

- surface water bodies that exist within one mile of the investigation sites,
- all surface water bodies nearest the investigation sites if these bodies lie outside the one-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 BUILDING 1343, 260th QM MOTORPOOL 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 FS 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 and provides detailed information relating to public and non-public water supply wells located two miles and one-half 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 to 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 is 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 Motorpool 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 to 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 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 December 1999, the depths to groundwater in these wells were 4.97 feet in AF-01, 5.02 feet in AF-07, and 5.00 feet in AF-20. Thus, the invert depth of the force main is located approximately 2.0 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	1300	525	7500	Public
1205	2	1941	600	250	1300	525	7500	Public
8455	3	1951	360	40	30	2	25	Public
8581	4a	1976	300	92	80	10	15	Public

NOTE: DPW = Directorate of Public Works.
gpm = gallons per minute.

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	1240	1500	TBD	TBD	Public
13	TBD	TBD	TBD	2200	TBD	TBD	Public
14	TBD	800	338	571	TBD	TBD	Public
15	TBD	414	252	1000	TBD	TBD	Public
23	TBD	639	320	1056	TBD	TBD	Public
25	TBD	540	287	1120	TBD	TBD	Public
27	TBD	550	321	1468	TBD	TBD	Public

NOTE: gpm = gallons per minute
TBD = to be determined

APPENDIX IV

SOIL BORING LOGS

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HTRW DRILLING LOG

HOLE NUMBER AF-Ø1

PROJECT: HAAF USTs 25 & 26 | INSPECTOR | 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)
	0	ASPHALT				Ran 4.Ø', Rec 2.7'
	1	silty SAND (SM), fine grained, loose, dry, non-plastic, light brown to gray (2.5 Y 6/2)	5.9 ppm			
	2	SAND (SP), fine grained, some silt, loose, dry to damp, non-plastic, light gray (2.5 Y 7/1)				
	3		6.1 ppm			
	4					
	5	SAND (SP), fine to medium grained, loose, moist to wet, non-plastic, gradational contact, light gray (2.5 Y 7/1)	7.6 ppm		Soil Sample AFØ111	Ran 3.Ø', Rec 2.1' ▽ = Wet below 4.6 ft BGS
	6					
	7	NO RECOVERY				
	8	SHELBY TUBE SAMPLE		Soil Sample AFØ131		Pushed to 12.5 ft BGS to set temporary piezometer screened at 2.5 to 12.5 ft BGS
	9					Collected groundwater sample AFØ112 from temporary piezometer
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-02

PROJECT: HAAF USTs 25 & 26 | INSPECTOR M. Vest | 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)
		Top soil w/ roots (grass)				Ran 4.0', Rec 4.0'
	1	SILT (ML), loose, dry, non-plastic, dark gray, (2.5 Y 4/1)	2.2 ppm			
	2	SAND (SP), fine to medium grained, loose, moist, non-plastic, light gray (2.5 Y 7/2)				
	3	Sandy SILT (ML), fine grained, loose, moist, non-plastic, gradational contact, gray (10 YR 5/1)	3.0 ppm			
	4					
	5	Sandy SILT (ML), fine grained, loose, wet, non-plastic, gradational contact, black (5 Y 2.5/1)	4.6 ppm		Soil sample AF0211	Ran 3.0', Rec 3.0'
	6	SILT (ML), fine grained, some sand, loose, non-plastic, saturated, gray (2.5 Y 1/1)		Soil sample AF0231		▽ wet below 6.1 ft BGS
	7	SILT (ML), wet, non-plastic, med. density, gray (2.5 Y 6/1)	2.6 ppm			Pushed to 12.0 ft BGS to set temporary piezometer screened at 2.0 to 12.0 ft BGS.
	8					
	9					Collected groundwater Sample AF0212 from temporary piezometer
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-03

PROJECT: HAAF USTs 25 & 26 | INSPECTOR M. Vest | 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)
		Top soil w/ grass roots				Ran 4.0', Rec 4.0'
	1	Sandy SILT (ML), fine grained, loose, dry, non-plastic, bright yellow (10 YR 6/6)	0.0 ppm			
	2	Sandy SILT (ML), fine grained, loose, dry, non-plastic, gradational contact, dark gray (2.5 Y 3/1)				
	3	Sandy SILT (ML), fine grained, loose, moist to wet, non-plastic, gradational contact, dark gray (2.5 Y 3/1)	0.0 ppm			
	4					
	5	SILT (ML), some sand and some clay, fine grained, loose, moist to wet, medium plasticity, gradational contact (2.5 Y 3/1)	0.0 ppm			Ran 3.0', Rec 3.0'
	6					
			5.8 ppm		Soil Sample AF0311	
	7					
						Ran 3.0', Rec 3.0'
	8	Sandy SILT (ML), fine grained, low to medium density, wet, non-plastic, some clay, gray (2.5 Y 5/1)	4.8 ppm			▽ wet below 7.9 ft BGS
	9			Soil Sample AF0331		COLLECTED GROUNDWATER SAMPLE AF0312 FROM TEMPORARY PIEZOMETER SCREENED AT 2.0 - 12.0 ft BGS
		Silty SAND (SM), fine grained, loose, non-plastic, wet, light gray (2.5 Y 7/2)	4.8 ppm			END OF DRILLING AT 12.0 FT BGS AND SET TEMPORARY PIEZOMETER
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-04

PROJECT: HAAF USTs 25 & 26 | INSPECTOR M. Vest | 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)
	0	Gravel				Ran 4.0', Rec. 3.0'
	1	SILT (ML), some fine grained sand, low density, damp to moist, non-plastic, gradational contact, very dark gray (2.5 Y 3/1)	1.4 ppm			
	2	SAND (SP), fine to medium grained, moist to wet, loose, non-plastic, gradational contact, light gray (2.5 Y 7/2)				
	3	SILT (ML), dense to low density, moist to wet, non-plastic, dark gray (2.5 Y 4/1)	1.0 ppm			
	4					Ran 3.0', Rec 3.0'
	5		4.2 ppm			▽ wet below 5.5 ft BGS
	6	SILT (ML), low density, wet, non-plastic, black (2.5 Y 2.5/1)	6.3 ppm	Soil Sample AF0431	Soil Sample AF0411	
	7	SILT (ML), fine grained, some sand, loose to low density, wet, non-plastic, light gray (2.5 Y 7/2)				Pushed to 12.0 ft BGS to set temporary piezometer screened at 2.0 to 12.0 ft BGS
	8					
	9					Collected groundwater sample AF0412 from temporary piezometer
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-05

PROJECT: HAAF USTs 25 & 26 | INSPECTOR M. Vest | 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)
		Top soil w/ roots				Ran 4.0', Rec 4.0'
		Gravel				
	1	SILT (ML), fine grained, some sand, loose, damp to moist, non-plastic, dark gray (2.5 Y 4/1)	653 ppm			
	2					
	3	SAND (SP), fine grained, some silt, loose, moist, non-plastic, thin-bedded/laminated, light gray (2.5 Y 7/2)	864 ppm		Soil sample AF0511	
	4	SILT (ML), fine grained, moist, dense, non-plastic, dark grayish brown (2.5 Y 4/2)				
	5	SILT (ML), some clay, medium density, moist to wet, low plasticity, very dark gray (2.5 Y 3/1)	712 ppm	Soil Sample AF0531		Ran 3.0', Rec 3.0'
	6		14.2 ppm			
	7	SILT, fine grained, some sand and clay, low density, wet, non-plastic, gray (2.5 Y 5/1)				▽ wet below 6.7 ft BGS Pushed to 12.0 ft BGS to set temporary piezometer screened at 2.0 to 12.0 ft BGS
	8					
	9					Collected groundwater sample AF0512 from temporary piezometer
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-06

PROJECT: HAAF USTs 25 & 26 | INSPECTOR M. Vest | 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)
	0	Gravel				Ran 4.0', Rec 3.2
		SILT (ML), some sand, fine grained, loose, damp, non-plastic, pale yellow (2.5Y 7/4)				
	1	Silty SAND (SW), fine grained, loose, moist to damp, non-plastic, very dark grayish brown (10YR 3/2)	15.4 ppm			
	2	SAND (SP), fine to medium grained, loose, moist, non-plastic, light gray (10YR 7/1)			Soil Sample AF0611	
	3		16.0 ppm			
		NO RECOVERY				
	4					
		SAND (SP), fine to medium grained, loose, moist, non-plastic, light gray (10YR 7/1)				Ran 3.0', Rec 3.0'
	5		15.2 ppm			
		SILT (ML), some sand, fine grained, dense, moist to wet, non-plastic, very dark gray (2.5Y 3/1)				
	6		8.9 ppm	Soil Sample AF0631		
	7					▽ wet below = 6.8 ft BGS
						Pushed to 12.0 ft BGS to set temporary piezometer screened at 2.0 to 12.0 ft BGS
	8					
	9					Collected groundwater sample AF0612 from temporary piezometer
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-07

PROJECT: HAAF USTs 25 & 26 | INSPECTOR M. Vest | 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				Ran 4.0'; Rec 3.0'
	1	silty SAND (SM), Coarse sand to fine gravel, non-plastic, loose, dry, gray (2.5 YR 6/1)	31.0 ppm			
	2	SAND (SP), fine to medium grained, some silt, non-plastic, loose, dry light olive brown (2.5Y 5/3)				
	3		1832 ppm		Soil Sample AF0711	
	4					
		SAND (SP), fine to medium grained, some silt, non-plastic loose, dry, gradational contact, dark gray (2.5 Y 4/1)				Ran 3.0', Rec 3.0'
	5	SAND (SP), fine grained, some silt, non-plastic, moist to wet, loose, gray, (2.5 Y 6/1)	1712 ppm			▽ = wet below 5.5 ft BGS
	6					
			1631 ppm	Soil Sample AF0731		
	7					Pushed to 12.5 ft BGS to set temporary piezometer screened at 2.5 to 12.5 ft BGS
	8					
	9					Collected groundwater sample AF0712 from temporary piezometer
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-08

PROJECT: HAAF USTs 25 & 26 | INSPECTOR M. Vest | 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)
	0	ASPHALT				Ran 4.0'; Rec 2.8'
	1	silty SAND (SM), fine grained, loose, dry, non-plastic, light brown to gray (2.5 Y 6/2)	17.0 ppm			
	2	SAND (SP), some silt, loose, dry to damp, non-plastic, light gray (2.5 Y 7/1)				
	3		18.5 ppm		soil sample AF0811	
	4					Ran 3.0'; Rec 3.0'
	5	SAND (SP), fine to medium grained, loose, wet, non-plastic, light gray (2.5 YR 7/1)	9.7 ppm	soil sample AF0831		▽ wet below 4.5 ft BGS
	6					
	7	silty SAND (SM), fine grained, wet, loose, non-plastic, light gray (2.5 YR 7/1)	4.2 ppm			Pushed to 12.5 ft BGS to set temporary piezometer screened at 2.5 to 12.5 ft BGS
	8					
	9					Collected groundwater sample AF0812 from temporary piezometer
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-09

PROJECT: HAAF USTs 25 & 26 | INSPECTOR M. Vest | 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)
	0	ASPHALT				Ran 4.0', Rec 2.8'
	1	Silty SAND (SM), fine grained, loose, dry, non-plastic, gray (2.5Y 5/1)	651 ppm			
	2	Silty SAND (SM), fine grained, loose, damp, non-plastic, dark gray (2.5Y 4/1)				
	3		714 ppm		Soil sample AF0911	
	4	Silty SAND (SM), fine grained, loose, damp, non-plastic, gradational contact, light gray (2.5Y 7/1)				Ran 3.0', Rec 3.0'
	5	Sandy SILT (ML), fine grained, loose, wet to saturated, non-plastic, gray (2.5Y 5/1)	607 ppm			▽ wet below 4.5 ft BGS
	6		303 ppm	Soil sample AF0931		
	7					Pushed to 12.0 ft BGS to set temporary piezometer screened at 2.0 to 12.0 ft BGS
	8					
	9					Collected groundwater sample AF0912 from temporary piezometer
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-10

PROJECT: HAAF USTs 25 & 26

INSPECTOR M. Vest

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				Ran 4.0', Rec 2.9
		SAND (SP), fine grained, loose, dry, non-plastic, light gray (2.5 Y 6/1)				
	1	SAND (SP), fine to medium grained, some silt, loose, dry to damp, non-plastic, light brown to gray (2.5 Y 6/2)	28.4 ppm			
	2					
			28.2 ppm		Soil Sample AF1011	
	3					
		Sandy SILT (ML), fine grained, loose, damp to moist, non-plastic, light gray, 2.5 Y 5/1				
	4	Sandy SILT (ML), fine grained, loose, damp to moist, non-plastic, light gray, 2.5 Y 4/1				Ran 3.0', Rec 3.0'
						▽ = wet below 4.9 ft BGS
	5	SAND (SP), fine to medium grained, loose, wet, non-plastic, light gray, 2.5 Y 7/2	27.8 ppm			
	6			Soil Sample AF1031		
		Sandy SILT (ML), fine grained, loose, wet, non-plastic, light brown to gray, 2.5 Y 6/2	20.7 ppm			
	7					Pushed to 12.5 ft BGS to set temporary piezometer screened at 2.5 to 12.5 ft BGS.
	8					
	9					Collected groundwater sample AF1012 from temporary piezometer
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-11

PROJECT: HAAF USTs 25 & 26 | INSPECTOR M. Vest | 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)
	0	Top soil w/ roots				Ran 4.0' Rec 3.7
		SILT (ML), fine grained, some sand loose, dry to damp, non-plastic, light olive brown (2.5 Y 5/3)				
	1	SILT (ML), fine grained, some sand, loose, damp to moist, non-plastic, very dark gray (2.5 Y 3/1)	2.0 ppm			
	2					
		SAND (SP), fine to medium grained, loose, moist to wet, non-plastic, pale yellow (2.5 Y 8/2)				
	3	SAND (SP), some silt, fine grained, moist to wet, non-plastic, gradational contact, very dark gray (10 YR 3/1)	2.2 ppm			
	4					▽
			2.9 ppm	Soil Sample AF1131	Soil Sample AF1111	Ran 3.0', Rec 2.5' wet below 4.0 ft BGS
	5	SILT (ML), some sand, fine grained, medium density, wet to saturated, non-plastic, very dark gray (5 Y 3/1)				
		SILT (ML), some sand, fine grained, dense, wet, non-plastic, gray (5 Y 6/1)	1.9 ppm			
	6					
	7					Pushed to 11.0 ft BGS to set temporary piezometer screened at 1.0 to 11.0 ft BGS.
	8					
	9					Collected groundwater sample AF1112 from temporary piezometer
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-12

PROJECT: HAAF USTs 25 & 26 | INSPECTOR M. Vest | 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)
	0	ASPHALT				Ran 4.0', Rec. 3.5'
	1	Silty SAND (SM), fine grained, loose, damp to dry, non-plastic, light gray (2.5 Y 7/1)	36.0 ppm			
	2	Silty SAND (SM), fine grained, loose, damp to dry, non-plastic, gray (2.5 Y 5/2)				
	3		534 ppm		Soil sample AF1211	
	4					
	5	Silty SAND (SM), fine grained, loose, moist to wet, non-plastic, gradational contact, dark gray (2.5 Y 4/1)	513 ppm	Soil sample AF1212		Ran 3.0', Rec. 1.9' ▽ wet below 5.5 ft BGS
	6					
	7	NO RECOVERY				Pushed to 12.5 ft BGS to set temporary piezometer screened at 2.5 to 12.5 ft BGS
	8					
	9					Collected groundwater sample AF1212 from temporary piezometer
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-13

PROJECT: HAAF USTs 25 & 26 | INSPECTOR M. Vest | 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				Ran 4.0', Rec 3.3'
		SAND + GRAVEL (dense grade base for asphalt)				
	1	SILT (ML), some fine-grained sand, loose, dry non-plastic, light brownish gray (2.5 Y 6/2)	35.2 ppm			
	2					
	3		265 ppm		Soil sample AF1311	
	4	SILT (ML), some fine-grained sand, loose, damp, non-plastic, very dark gray (2.5 Y 3/1)				Ran 3.0', Rec 3.0'
	5		81.5 ppm			
	6	Silty SAND (SM), fine-grained, loose, moist to wet, non-plastic, light to dark brown (2.5 Y 5/3)				▽ wet below 6.4 ft BGS
	7		41.1 ppm			Ran 3.0', Rec 3.0'
	8					
	9		18.3 ppm			
	10			AF1331		

HTRW DRILLING LOG

HOLE NUMBER AF-13

PROJECT: HAAF USTs 25 & 26 | INSPECTOR M. Vest | 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)
	11		0.0 ppm	Soil Sample AF1331		Ran 2.5', Rec 2.5' COLLECTED GROUNDWATER SAMPLE AF1312 FROM TEMPORARY PIEZOMETER SCREENED AT 2.5-12.5 ft BGS.
	12	Silty SAND (SM), fine-grained, loose, wet, non-plastic, light olive brown (2.5Y 5/3)				END OF DRILLING AT 12.5 FT BGS AND SET TEMPORARY PIEZOMETER
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					

HTRW DRILLING LOG

HOLE NUMBER AF-14

PROJECT: HAAF USTs 25 & 26

INSPECTOR Timothy 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				Ran 4.0', Rec 3.4'
		GRAVEL (GW). Base, dark green-gray (10 GY 4/1)				
	1	Silty SAND (SW), fine grained, dry, mostly laminated, well packed, very dark gray-brown (10 YR 3/2) to dark gray (10 YR 4/1)	0.0 ppm			
	2	Silty SAND (SW), fine grained, massive, dry, densely packed, black to dark gray (10 YR 2/1)		Soil Sample AF1431		
	3		0.0 ppm			
	4	NO RECOVERY				
		SAND (SP), very fine grained, generally massive, densely packed to weakly cemented, wet but dries quickly, dark gray (10 YR 4/1)	0.0 ppm		Soil sample AF1411	Ran 4.0', Rec 4.0' ▽ Wet below 4.8 ft BGS
	5					
	6					
	7					
	8					Pushed to 11.4 ft BGS to set temporary Piezometer screened at 1.4 to 11.4 ft BGS
	9					Collected groundwater Sample AF1412 from temporary piezometer
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-15

PROJECT: HAAF USTs 25 & 26 | INSPECTOR Timothy 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				Ran 4.0', Rec 3.8'
		GRAVEL (GW), gravel base, coarse, dark green-gray (10 GY 4/1)				
	1	silty SAND (SW), very fine grained, dry, massive, moderately packed, very dark gray brown (10 YR 3/2)	0.0 ppm			
	2	SAND (SP), medium grained, dry, massive, laminated in places, very pale brown (10 YR 8/2)		Soil Sample AF1531		
	3		0.0 ppm			
	4					Ran 4.0', Rec 4.0'
		SAND (SP), medium grained, dry, massive, laminated in places, dark brown (10 YR 3/3)	0.0 ppm		Soil Sample AF1511	
	5	silty SAND (SW), some pebbles, dry, varieted, mottled, black (10 YR 2/1)				▽ = wet below 5.1 ft BGS
		SAND (SP), medium grained, moist-wet light gray (10 YR 7/2)				
	6	silty SAND (SW), very fine grained, massive, well packed, dark gray, (10 YR 4/1)				
	7	grades to light gray (10 YR 7/1) at depth				
	8					Pushed to 11.5 ft BGS to set temporary piezometer screened at 1.5 to 11.5 ft BGS.
	9					Collected groundwater sample AF1512 from temporary piezometer
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-16

PROJECT: HAAF USTs 25 & 26 | INSPECTOR Timothy 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)
	0	SAND(SP), fine to medium grained, loose, dry, friable, massive, white (10YR8/1)				Ran 4.0', Rec 2.6'
	1	SAND(SP), medium grained moist, weakly packed, massive, l nt grey (10YR7/2)	0.0 ppm			
	2					
		silty SAND(SW), fine grained, moist massive, med. packed, black (10YR2/1)				
	3	NO RECOVERY	0.0 ppm	Soil sample AF1631		
	4					
		SAND(SP), medium grained, moist, weakly packed, massive, very pale brown to brown (10YR7/3)	0.0 ppm		Soil sample AF1611	Ran 4.0', Rec 3.7'
	5	silty SAND(SW) fine grained, moist to wet, moderately packed, black (10YR2/1)				▽ wet below 5.4 ft BGS
		SAND(SP), fine grained, moist, moderately packed, massive, dries rapidly, light gray (10YR7/1)				
	6					
	7					
		NO RECOVERY				
	8					Pushed to 11.5 ft BGS to set temporary piezometer screened at 1.5 to 11.5 ft BGS
	9					Collected groundwater sample AF1612 from temporary piezometer.
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-17

PROJECT: HAAF USTs 25 & 26 | INSPECTOR Timothy 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)
	0–1	CLAY (CH), dense, slightly plastic, grass etc., dark brown (10YR 3/3)	1.4 ppm			Ran 4.0', Rec 3.9'
	1–2	SAND (SP), fine grained, massive, loose, dry, light yellow-brown (10YR 6/4)				
	2–4	CLAY (CH), dense, massive, plastic, black (10YR 2/1)	0.0 ppm			
	4–6		12 ppm		Soil Sample AF1711	Ran 4.0', Rec 3.9'
	6–7					
	7–8	CLAY (CH), dense, massive, moist, plastic, streaked with orange and black staining, green-gray (10Y 6/1)	1.9 ppm			▽ wet below 8.0 ft BGS
	8–9			Soil Sample AF1731		Ran 4.0', Rec 3.9'
	9–10	Silty SAND (SW), fine grained, massive, wet, micaceous, light green-gray (10GY 7/1)				

HTRW DRILLING LOG

HOLE NUMBER AF-17

PROJECT: HAAF USTs 25 & 26

INSPECTOR Timothy 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)
	11			Soil Sample AF1731		
	12					Pushed to 12.5 ft BGS to set temporary Piezometer screened at 2.5 to 12.5 ft BGS.
	13					
	14					Collected groundwater sample AF1712 from temporary piezometer
	15					
	16					
	17					
	18					
	19					
	20					

HTRW DRILLING LOG

HOLE NUMBER AF-18

PROJECT: HAAF USTs 25 & 26 | INSPECTOR Timothy 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)
	0	Sandy CLAY (CL), densely packed, unplastic, very dark grey-brown (10YR 3/2)				Ran 4.0', Rec 3.2'
		SAND (SP) light yellow-brown (10YR 6/4)				
	1	Sandy CLAY (CL), fine grained, Sand and clay fractions vary, generally massive, moderately plastic, black (10YR 2/1)	0.0 ppm			
	2					
			99 ppm		Soil Sample AF1811	
	3	SAND (SP) very pale brown (10YR 8/2)				
		NO RECOVERY				
	4			Soil Sample AF1831		
		SAND (SP), very fine grained, dry, massive, moderately packed, very pale brown (10YR 8/2)	92 ppm			Ran 4.0', Rec 3.7'
		Sandy CLAY (CL), moist, massive, medium plasticity, black (10YR 2/1)				▽ = Wet below 4.7 ft BGS
	5					
		SAND (SP), fine grained, massive, moderately packed, wet but dries rapidly upon exposure to air, gray (10YR 6/1)				
	6					
	7					
		NO RECOVERY				
	8					Pushed to 11.5 ft BGS to set temporary piezometer screened at 1.5 to 11.5 ft BGS.
	9					Collected groundwater sample AF1812 from temporary piezometer
	10					

HTRW DRILLING LOG

PROJECT: HAAF USTs 25 & 26 | INSPECTOR Timothy Coffey | HOLE NUMBER AF-19 | 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)
	0	Silty SAND(SM), topsoil, grass, very dark grey-brown (10 YR 3/2)				Ran 4.0' Rec 3.0'
	1	SAND(SP), fine grained, dry, staining gives mottling effect, brown-yellow (10 YR 6/8)	0.0 ppm			
	2	Sandy CLAY(CL), fine grained, dry to moist, medium plasticity, clay beds are laminated, black (10 YR 2/1)	10.1 ppm		Soil Sample AF1911	
	3	NO RECOVERY				
	4	Sandy CLAY(CL), fine grained, dry to moist, medium plasticity, clay beds are laminated, black (10 YR 2/1)	0.0 ppm	Soil Sample AF1931		Ran 4.0', Rec 3.3'
	5					▽ Wet below 5.8 ft BGS
	6	SAND(SP), fine grained, massive, dries rapidly, light gray (10 YR 7/1) to light green-gray (10 GY 8/1)				
	7	NO RECOVERY				
	8					Pushed to 11.5 ft BGS to set temporary piezometer screened at 1.5 to 11.5 ft BGS
	9					Collected groundwater sample AF1912 from temporary piezometer
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-20

PROJECT: HAAF USTs 25 & 26 | INSPECTOR | 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)
	0	Topsoil				
	1	SAND (SW), fine-grained, well sorted, black to dark gray	115 ppm			
	2					
	3	SAND (SW), medium grained, well sorted, light brown to gray	115 ppm			
	4					
	5		182 ppm			
	6	Silty SAND (SM), very fine grained, some what cohesive, black				▽ WET BELOW 6.0 FT
	7		223 ppm	Geotechnical Soil Sample AF2031 (7.0 - 13.0 Ft)	Soil Sample AF2011	
	8	SAND (SW), very fine grained, well sorted, wet, gray to light gray				Collected groundwater sample AF2012 from piezometer.
	9		50.5 ppm			Pushed to 13.0 ft to set piezometer screened at 3.0 to 13.0 ft BGS
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-21

PROJECT: HAAF USTs 25 & 26 | INSPECTOR M. Vest | 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					
	8					
	10					
	12				Groundwater Sample AF2112	
	14					
	16					
	18				Groundwater Sample AF2122	
	20					

HTRW DRILLING LOG

HOLE NUMBER AF-21

PROJECT: HAAF USTs 25 & 26 | INSPECTOR M. Vest | 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 AF2132	
	24					
	26				Groundwater Sample AF2142	
	28					
	30					
	32				Groundwater Sample AF2152	
	34					
	36					
	38				Groundwater Sample AF2162	
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-21

PROJECT: HAAF USTs 25 & 26 | INSPECTOR M. Vest | 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 AF2172	
	44					
	46					
	48				Groundwater Sample AF2182	
	50					
	52				Groundwater Sample AF2192	
	54					
	56	REFUSAL AT 55.0 FT BGS END OF PROBING AND SAMPLING				
	58					
	60					

HTRW DRILLING LOG

HOLE NUMBER AF-22

PROJECT: HAAF USTs 25 & 26 | INSPECTOR M.Vest | 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)
	0	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description				
	2					
	4					
	6					
	8					
	10					
	12				Groundwater Sample AF2212	
	14					
	16					
	18				Groundwater Sample AF2222	
	20					

HTRW DRILLING LOG

HOLE NUMBER AF-22

PROJECT: HAAF USTs 25 & 26

INSPECTOR M. Vest

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 AF2232	
	24					
	26				Groundwater Sample AF2242	
	28					
	30					
	32				Groundwater Sample AF2252	
	34					
	36					
	38				Groundwater Sample AF2262	
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-22

PROJECT: HAAF USTs 25 & 26 | INSPECTOR M. Vest | 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 AF2272	
	44					
	46					
	48				Groundwater Sample AF2282	
	50	REFUSAL AT 50.0 FT BGS END OF PROBING AND SAMPLING				
	52					
	54					
	56					
	58					
	60					

HTRW DRILLING LOG

HOLE NUMBER AF-23

PROJECT: HAAF USTs 25 & 26

INSPECTOR

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)
	0	ASPHALT & GRAVEL	24.2ppm			
	1	SAND (SW), fine grained, well sorted, brown				
	2		24.2ppm			
	3	SAND (SW), medium grained, well sorted, light brown to brown				
	4		25.6ppm		Soil Sample AF2311	
	5	SAND (SW), very fine grained, well sorted, light brown to brown				
	6		24.2ppm			
	7			Geotechnical Soil Sample AF2331 (7.5 - 13.0 ft)		
	8		27.0ppm			Collected groundwater sample AF2312 from piezometer
	9					Pushed to 13.0 ft BGS to set piezometer screened at 3.0 to 13.0 ft BGS
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-24

PROJECT: HAAF USTs 25 & 26 | INSPECTOR | 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)
	0	ASPHALT & GRAVEL				
	1	SAND (SP), fine grained, poorly sorted, dark brown to black	2.7ppm			
	2					
	3	SAND (SW), medium grained, well sorted, tan to dark brown	2.7ppm		Soil Sample AF2411	▽ WET BELOW 3.5FT BGS
	4					
	5		13.6ppm	Geotechnical Soil Sample AF2431 (2.0-8.0 FT)		
	6					
	7	SAND (SW), very fine grained, well sorted, wet, tan	21.7ppm			
	8					Collected groundwater sample AF2412 from piezometer
	9		N/A			Pushed to 12.0 ft BGS to set piezometer screened at 2.0 to 12.0 ft BGS
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-25

PROJECT: HAAF USTs 25 & 26 | INSPECTOR Timothy 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)
	0	Sandy CLAY (CL), top soil, very dark gray-brown (10YR 3/2)	7 ppm		Soil Sample AF2511	Ran 4.0', Rec 2.8' ▽ Wet below 0.3 ft BGS
	1	Sandy CLAY (CL), wet, massive, weak, black (10YR 2/1)				
	2	SAND (SP), fine-grained, moderately packed, micaceous, wet, dark gray (10YR 4/1)		Soil Sample AF2531		
	3	SAND (SP), fine-grained, moderately packed, wet, light green-gray (10G 7/1)				
	4	NO RECOVERY				Pushed to 10.5 ft BGS to set temporary Piezometer screened at 0.5 to 10.5 ft BGS
	5					
	6					Collected groundwater Sample AF2512 from temporary piezometer
	7					
	8					
	9					
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-26

PROJECT: HAAF USTs 25 & 26 | INSPECTOR Timothy 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)
	0	CLAY(CH), topsoil, very dark gray (10YR 3/1)				Ran 4.0', Rec 4.0'
	1	CLAY (CH), dense, stiff, moist, plastic, black (10YR 2/1)	0.0 ppm			
	2					
	3		0.0 ppm			
		Sandy CLAY(CH), dark yellow-brown (10YR 4/6)				
	4	CLAY(CH), dense, stiff, moist, plastic, black (10YR 2/1)				Ran 4.0' Rec 4.0'
	5		0.0 ppm			
	6					
		CLAY(CH), stiff, plastic, green-gray (5GY 5/1)	0.0 ppm	Soil Sample AF2631	Soil Sample AF2611	
	7	Sandy CLAY(CH), fine grained, wet to moist, non-plastic, green-gray (5GY 4/1)				▽ wet below 7.4 ft BGS
		SAND(SP), fine grained, moderately packed, wet, dries rapidly, green-gray (10Y 5/1)				
	8					Pushed to 12.0 ft BGS to set temporary piezometer screened at 2.0 to 12.0 ft BGS
	9					Collected groundwater sample AF2621 from temporary piezometer
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-27

PROJECT: HAAF USTs 25 & 26 | INSPECTOR Timothy 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)
	0–4	CLAY(CL), topsoil, very dark gray (10YR 3/1) CLAY(CL), somesilt, massive, plastic, stiff, dense, black (10YR 2/1)	0.0 ppm	Soil Sample AF2731	Soil Sample AF2711	Ran 4.0', Rec 4.0'
	3–4	SAND(SP), dark gray (10YR 4/1)	0.0 ppm			
	4–8	CLAY(CL), massive, plastic, stiff, dense, dark green-gray (5GY 4/1) to black (10YR 2/1) NO RECOVERY				Ran 4.0', Rec 0.3'
	8–10					Pushed to 11.0 ft BGS to set temporary Piezometer screened at 1.0 to 11.0 ft BGS Collected groundwater sample AF2712 from temporary piezometer

HTRW DRILLING LOG

HOLE NUMBER AF-28

PROJECT: HAAF USTs 25 & 26

INSPECTOR Timothy 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)
	0–2	CLAY (CH), top soil, very dark gray (10YR 3/1) Sandy CLAY (CH), massive, stiff, moist, highly plastic, black (10YR 2/1)	0.0 ppm			Ran 4.0', Rec 2.2'
	2–4	NO RECOVERY	0.0 ppm			
	4–5	Sandy CLAY (CH), massive, stiff, moist, highly plastic, black (10YR 2/1)	1.7 ppm	Soil Sample AF2831	Soil Sample AF2811	Ran 4.0', Rec 3.0' ▽ = wet below 4.9 ft BGS
	5–6	Sandy CLAY (CH), massive, stiff, moist, highly plastic, dark gray (10YR 4/1)				
	6–7	Sandy CLAY (CH), massive, stiff, moist, highly plastic, green-gray				
	7–8	NO RECOVERY				
	8–10					Pushed to 12.0 ft BGS to set temporary Piezometer screened at 2.0 to 12.0 ft BGS Collected groundwater sample AF2821 from temporary piezometer

HTRW DRILLING LOG

HOLE NUMBER AF-29

PROJECT: HAAF USTs 25 & 26

INSPECTOR Timothy 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)
	1	Sandy SILT (ML), topsoil, very dark gray (10YR 3/1)			Soil sample AF2911	Ran 4.0', Rec 2.4'
	2	SAND (SP), fine grained, massive, dry, weakly packed, yellow (10YR 7/6)	140 ppm			
		Sandy CLAY (CH), moist, plastic to non-plastic, black (10YR 2/1)				
	3	NO RECOVERY	N/A			
	4					
	5	Sandy CLAY (CH), moist, plastic to non-plastic, black (10YR 2/1)	0.0 ppm			Ran 4.0', Rec 4.0'
	6					
	7		0.0 ppm	Soil sample AF2931		
		CLAY (CH), moist, streaked, plastic, pale brown (10YR 6/3)				
	8	CLAY (CH), moist, dark green-gray (10Y 4/1)				Ran 4.0', Rec 1.5' ▽ wet below 8.5 ft BGS
	9					
	10	NO RECOVERY				

HTRW DRILLING LOG

HOLE NUMBER AF-29

PROJECT: HAAF USTs 25 & 26

INSPECTOR Timothy 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)
	11					
	12					Pushed to 12.0 ft BGS to set temporary Piezometer screened at 2.0 to 12.0 ft BGS
	13					
	14					Collected groundwater sample AF2921 from temporary piezometer
	15					
	16					
	17					
	18					
	19					
	20					

HTRW DRILLING LOG

HOLE NUMBER AF-30

PROJECT: HAAF USTs 25 & 26 | INSPECTOR S. Budd | 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)
	0	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description				
	2					
	4					
	6					
	8					
	10					
	12				Groundwater Sample AF3012	
	14					
	16				Groundwater Sample AF3022	
	18					
	20					

HTRW DRILLING LOG

HOLE NUMBER AF-30

PROJECT: HAAF UST 25 & 26

INSPECTOR S. Budd

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 AF3032	
	24					
	26				Groundwater Sample AF3042	
	28					
	30				Groundwater Sample AF3052	
	32					
	34				Groundwater Sample AF3062	
	36					
	38					
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-30

PROJECT: USTs 25 & 26 HAAF

INSPECTOR S. Budd

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 AF3072	
	44					
	46					
	48				Groundwater Sample AF3082	
	50	END OF PROBING AND SAMPLING AT 50.0 FTBGS				
	52					
	54					
	56					
	58					
	60					

HTRW DRILLING LOG

HOLE NUMBER AF-31

PROJECT: HAAF USTs 25 & 26 | INSPECTOR S. Budd | 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)
	0	Vertical profile borehole for the purpose of collecting groundwater samples. No soil was collected for lithlogic description				
	2					
	4					
	6					
	8				Groundwater Sample AF3112	
	10					
	12				Groundwater Sample AF3122	
	14					
	16					
	18				Groundwater Sample AF3132	
	20					

HTRW DRILLING LOG

HOLE NUMBER AF-31

PROJECT: HAAF USTs 25 & 26

INSPECTOR S. Budd

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 AF3142	
	24					
	26					
	28				Groundwater Sample AF3152	
	30					
	32				Groundwater Sample AF3162	
	34					
	36					
	38				Groundwater Sample AF3172	
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-31

PROJECT: HAAF USTs 25 & 26 | INSPECTOR S. Budd | 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 lithologic description			Groundwater Sample AF3182	
	44					
	46					
	48				Groundwater Sample AF3192	
	50	END OF PROBING AND SAMPLING AT 50.0 FT BGS				
	52					
	54					
	56					
	58					
	60					

HTRW DRILLING LOG

HOLE NUMBER AF-32

PROJECT: HAAF USTs 25 & 26 | INSPECTOR S. Budd | 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)
	0	Vertical profile borehole for the purpose of collecting groundwater samples No soil was collected for lithlogic description				
	2					
	4					
	6					
	8					
	10					
	12				Groundwater Sample AF3212	
	14					
	16					
	18				Groundwater Sample AF3222	
	20					

HTRW DRILLING LOG

HOLE NUMBER AF-32

PROJECT: HAAF USTs 25 & 26 | INSPECTOR S. Budd | 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 AF3232	
	24					
	26					
	28				Groundwater Sample AF3242	
	30					
	32				Groundwater Sample AF3252	
	34					
	36					
	38				Groundwater Sample AF3262	
	40					

HTRW DRILLING LOG

HOLE NUMBER AF-32

PROJECT: HAAF USTs 25 & 26

INSPECTOR S. Budd

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 lithologic description			Groundwater Sample AF3272	
	44					
	46					
	48				Groundwater Sample AF3282	
	50	END OF PROBING AND SAMPLING AT 50.0 FT BGS				
	52					
	54					
	56					
	58					
	60					

HTRW DRILLING LOG

HOLE NUMBER AF-33

PROJECT: HAAF USTs 25 & 26 | INSPECTOR H. Smith | 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)
	1	Silty SAND, soft, nonplastic, moist, fine to medium grained, black to dark grayish brown (10 YR 4/2)	5.1 ppm			No soil samples were collected for laboratory analysis
	2	sandy CLAY, high plasticity, soft, moist, very dark gray (10 YR 3/1)				
	3	Silty SAND, fine to medium grained, some clay, moist, dark gray (7.5 YR 4/1)	5.1 ppm			
	4					
	5		2.3 ppm			▽ wet below 5.1 ft BGS
	6	SAND, fine grained, well sorted, very soft, wet pale olive (5 Y 6/3)				
	7		2.3 ppm			
	8					
	9		5.9 ppm			
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-33

PROJECT: HAAF USTs 25 & 26 | INSPECTOR H. Smith | 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)
	11	SAND: Same as above Sandy CLAY, high plasticity, soft, moist, gray (5Y5/1) SAND, fine to medium grained, soft, poorly sorted, wet, light gray (5Y7/1)	5.9ppm			Collected groundwater sample AF3312 from monitoring point
	12	END OF DRILLING AND SAMPLING AT 12.0 FT BGS				Set 3/4" monitoring point screened from 2.3 to 11.8 ft BGS
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					

HTRW DRILLING LOG

HOLE NUMBER AF-34

PROJECT: HAAF USTs 25 & 26 | INSPECTOR H.Smith | 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)
	0	Sandy Topsoil				No soil samples were collected for laboratory analysis
	1	Silty SAND (SM), fine to medium grained, soft, moist,	4.4ppm			
	2	Sandy CLAY, low to medium plasticity, moist, brown (10YR5/3)				
	3		4.4ppm			
	4					
	5	Clayey SAND, low plasticity, some silt, soft to firm, moist, light yellowish brown (10YR6/4)	2.7ppm			▽ wet below 5.5ft
	6	Silty SAND, fine to medium grained, soft, wet, mottled, brown (10YR4/2)				
	7	SAND, fine grained, trace of silt, poorly sorted, wet gray (5Y6/1)	2.7ppm			Collected groundwater sample AF3412 from monitoring point
	8	END OF SAMPLING AT 8.0 FT BGS				Pushed to 11.0 ft BGS to set 3/4" monitoring point screened from 1.4 to 10.9 ft BGS
	9					
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-35

PROJECT: HAAF USTs 25 & 26 | INSPECTOR H. Smith | 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)
	0	Silty SAND, moist, very dark brown (10YR2/2)				
	1		1.3ppm			No soil samples were collected for laboratory analysis
	2					
	3	CLAY, hard, high plasticity, moist, black (10YR2/1) mottled with dark brown (7.5YR3/4)	1.3ppm			
	4					
	5		1.4ppm			
						▽ wet below 5.6 ft
	6	SAND, fine grained, well sorted, soft, wet gray (5Y6/1)				
	7		1.4ppm			Collected groundwater sample AF3512 from monitoring point
	8	END OF SAMPLING AT 6.0 FT BGS				Pushed to 11.0 ft BGS to set 3/4" monitoring point screened from 1.2 to 10.7 ft BGS
	9					
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-36

PROJECT: HAAF USTs 25 & 26 | INSPECTOR H. Smith | 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)
	0	Sandy CLAY, firm to hard, plastic, moist, black (10YR 2/1)	1.3ppm			No soil samples were collected for laboratory analysis
	1					
	2		1.3ppm			
	3					
	4		1.4 ppm			
	5	Silty SAND, fine to medium grained, soft, wet, dark gray (7.5YR 4/1)				▽ wet below 5.8 ft
	6					
	7	SAND, fine grained, well sorted soft, wet, light gray (5Y 7/1)	1.4ppm			Collected groundwater sample AF3612 from monitoring point
	8					Pushed to 11.0 ft BGS to set 3/4" monitoring point screened from 1.4 to 10.9 ft BGS
	9					
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-37

PROJECT: HAAF USTs 25 & 26

INSPECTOR P. Lucot

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)
	0	Silty SAND (SM), very loose, moist, yellowish brown (10 YR 5/4)				No soil samples were collected for laboratory analysis
	1	SAND (SM), fine grained, some silt, traces of clay, very loose, moist, grayish brown (2.5 Y 5/4)	0.0 ppm			
	2					
	3		0.0 ppm			▽ wet below 3.5 ft
	4	Silty CLAY (CL), soft, medium plasticity, moist black (5Y 2.5/1)				
	5		1.5 ppm			Collected groundwater sample AF3712 from monitoring point
	6	END OF SAMPLING AT 6.0 FT BGS				Pushed to 15.0 ft BGS to set 3/4" monitoring point screened from 4.4 to 14.3 ft BGS
	7					
	8					
	9					
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-38

PROJECT: HAAF USTs 25 & 26 | INSPECTOR P. Lucot | 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)
	1	Silty SAND (SM), fine to coarse grained, very loose, traces of clay, moist, yellowish brown (10YR5/4)	0.0ppm			No soil samples were collected for laboratory analysis
	2	SAND (sm), fine grained, some silt, traces of clay, very loose, moist, grayish brown (2.5Y5/4)				
	3	silty CLAY (CL), soft, medium plasticity, moist, black (5Y 2.5/1)	0.0ppm			
	4					
	5		0.0ppm			
	6					▽ wet below 5.8ft
	7		0.0ppm			
	8	Silty SAND (SM), fine grained, medium dense, wet, gray (2.5Y 6/1)	0.0ppm			Groundwater sample AF3B12 collected from monitoring point
	9					Pushed to 14.5 ft BGS to set 3/4" monitoring point screened from 4.1 to 14.0 ft BGS
	10					

HTRW DRILLING LOG

HOLE NUMBER AF-39

PROJECT: HAAF USTs 25 & 26 | INSPECTOR P. Lucot | 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)
	1	Silty SAND (SM), fine to coarse grained, subangular to subrounded, loose, traces of clay, moist, yellowish brown (10 YR 5/4)	0.0 ppm			No soil samples were collected for laboratory analysis.
	2					
	3	SAND (SM), Fine grained, some silt, traces of clay, very loose, moist, grayish brown (2.5 Y 5/4)	0.0 ppm			
	4	silty SAND (SM), fine grained, very loose, moist, very dark gray (2.5 Y 3/1)				
	5	silty CLAY (CL), soft, medium plasticity, moist black (5Y 2.5/1)	0.0 ppm			
	6	Silty SAND (SM), fine to medium grained, loose, dark gray (2.5 Y 5/1)				▽ wet below 5.8 ft
	7		0.0 ppm			
	8					Collected groundwater sample AF3912 from monitoring point
	9		0.0 ppm			
	10	END OF SAMPLING AT 9.0 FT BGS				Pushed to 15.0 ft BGS to set 3/4" monitoring point screened from 4.4 to 14.3 ft BGS

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APPENDIX V

SOIL AND SEDIMENT LABORATORY RESULTS

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Soil samples were not collected as part of the CAP-Part A investigation, but as part of the closure activities. Analytical data sheets associated with the closure activities were provided in the CAP-Part A Report, dated March 1999.

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Table V-A. Summary of CAP-Part B Soil Analytical Results

Station:	GA UST	AF-01	AF-02	AF-03	AF-04	AF-05
Sample ID:	Soil	AF0111	AF0211	AF0311	AF0411	AF0511
Sample Interval (ft BGS):	Threshold	4.1 - 6.1	4.0 - 6.0	6.0 - 7.0	5.5 - 7.0	2.0 - 4.0
Collection Date:	Levels[1]	04-May-99	05-May-99	05-May-99	05-May-99	05-May-99
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS						
Benzene	0.008	0.00083 J	0.0129 =	0.0022 =	0.0038 J	0.0012 J
Toluene	6	0.0025 U	0.0007 J	0.0019 U	0.001 J	0.0074 J
Ethylbenzene	10	0.0025 U	0.0024 U	0.0019 U	0.0027 R	0.0065 UJ
Xylenes, Total	700	0.0038 U	0.006 U	0.0058 U	0.0081 R	0.933 J
POLYNUCLEAR AROMATIC HYDROCARBONS						
2-Chloronaphthalene	NRC	0.374 U	0.388 U	0.388 U	0.402 U	0.355 U
Acenaphthene	NRC	0.374 U	0.388 U	0.388 U	0.402 U	0.355 U
Acenaphthylene	NRC	0.374 U	0.388 U	0.388 U	0.402 U	0.355 U
Anthracene	NRC	0.374 U	0.388 U	0.388 U	0.402 U	0.355 U
Benzo(a)anthracene	NRC	0.374 U	0.388 U	0.388 U	0.402 U	0.355 U
Benzo(a)pyrene	NRC	0.374 U	0.388 U	0.388 U	0.402 U	0.355 U
Benzo(b)fluoranthene	NRC	0.374 U	0.388 U	0.388 U	0.402 U	0.082 J
Benzo(g,h,i)perylene	NRC	0.374 U	0.388 U	0.388 U	0.402 U	0.355 U
Benzo(k)fluoranthene	NRC	0.374 U	0.388 U	0.388 U	0.402 U	0.355 U
Chrysene	NRC	0.374 U	0.388 U	0.388 U	0.402 U	0.355 U
Dibenzo(a,h)anthracene	NRC	0.374 U	0.388 U	0.388 U	0.402 U	0.355 U
Fluoranthene	NRC	0.374 U	0.388 U	0.388 U	0.402 U	0.355 U
Fluorene	NRC	0.374 U	0.388 U	0.388 U	0.402 U	0.116 J
Indeno(1,2,3-cd)pyrene	NRC	0.374 U	0.388 U	0.388 U	0.402 U	0.355 U
Naphthalene	NRC	0.374 U	0.388 U	0.388 U	0.402 U	0.408 =
Phenanthrene	NRC	0.374 U	0.388 U	0.388 U	0.402 U	0.045 J
Pyrene	NRC	0.374 U	0.388 U	0.388 U	0.402 U	0.355 U
OTHER ANALYTES						
Total Organic Carbon	NRC	1710 =				
TPH-Diesel Range Organics	NRC	0.92 UJ	6.3 =	0.49 U	2.9 =	1030 =
TPH-Gasoline Range Organics	NRC	0.219 =	1.32 =	0.735 =	0.938 =	1130 =

NOTE:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0613 (duplicate), AF0815 (equipment rinsate), and AF1113 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

[1] Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table A, Column 2)

NRC No regulatory criteria

Laboratory Qualifiers

U Indicates that the compound was not detected above the reported sample quantitation limit.

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

J Indicates that the value for the compound was an estimated value.

= Indicates that the compound was detected at the concentration reported.

Table V-A. Summary of CAP-Part B Soil Analytical Results (continued)

Station:	GA UST	AF-06	AF-07	AF-08	AF-09	AF-10
Sample ID:	Soil	AF0611	AF0711	AF0811	AF0911	AF1011
Sample Interval (ft BGS):	Threshold	2.0 - 4.0	2.0 - 4.0	2.0 - 4.0	2.0 - 4.0	2.0 - 4.0
Collection Date:	Levels[1]	05-May-99	04-May-99	04-May-99	04-May-99	04-May-99
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS						
Benzene	0.008	0.0013 J	0.069 =	0.00072 J	0.0859 J	0.0023 U
Toluene	6	0.0031 U	0.0006 J	0.0026 U	0.22 U	0.0023 U
Ethylbenzene	10	0.0031 U	0.0539 =	0.0026 U	2.13 =	0.0023 U
Xylenes, Total	700	0.0079 U	0.0526 =	0.0039 U	0.33 U	0.0034 U
POLYNUCLEAR AROMATIC HYDROCARBONS						
2-Chloronaphthalene	NRC	0.362 U	1.45 U	0.355 U	1.46 U	1.53 U
Acenaphthene	NRC	0.362 U	1.45 U	0.355 U	1.46 U	1.53 U
Acenaphthylene	NRC	0.362 U	1.45 U	0.355 U	1.46 U	1.53 U
Anthracene	NRC	0.362 U	1.45 U	0.355 U	1.1 J	1.53 U
Benzo(a)anthracene	NRC	0.362 U	1.45 U	0.355 U	1.46 U	0.278 J
Benzo(a)pyrene	NRC	0.362 U	1.45 U	0.355 U	1.46 U	0.242 J
Benzo(b)fluoranthene	NRC	0.362 U	1.45 U	0.355 U	0.0833 J	0.264 J
Benzo(g,h,i)perylene	NRC	0.362 U	1.45 U	0.355 U	1.46 U	0.157 J
Benzo(k)fluoranthene	NRC	0.362 U	1.45 U	0.355 U	0.0761 J	0.274 J
Chrysene	NRC	0.362 U	1.45 U	0.355 U	0.312 J	0.292 J
Dibenzo(a,h)anthracene	NRC	0.362 U	1.45 U	0.355 U	1.46 U	1.53 U
Fluoranthene	NRC	0.362 U	1.45 U	0.355 U	1.46 U	0.467 J
Fluorene	NRC	0.362 U	1.45 U	0.355 U	1.46 U	1.53 U
Indeno(1,2,3-cd)pyrene	NRC	0.362 U	1.45 U	0.355 U	1.46 U	0.138 J
Naphthalene	NRC	0.362 U	0.489 J	0.355 U	17.1 =	1.53 U
Phenanthrene	NRC	0.362 U	1.45 U	0.355 U	1.46 U	1.53 U
Pyrene	NRC	0.362 U	1.45 U	0.355 U	2.29 =	0.436 J
OTHER ANALYTES						
Total Organic Carbon	NRC					
TPH-Diesel Range Organics	NRC	1.6 =	1510 J	0.24 UJ	13100 J	1.8 J
TPH-Gasoline Range Organics	NRC	1.1 =	4030 =	0.223 =	1270 =	0.281 =

NOTE:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0613 (duplicate), AF0815 (equipment rinsate), and AF1113 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

[1] Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table A, Column 2)

NRC No regulatory criteria

Laboratory Qualifiers

U Indicates that the compound was not detected above the reported sample quantitation limit.

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

J Indicates that the value for the compound was an estimated value.

= Indicates that the compound was detected at the concentration reported.

Table V-A. Summary of CAP-Part B Soil Analytical Results (continued)

Station:	GA UST	AF-11	AF-12	AF-13	AF-14	AF-15
Sample ID:	Soil	AF1111	AF1211	AF1311	AF1411	AF1511
Sample Interval (ft BGS):	Threshold	4.0 - 5.5	2.0 - 4.0	2.0 - 4.0	4.0 - 4.8	4.0 - 5.1
Collection Date:	Levels[1]	05-May-99	04-May-99	07-May-99	07-May-99	07-May-99
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS						
Benzene	0.008	0.0032 U	0.0012 J	0.002 U	0.002 U	0.0019 U
Toluene	6	0.002 J	0.0025 U	0.0013 J	0.0007 J	0.0019 U
Ethylbenzene	10	0.0035 U	0.0274 =	0.0025 =	0.0049 =	0.0019 U
Xylenes, Total	700	0.0085 U	0.0018 J	0.0014 J	0.003 U	0.0048 U
POLYNUCLEAR AROMATIC HYDROCARBONS						
2-Chloronaphthalene	NRC	0.392 U	1.45 U	0.379 U	1.5 U	0.374 U
Acenaphthene	NRC	0.392 U	1.45 U	0.379 U	1.5 U	0.374 U
Acenaphthylene	NRC	0.392 U	1.45 U	0.379 U	1.5 U	0.374 U
Anthracene	NRC	0.392 U	17.6 J	0.379 U	1.5 U	0.374 U
Benzo(a)anthracene	NRC	0.392 U	0.164 J	0.379 U	1.5 U	0.374 U
Benzo(a)pyrene	NRC	0.392 U	0.113 J	0.0382 J	1.5 U	0.374 U
Benzo(b)fluoranthene	NRC	0.392 U	0.0729 J	0.379 U	1.5 U	0.374 U
Benzo(g,h,i)perylene	NRC	0.392 U	1.45 U	0.379 U	1.5 U	0.374 U
Benzo(k)fluoranthene	NRC	0.392 U	1.45 U	0.379 U	1.5 U	0.374 U
Chrysene	NRC	0.392 U	0.257 J	0.379 U	1.5 U	0.374 U
Dibenzo(a,h)anthracene	NRC	0.392 U	1.45 U	0.379 U	1.5 U	0.374 U
Fluoranthene	NRC	0.392 U	0.385 J	0.379 U	1.5 U	0.374 U
Fluorene	NRC	0.136 J	1.45 U	0.379 U	1.5 U	0.374 U
Indeno(1,2,3-cd)pyrene	NRC	0.392 U	1.45 U	0.379 U	1.5 U	0.374 U
Naphthalene	NRC	0.449 =	9.6 =	0.379 U	1.5 U	0.374 U
Phenanthrene	NRC	0.052 J	1.45 U	0.379 U	1.5 U	0.374 U
Pyrene	NRC	0.392 U	1.82 =	0.379 U	1.5 U	0.374 U
OTHER ANALYTES						
Total Organic Carbon	NRC					
TPH-Diesel Range Organics	NRC	0.51 U	6420 J	17.8 J	14.4 =	2.8 =
TPH-Gasoline Range Organics	NRC	0.637 =	1320 =	1.05 =	0.112 U	0.111 U

NOTE:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0613 (duplicate), AF0815 (equipment rinsate), and AF1113 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

[1] Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table A, Column 2)

NRC No regulatory criteria

Laboratory Qualifiers

U Indicates that the compound was not detected above the reported sample quantitation limit.

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

J Indicates that the value for the compound was an estimated value.

= Indicates that the compound was detected at the concentration reported.

Table V-A. Summary of CAP-Part B Soil Analytical Results (continued)

Station:	GA UST	AF-16	AF-17	AF-18	AF-19	AF-20	AF-23
Sample ID:	Soil	AF1611	AF1711	AF1811	AF1911	AF2011	AF2311
Sample Interval (ft BGS):	Threshold	4.0 - 5.4	4.0 - 6.0	2,0 - 4.0	2,0 - 4.0	6.0 - 7.0	4.0 - 5.0
Collection Date:	Levels[1]	07-May-99	08-May-99	08-May-99	08-May-99	08-May-99	08-May-99
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.008	0.0021 U	0.0036 =	0.0024 U	0.0022 U	0.0065 =	0.0023 U
Toluene	6	0.0021 U	0.0021 U	0.0024 U	0.0022 U	0.0033 =	0.0023 U
Ethylbenzene	10	0.0021 U	0.0021 U	0.0024 U	0.0022 U	0.021 =	0.0023 U
Xylenes, Total	700	0.0052 U	0.0054 U	0.006 U	0.0055 U	0.0056 U	0.0034 U
POLYNUCLEAR AROMATIC HYDROCARBONS							
2-Chloronaphthalene	NRC	0.397 U	0.417 U	0.402 U	0.412 U	0.406 U	3.66 U
Acenaphthene	NRC	0.397 U	0.417 U	0.402 U	0.412 U	0.406 U	3.66 U
Acenaphthylene	NRC	0.397 U	0.417 U	0.402 U	0.412 U	0.406 U	3.66 U
Anthracene	NRC	0.397 U	0.417 U	0.402 U	0.412 U	0.406 U	3.66 U
Benzo(a)anthracene	NRC	0.397 U	0.417 U	0.402 U	0.112 J	0.406 U	3.66 U
Benzo(a)pyrene	NRC	0.397 U	0.417 U	0.402 U	0.0842 J	0.406 U	3.66 U
Benzo(b)fluoranthene	NRC	0.397 U	0.417 U	0.402 U	0.0891 J	0.406 U	3.66 U
Benzo(g,h,i)perylene	NRC	0.397 U	0.417 U	0.402 U	0.0414 J	0.406 U	3.66 U
Benzo(k)fluoranthene	NRC	0.397 U	0.417 U	0.402 U	0.0826 J	0.406 U	3.66 U
Chrysene	NRC	0.397 U	0.417 U	0.402 U	0.118 J	0.406 U	3.66 U
Dibenzo(a,h)anthracene	NRC	0.397 U	0.417 U	0.402 U	0.412 U	0.406 U	3.66 U
Fluoranthene	NRC	0.397 U	0.417 U	0.402 U	0.18 J	0.406 U	3.66 U
Fluorene	NRC	0.397 U	0.417 U	0.402 U	0.412 U	0.406 U	3.66 U
Indeno(1,2,3-cd)pyrene	NRC	0.397 U	0.417 U	0.402 U	0.153 J	0.406 U	3.66 U
Naphthalene	NRC	0.397 U	0.417 U	0.402 U	0.412 U	0.406 U	3.66 U
Phenanthrene	NRC	0.397 U	0.417 U	0.402 U	0.412 U	0.406 U	3.66 U
Pyrene	NRC	0.397 U	0.417 U	0.402 U	0.412 U	0.406 U	3.66 U
OTHER ANALYTES							
Total Organic Carbon	NRC						
TPH-Diesel Range Organics	NRC	0.65 U	0.43 U	0.84 =	0.47 U	2 =	5.6 =
TPH-Gasoline Range Organics	NRC	0.118 U	0.123 U	5.14 =	0.274 =	0.186 =	0.132 =

NOTE:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0613 (duplicate), AF0815 (equipment rinsate), and AF1113 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

[1] Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table A, Column 2)

NRC No regulatory criteria

Laboratory Qualifiers

U Indicates that the compound was not detected above the reported sample quantitation limit.

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

J Indicates that the value for the compound was an estimated value.

= Indicates that the compound was detected at the concentration reported.

Table V-A. Summary of CAP-Part B Soil Analytical Results (continued)

Station:	GA UST	AF-24	AF-25	AF-26	AF-27	AF-28	AF-29
Sample ID:	Soil	AF2411	AF2511	AF2611	AF2711	AF2811	AF2911
Sample Interval (ft BGS):	Threshold	2.0 - 3.0	0.0 - 0.6	6.0 - 7.4	2.0 - 4.0	4.0 - 4.9	0.0 - 2.4
Collection Date:	Levels[1]	08-May-99	11-May-99	11-May-99	11-May-99	11-May-99	11-May-99
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.008	0.0021 U	0.0027 U	0.0078 =	0.0021 U	0.002 U	0.0024 U
Toluene	6	0.00068 J	0.0015 J	0.0024 U	0.0021 U	0.002 U	0.0024 U
Ethylbenzene	10	0.0021 U	0.0027 U	0.0024 U	0.0021 U	0.002 U	0.0024 U
Xylenes, Total	700	0.0032 U	0.0068 U	0.006 U	0.0051 U	0.0051 U	0.006 U
POLYNUCLEAR AROMATIC HYDROCARBONS							
2-Chloronaphthalene	NRC	1.46 U	0.42 U	0.443 U	0.41 U	0.395 U	1.47 U
Acenaphthene	NRC	1.46 U	0.42 U	0.443 U	0.41 U	0.395 U	1.47 U
Acenaphthylene	NRC	1.46 U	0.42 U	0.443 U	0.41 U	0.395 U	1.47 U
Anthracene	NRC	1.46 U	0.42 U	0.443 U	0.41 U	0.395 U	1.47 U
Benzo(a)anthracene	NRC	0.156 J	0.42 U	0.443 U	0.41 U	0.395 U	1.47 U
Benzo(a)pyrene	NRC	0.159 J	0.42 U	0.443 U	0.41 U	0.395 U	1.47 U
Benzo(b)fluoranthene	NRC	0.137 J	0.42 U	0.443 U	0.41 U	0.395 U	1.47 U
Benzo(g,h,i)perylene	NRC	0.129 J	0.42 U	0.443 U	0.41 U	0.395 U	1.47 U
Benzo(k)fluoranthene	NRC	0.19 J	0.42 U	0.443 U	0.41 U	0.395 U	1.47 U
Chrysene	NRC	0.184 J	0.42 U	0.443 U	0.41 U	0.395 U	1.47 U
Dibenzo(a,h)anthracene	NRC	1.46 U	0.42 U	0.443 U	0.41 U	0.395 U	1.47 U
Fluoranthene	NRC	0.115 J	0.42 U	0.443 U	0.41 U	0.395 U	1.47 U
Fluorene	NRC	1.46 U	0.42 U	0.443 U	0.41 U	0.395 U	1.47 U
Indeno(1,2,3-cd)pyrene	NRC	0.498 J	0.42 U	0.443 U	0.41 U	0.395 U	1.47 U
Naphthalene	NRC	1.46 U	0.42 U	0.443 U	0.41 U	0.395 U	1.47 U
Phenanthrene	NRC	1.46 U	0.42 U	0.443 U	0.41 U	0.395 U	1.47 U
Pyrene	NRC	1.46 U	0.42 U	0.443 U	0.41 U	0.395 U	1.47 U
OTHER ANALYTES							
Total Organic Carbon	NRC						
TPH-Diesel Range Organics	NRC	21.5 =	3.4 =	0.47 U	0.36 U	2 =	2.5 =
TPH-Gasoline Range Organics	NRC	0.109 U	0.128 U	0.134 U	0.123 U	0.12 U	0.216 J

NOTE:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0613 (duplicate), AF0815 (equipment rinsate), and AF1113 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

[1] Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table A, Column 2)

NRC No regulatory criteria

Laboratory Qualifiers

U Indicates that the compound was not detected above the reported sample quantitation limit.

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

J Indicates that the value for the compound was an estimated value.

= Indicates that the compound was detected at the concentration reported.

Table V-B. Summary of CAP-Part B Sediment Analytical Results

Station: / Sample ID: / Collection Date: / Units:	GUST Soil Threshold Levels[1] (mg/kg)	AF-S1 AF0110 11-May-99 (mg/kg)	AF-S2 AF0210 11-May-99 (mg/kg)	AF-S3 AF0310 12-May-99 (mg/kg)
VOLATILE ORGANIC COMPOUNDS				
Benzene	0.008	0.003 U	0.0026 U	0.00066 J
Toluene	6	0.0024 J	0.0026 U	0.0024 U
Ethylbenzene	10	0.003 U	0.0026 U	0.0024 U
Xylenes, Total	700	0.0076 U	0.0065 U	0.0058 U
POLYNUCLEAR AROMATIC HYDROCARBONS				
2-Chloronaphthalene	NRC	2.08 U	1.85 U	1.72 U
Acenaphthene	NRC	2.08 U	1.85 U	1.72 U
Acenaphthylene	NRC	2.08 U	1.85 U	1.72 U
Anthracene	NRC	2.08 U	1.85 U	1.72 U
Benzo(a)anthracene	NRC	2.08 U	1.85 U	1.72 U
Benzo(a)pyrene	NRC	2.08 U	1.85 U	1.72 U
Benzo(b)fluoranthene	NRC	2.08 U	1.85 U	1.72 U
Benzo(g,h,i)perylene	NRC	2.08 U	1.85 U	1.72 U
Benzo(k)fluoranthene	NRC	2.08 U	1.85 U	1.72 U
Chrysene	NRC	2.08 U	1.85 U	1.72 U
Dibenzo(a,h)anthracene	NRC	2.08 U	1.85 U	1.72 U
Fluoranthene	NRC	2.08 U	1.85 U	1.72 U
Fluorene	NRC	2.08 U	1.85 U	1.72 U
Indeno(1,2,3-cd)pyrene	NRC	2.08 U	1.85 U	1.72 U
Naphthalene	NRC	2.08 U	1.85 U	1.72 U
Phenanthrene	NRC	2.08 U	1.85 U	1.72 U
Pyrene	NRC	2.08 U	1.85 U	1.72 U
OTHER ANALYTES				
TPH-Diesel Range Organics	NRC	1.8 =	9.8 =	13 =
TPH-Gasoline Range Organics	NRC	0.159 U	0.141 U	0.206 J

NOTE:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

[1] Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table A, Column 2)

NRC No regulatory criteria

Laboratory Qualifiers

U Indicates that the compound was not detected above the reported sample quantitation limit.

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

J Indicates that the value for the compound was an estimated value.

= Indicates that the compound was detected at the concentration reported.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0111

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-05

Sample wt/vol: 4.5 (g/mL) G Lab File ID: 1I318

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: not dec. 11 Date Analyzed: 05/12/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	benzene	0.83	J
108-88-3	toluene	2.5	U
100-41-4	ethylbenzene	2.5	U
1330-20-7	xylenes (total)	3.8	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0111

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-05

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 5U108

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: 11 decanted: (Y/N) N Date Extracted: 05/07/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/17/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	374	U
91-58-7	2-chloronaphthalene	374	U
208-96-8	acenaphthylene	374	U
83-32-9	acenaphthene	374	U
86-73-7	fluorene	374	U
85-01-8	phenanthrene	374	U
120-12-7	anthracene	374	U
206-44-0	fluoranthene	374	U
129-00-0	pyrene	374	U
56-55-3	benzo(a)anthracene	374	U
218-01-9	chrysene	374	U
205-99-2	benzo(b)fluoranthene	374	U
207-08-9	benzo(k)fluoranthene	374	U
50-32-8	benzo(a)pyrene	374	U
193-39-5	indeno(1,2,3-cd)pyrene	374	U
53-70-3	dibenz(a,h)anthracene	374	U
191-24-2	benzo(g,h,i)perylene	374	U

U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF0111RE

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-05

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 014F1401

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: 11 decanted: (Y/N) N Date Extracted:05/21/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/22/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

USP

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	0.92	B	US A01, F01, F06

FORM I SV

243

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0111

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-05

Sample wt/vol: 5.1 (g/mL) G Lab File ID: 1H509

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: not dec. 11 Date Analyzed: 05/07/99

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GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	219		

FORM I VOA

DATA VALIDATION
COPY

Client: Science Applications International Corp.
P.O. Box 2502
800 Oak Ridge Turnpike
Oak Ridge, Tennessee 37831
Contact: Ms. Leslie Barbour
Project Description: CAP-Part B's for UST Sites 25 and 26

cc: SAIC01099

Report Date: May 20, 1999

Sample ID : AF0111
Lab ID : 9905124-05
Matrix : Soil
Date Collected : 05/04/99
Date Received : 05/05/99
Priority : Routine
Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
General Chemistry											
Evaporative Loss @ 105 C		11.0	1.00	1.00	wt%	1.0	GJ	05/06/99	1550	148511	1
TOTAL ORGANIC CARBON (TOC)		1710 =	43.1	100	mg/kg	1.0	LS	05/20/99	1351	149522	2

M = Method	Method-Description
M 1	EPA 3550
M 2	SW846 9060 Modified

Notes:
The qualifiers in this report are defined as follows:
ND indicates that the analyte was not detected at a concentration greater than the detection limit.
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).
U indicates that the analyte was not detected at a concentration greater than the detection limit.
* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

Data reported in mass/mass units is reported as 'dry weight'.

This data report has been prepared and reviewed
in accordance with General Engineering Laboratories
standard operating procedures. Please direct
any questions to your Project Manager, Valerie Davis at (843) 769-7391.

Reviewed By

323

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0211

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-03

Sample wt/vol: 4.9 (g/mL) G Lab File ID: 2J217

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. 14 Date Analyzed: 05/18/99

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	benzene	12.9		=
108-88-3	toluene	0.70	J	J
100-41-4	ethylbenzene	~~2.1~~ 2.4	JB	U F01, F06
1330-20-7	xylenes (total)	6.0	B	U F01, F07

FORM I VOA OLM03.0

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0211

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-03

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 8T214

Level: (low/med) LOW DATA VALIDATION COPY Date Received: 05/06/99

% Moisture: 14 decanted: (Y/N) N Date Extracted: 05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/12/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	388	U
91-58-7	2-chloronaphthalene	388	U
208-96-8	acenaphthylene	388	U
83-32-9	acenaphthene	388	U
86-73-7	fluorene	388	U
85-01-8	phenanthrene	388	U
120-12-7	anthracene	388	U
206-44-0	fluoranthene	388	U
129-00-0	pyrene	388	U
56-55-3	benzo(a)anthracene	388	U
218-01-9	chrysene	388	U
205-99-2	benzo(b)fluoranthene	388	U
207-08-9	benzo(k)fluoranthene	388	U
50-32-8	benzo(a)pyrene	388	U
193-39-5	indeno(1,2,3-cd)pyrene	388	U
53-70-3	dibenz(a,h)anthracene	388	U
191-24-2	benzo(g,h,i)perylene	388	U

FORM 1 Science Applications06-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF0211

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-03

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 022F2201

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: 14 decanted: (Y/N) N Date Extracted:05/14/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/20/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	6.3	B	= F03

FORM I SV

168

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0211

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-03

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1I206

Level: (low/med) LOW DATA VALIDATION COPY Date Received: 05/06/99

% Moisture: not dec. 14 Date Analyzed: 05/11/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	1320		

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0311

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-04

Sample wt/vol: 6.2 (g/mL) G Lab File ID: 2J218

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. 14 Date Analyzed: 05/18/99

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	benzene	2.2	U	= U
108-88-3	toluene	1.9	U	U FD1, FD6
100-41-4	ethylbenzene	1.9 ~~1.6~~	JB	U FD1, FD6
1330-20-7	xylenes (total)	5.8 4.7	JB	

FORM I VOA OLM03.0

32

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0311

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 8T215

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: 14 decanted: (Y/N) N Date Extracted:05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/12/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	388	U
91-58-7	2-chloronaphthalene	388	U
208-96-8	acenaphthylene	388	U
83-32-9	acenaphthene	388	U
86-73-7	fluorene	388	U
85-01-8	phenanthrene	388	U
120-12-7	anthracene	388	U
206-44-0	fluoranthene	388	U
129-00-0	pyrene	388	U
56-55-3	benzo(a)anthracene	388	U
218-01-9	chrysene	388	U
205-99-2	benzo(b)fluoranthene	388	U
207-08-9	benzo(k)fluoranthene	388	U
50-32-8	benzo(a)pyrene	388	U
193-39-5	indeno(1,2,3-cd)pyrene	388	U
53-70-3	dibenz(a,h)anthracene	388	U
191-24-2	benzo(g,h,i)perylene	388	U

U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF0311

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-04

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 025F2501

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: 14 decanted: (Y/N) N Date Extracted:05/14/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/20/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	0.49	JB	U F01, F06

FORM I SV

169

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0311

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-04

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1I207

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. 14 Date Analyzed: 05/11/99

DATA VALIDATION COPY

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	----------Gasoline Range Organics	735	

FORM I VOA

212

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0411

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA . SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-05

Sample wt/vol: 4.4 (g/mL) G Lab File ID: 2J219

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. 17 Date Analyzed: 05/18/99

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	benzene	3.8		J K02
108-88-3	toluene	1.0	J	RJ
100-41-4	ethylbenzene	2.7	U	R
1330-20-7	xylenes (total)	8.1	B	R ↓ F01,F07

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0411

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-05

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 8T216

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: 17 decanted: (Y/N) N Date Extracted: 05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/12/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	402	U
91-58-7	2-chloronaphthalene	402	U
208-96-8	acenaphthylene	402	U
83-32-9	acenaphthene	402	U
86-73-7	fluorene	402	U
85-01-8	phenanthrene	402	U
120-12-7	anthracene	402	U
206-44-0	fluoranthene	402	U
129-00-0	pyrene	402	U
56-55-3	benzo(a)anthracene	402	U
218-01-9	chrysene	402	U
205-99-2	benzo(b)fluoranthene	402	U
207-08-9	benzo(k)fluoranthene	402	U
50-32-8	benzo(a)pyrene	402	U
193-39-5	indeno(1,2,3-cd)pyrene	402	U
53-70-3	dibenz(a,h)anthracene	402	U
191-24-2	benzo(g,h,i)perylene	402	U

U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF0411

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-05

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 026F2601

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: 17 decanted: (Y/N) N Date Extracted:05/14/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/20/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	2.9	B	=F08

FORM I SV

170

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0411

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-05

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1I208

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. 17 Date Analyzed: 05/11/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

DATA VALIDATION COPY

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
----------	Gasoline Range Organics	938		U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0511

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-06

Sample wt/vol: 3.7 (g/mL) G Lab File ID: 2J220

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. 6 Date Analyzed: 05/18/99

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	benzene	1.2	J	J G02
108-88-3	toluene	7.4		J
100-41-4	ethylbenzene	6.5	B	UJ ↓, F01, F07
1330-20-7	xylenes (total)	~~317~~ 933	BEDJB	J F12

MMP 6/7/99

UJ

FORM I VOA OLM03.0

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0511

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-06

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 8T217

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: 6 decanted: (Y/N) N Date Extracted: 05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/12/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	408	
91-58-7	2-chloronaphthalene	355	U
208-96-8	acenaphthylene	355	U
83-32-9	acenaphthene	355	U
86-73-7	fluorene	116	J
85-01-8	phenanthrene	45.0	J
120-12-7	anthracene	355	U
206-44-0	fluoranthene	355	U
129-00-0	pyrene	355	U
56-55-3	benzo(a)anthracene	355	U
218-01-9	chrysene	355	U
205-99-2	benzo(b)fluoranthene	82.0	J
207-08-9	benzo(k)fluoranthene	355	U
50-32-8	benzo(a)pyrene	355	U
193-39-5	indeno(1,2,3-cd)pyrene	355	U
53-70-3	dibenz(a,h)anthracene	355	U
191-24-2	benzo(g,h,i)perylene	355	U

FORM I SV-1 OLM03.0

105

FORM 1 Science Applications06-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF0511

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-06

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 072F7201

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: 6 decanted: (Y/N) N Date Extracted:05/14/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/21/99

Injection Volume: 1.0(uL) Dilution Factor: 200.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	1030	B	= F08

FORM I SV

171

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0511

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-06

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1I2015

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. 6 Date Analyzed: 05/11/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1000.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	1130000		=

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0611

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-02

Sample wt/vol: 3.5 (g/mL) G Lab File ID: 2J216

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. 8 Date Analyzed: 05/18/99

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q	
71-43-2	benzene		1.3	J	J
108-88-3	toluene		3.1	U	U
100-41-4	ethylbenzene	3.1	~~2.6~~	JB	U F01, F06
1330-20-7	xylenes (total)		7.9	B	U F01, F07

FORM I VOA OLM03.0

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0611

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-02

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 8T213

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: 8 decanted: (Y/N) N Date Extracted: 05/10/99

Concentrated Extract Volume: 1.00 (mL) Date Analyzed: 05/12/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	362	U
91-58-7	2-chloronaphthalene	362	U
208-96-8	acenaphthylene	362	U
83-32-9	acenaphthene	362	U
86-73-7	fluorene	362	U
85-01-8	phenanthrene	362	U
120-12-7	anthracene	362	U
206-44-0	fluoranthene	362	U
129-00-0	pyrene	362	U
56-55-3	benzo(a)anthracene	362	U
218-01-9	chrysene	362	U
205-99-2	benzo(b)fluoranthene	362	U
207-08-9	benzo(k)fluoranthene	362	U
50-32-8	benzo(a)pyrene	362	U
193-39-5	indeno(1,2,3-cd)pyrene	362	U
53-70-3	dibenz(a,h)anthracene	362	U
191-24-2	benzo(g,h,i)perylene	362	U

FORM 1 Science Applications06-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF0611

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-02

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 021F2101

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: 8 decanted: (Y/N) N Date Extracted:05/14/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/20/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics_____	1.6	B	= F03

FORM I SV

167

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0611

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-02

Sample wt/vol: 5.1 (g/mL) G Lab File ID: 1I205

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. 8 Date Analyzed: 05/11/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	----------Gasoline Range Organics	1100	

FORM I VOA

DUPLICATE

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0613

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-01

Sample wt/vol: 3.5 (g/mL) G Lab File ID: 2J215

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. 9 Date Analyzed: 05/18/99

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q	
71-43-2	benzene		3.1	U	U
108-88-3	toluene		3.1	U	U
100-41-4	ethylbenzene	3.1	~~2.7~~	JB	U F01, F06
1330-20-7	xylenes (total)		8.2	B	U F01, F07

FORM I VOA OLM03.0

42

DUPLICATE

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0613

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-01

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1I204

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. 9 Date Analyzed: 05/11/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	582		=

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0711

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-02

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1I510

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: not dec. 8 Date Analyzed: 05/14/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	benzene	69.0	
108-88-3	toluene	0.60	J
100-41-4	ethylbenzene	53.9	
1330-20-7	xylenes (total)	52.6	

FORM I VOA OLM03.0

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0711

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-02

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4T215

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: 8 decanted: (Y/N) N Date Extracted: 05/07/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/11/99

Injection Volume: 1.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	489	J
91-58-7	2-chloronaphthalene	1450	U
208-96-8	acenaphthylene	1450	U
83-32-9	acenaphthene	1450	U
86-73-7	fluorene	1450	U
85-01-8	phenanthrene	1450	U
120-12-7	anthracene	1450	U
206-44-0	fluoranthene	1450	U
129-00-0	pyrene	1450	U
56-55-3	benzo(a)anthracene	1450	U
218-01-9	chrysene	1450	U
205-99-2	benzo(b)fluoranthene	1450	U
207-08-9	benzo(k)fluoranthene	1450	U
50-32-8	benzo(a)pyrene	1450	U
193-39-5	indeno(1,2,3-cd)pyrene	1450	U
53-70-3	dibenz(a,h)anthracene	1450	U
191-24-2	benzo(g,h,i)perylene	1450	U

J
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FORM 1 Science Applications05-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF0711RE

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-02

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 010F1001

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: 8 decanted: (Y/N) N Date Extracted:05/21/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/22/99

Injection Volume: 1.0(uL) Dilution Factor: 500.0

GPC Cleanup: (Y/N) N pH: 7.0

USQ

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
	Diesel Range Organics	1510	B

J A01, F08

FORM I SV

244

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0711

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-02

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1I1010

Level: (low/med) LOW DATA VALIDATION COPY Date Received: 05/05/99

% Moisture: not dec. 8 Date Analyzed: 05/10/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 5000.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	----------Gasoline Range Organics_____	4030000	_____

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0811

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-01

Sample wt/vol: 4.1 (g/mL) G Lab File ID: 1I316

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: not dec. 6 Date Analyzed: 05/12/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	benzene	0.72	J	J
108-88-3	toluene	2.6	U	U
100-41-4	ethylbenzene	2.6	U	
1330-20-7	xylenes (total)	3.9	U	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0811

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4T214

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: 6 decanted: (Y/N) N Date Extracted:05/07/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/11/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	355	U
91-58-7	2-chloronaphthalene	355	U
208-96-8	acenaphthylene	355	U
83-32-9	acenaphthene	355	U
86-73-7	fluorene	355	U
85-01-8	phenanthrene	355	U
120-12-7	anthracene	355	U
206-44-0	fluoranthene	355	U
129-00-0	pyrene	355	U
56-55-3	benzo(a)anthracene	355	U
218-01-9	chrysene	355	U
205-99-2	benzo(b)fluoranthene	355	U
207-08-9	benzo(k)fluoranthene	355	U
50-32-8	benzo(a)pyrene	355	U
193-39-5	indeno(1,2,3-cd)pyrene	355	U
53-70-3	dibenz(a,h)anthracene	355	U
191-24-2	benzo(g,h,i)perylene	355	U

U

FORM 1 Science Applications05-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF0811RE

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-01

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 009F0901

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: 6 decanted: (Y/N) N Date Extracted:05/21/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/22/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

USD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics_____	0.24	JB	UJ A01, F01, F06

FORM I SV

245

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0811

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-01

Sample wt/vol: 5.1 (g/mL) G Lab File ID: 1H507

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: not dec. 6 Date Analyzed: 05/07/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	----------Gasoline Range Organics_____	223	_____

FORM I VOA

RINSATE

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0815

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252601W

Matrix: (soil/water) WATER Lab Sample ID: 9905122-16

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5H410

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: not dec. _____ Date Analyzed: 05/06/99

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
71-43-2	benzene	2.0	U
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	3.0	U

V

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

RINSATE
EPA SAMPLE NO.

AF0815

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252603W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905125-03

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4S523

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/07/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/08/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

U

Client:	Science Applications International Corp. P.O. Box 2502 800 Oak Ridge Turnpike Oak Ridge, Tennessee 37831
Contact:	Ms. Leslie Barbour
Project Description:	CAP-Part B's for UST Sites 25 and 26

RINSATE

cc: SAIC01099 Report Date: May 20, 1999

Sample ID	: AF0815
Lab ID	: 9905125-03
Matrix	: Water
Date Collected	: 05/04/99
Date Received	: 05/05/99
Priority	: Routine
Collector	: Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
General Chemistry											
Total Rec. Petro. Hydrocarbons	U	0.155 U	0.277	1.00	mg/l	1.0	AAT	05/19/99	1200	149515	1

M = Method	Method-Description
M 1	EPA 418.1

Notes:
The qualifiers in this report are defined as follows:
ND indicates that the analyte was not detected at a concentration greater than the detection limit.
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).
U indicates that the analyte was not detected at a concentration greater than the detection limit.
* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis at (843) 769-7391.

Reviewed By

DATA VALIDATION COPY

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0911

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-03

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1J109

Level: (low/med) MED Date Received: 05/05/99

% Moisture: not dec. 9 Date Analyzed: 05/17/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10(ml) Soil Aliquot Volume: 100(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	benzene	85.9	J	J U = U
108-88-3	toluene	220	U	
100-41-4	ethylbenzene	2130		
1330-20-7	xylenes (total)	330	U	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0911

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-03

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4T216

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: 9 decanted: (Y/N) N Date Extracted: 05/07/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/11/99

Injection Volume: 1.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) N pH: 7.0

USE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	17100 ~~18100~~	~~E~~ D
91-58-7	2-chloronaphthalene	1460	U
208-96-8	acenaphthylene	1460	U
83-32-9	acenaphthene	1460	U
86-73-7	fluorene	1460	U
85-01-8	phenanthrene	1460	U
120-12-7	anthracene	1100	J
206-44-0	fluoranthene	1460	U
129-00-0	pyrene	2290	
56-55-3	benzo(a)anthracene	1460	U
218-01-9	chrysene	312	J
205-99-2	benzo(b)fluoranthene	83.3	J
207-08-9	benzo(k)fluoranthene	76.1	J
50-32-8	benzo(a)pyrene	1460	U
193-39-5	indeno(1,2,3-cd)pyrene	1460	U
53-70-3	dibenz(a,h)anthracene	1460	U
191-24-2	benzo(g,h,i)perylene	1460	U

MMP 6/15/99

U = U J = J U = U

FORM 1 Science Applications05-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF0911RE

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-03

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 011F1101

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: 9 decanted: (Y/N) N Date Extracted:05/21/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/22/99

Injection Volume: 1.0(uL) Dilution Factor: 2000.0

GPC Cleanup: (Y/N) N pH: 7.0

USL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	Diesel Range Organics	13100	B	J A01, F08

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0911

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-03

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1I1011

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: not dec. 9 Date Analyzed: 05/10/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 2000.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	----------Gasoline Range Organics	1270000	

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1011

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-04

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1I317

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: not dec. 13 Date Analyzed: 05/12/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	benzene	2.3	U
108-88-3	toluene	2.3	U
100-41-4	ethylbenzene	2.3	U
1330-20-7	xylenes (total)	3.4	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1011

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4T217

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: 13 decanted: (Y/N) N Date Extracted: 05/07/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/11/99

Injection Volume: 1.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	1530	U
91-58-7	2-chloronaphthalene	1530	U
208-96-8	acenaphthylene	1530	U
83-32-9	acenaphthene	1530	U
86-73-7	fluorene	1530	U
85-01-8	phenanthrene	1530	U
120-12-7	anthracene	1530	U
206-44-0	fluoranthene	467	J
129-00-0	pyrene	436	J
56-55-3	benzo(a)anthracene	278	J
218-01-9	chrysene	292	J
205-99-2	benzo(b)fluoranthene	264	J
207-08-9	benzo(k)fluoranthene	274	J
50-32-8	benzo(a)pyrene	242	J
193-39-5	indeno(1,2,3-cd)pyrene	138	J
53-70-3	dibenz(a,h)anthracene	1530	U
191-24-2	benzo(g,h,i)perylene	157	J

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FORM I SV-1 OLM03.0

FORM 1 Science Applications05-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF1011RE

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-04

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 012F1201

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: 13 decanted: (Y/N) N Date Extracted:05/21/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/22/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

USQ

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics_____	1.8	B	J AD1, F08

FORM I SV

247

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1011

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-04

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1H508

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: not dec. 13 Date Analyzed: 05/07/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	281		11

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1111

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-07

Sample wt/vol: 3.7 (g/mL) G Lab File ID: 2J309

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. 15 Date Analyzed: 05/19/99

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	benzene	3.2	U	U
108-88-3	toluene	2.0	J	J
100-41-4	ethylbenzene	3.5	B	U FD1, FD7
1330-20-7	xylenes (total)	8.5 ~~7.8~~	JB	U FD1, FD6

FORM I VOA OLM03.0

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1111

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-07

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 8T218

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: 15 decanted: (Y/N) N Date Extracted: 05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/12/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	449	
91-58-7	2-chloronaphthalene	392	U
208-96-8	acenaphthylene	392	U
83-32-9	acenaphthene	392	U
86-73-7	fluorene	136	J
85-01-8	phenanthrene	52.0	J
120-12-7	anthracene	392	U
206-44-0	fluoranthene	392	U
129-00-0	pyrene	392	U
56-55-3	benzo(a)anthracene	392	U
218-01-9	chrysene	392	U
205-99-2	benzo(b)fluoranthene	392	U
207-08-9	benzo(k)fluoranthene	392	U
50-32-8	benzo(a)pyrene	392	U
193-39-5	indeno(1,2,3-cd)pyrene	392	U
53-70-3	dibenz(a,h)anthracene	392	U
191-24-2	benzo(g,h,i)perylene	392	U

FORM 1 Science Applications06-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF1111

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-07

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 028F2801

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: 15 decanted: (Y/N) N Date Extracted:05/14/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/20/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	0.51	JB	U F01, F06

FORM I SV

172

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1111

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-07

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1I2014

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. 15 Date Analyzed: 05/11/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	Gasoline Range Organics	637	

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

DUPLICATE

EPA SAMPLE NO.

AF1113

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-08

Sample wt/vol: 2.1 (g/mL) G Lab File ID: 2J222

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. 14 Date Analyzed: 05/18/99

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	benzene	5.6	U	U
108-88-3	toluene	6.0		
100-41-4	ethylbenzene	5.6 5.1	JB	U FD1, FD6
1330-20-7	xylenes (total)	16.8 13.7	JB	U FD1, FD6

FORM I VOA OLM03.0

DUPLICATE

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1113

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-08

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 8T404

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: 14 decanted: (Y/N) N Date Extracted:05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/13/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	388	U
91-58-7	2-chloronaphthalene	388	U
208-96-8	acenaphthylene	388	U
83-32-9	acenaphthene	388	U
86-73-7	fluorene	388	U
85-01-8	phenanthrene	388	U
120-12-7	anthracene	388	U
206-44-0	fluoranthene	388	U
129-00-0	pyrene	388	U
56-55-3	benzo(a)anthracene	388	U
218-01-9	chrysene	388	U
205-99-2	benzo(b)fluoranthene	388	U
207-08-9	benzo(k)fluoranthene	388	U
50-32-8	benzo(a)pyrene	388	U
193-39-5	indeno(1,2,3-cd)pyrene	388	U
53-70-3	dibenz(a,h)anthracene	388	U
191-24-2	benzo(g,h,i)perylene	388	U

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FORM I SV-1 OLM03.0

111

DUPLICATE

FORM 1 Science Applications06-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF1113

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-08

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 029F2901

Level: (low/med) LOW DATA VALIDATION Date Received: 05/06/99

% Moisture: 14 decanted: (Y/N) N Date Extracted:05/14/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/20/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	0.54	JB	U F01, F06

FORM I SV

173

DUPLICATE

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1113

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252606S

Matrix: (soil/water) SOIL Lab Sample ID: 9905210-08

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1I2011

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. 14 Date Analyzed: 05/11/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	116	U	4

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1211

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-06

Sample wt/vol: 4.3 (g/mL) G Lab File ID: 1I609

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: not dec. 8 Date Analyzed: 05/15/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	benzene	1.2	J
108-88-3	toluene	2.5	U
100-41-4	ethylbenzene	27.4	
1330-20-7	xylenes (total)	1.8	J

J=UJ

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1211

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-06

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4T219

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: 8 decanted: (Y/N) N Date Extracted: 05/07/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/12/99

Injection Volume: 1.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) N pH: 7.0

USE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	9600	
91-58-7	2-chloronaphthalene	1450	U
208-96-8	acenaphthylene	1450	U
83-32-9	acenaphthene	1450	U
86-73-7	fluorene	1450	U
85-01-8	phenanthrene	1450	U
120-12-7	anthracene	17600	E
206-44-0	fluoranthene	385	J
129-00-0	pyrene	1820	
56-55-3	benzo(a)anthracene	164	J
218-01-9	chrysene	257	J
205-99-2	benzo(b)fluoranthene	72.9	J
207-08-9	benzo(k)fluoranthene	1450	U
50-32-8	benzo(a)pyrene	113	J
193-39-5	indeno(1,2,3-cd)pyrene	1450	U
53-70-3	dibenz(a,h)anthracene	1450	U
191-24-2	benzo(g,h,i)perylene	1450	U

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FORM 1 Science Applications05-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF1211RE

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-06

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 015F1501

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: 8 decanted: (Y/N) N Date Extracted:05/21/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/22/99

Injection Volume: 1.0(uL) Dilution Factor: 2000.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
	----------Diesel Range Organics	6420	B

USL

JA01, F08

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1211

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252602S

Matrix: (soil/water) SOIL Lab Sample ID: 9905124-06

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1I1014

Level: (low/med) LOW DATA VALIDATION COPY Date Received: 05/05/99

% Moisture: not dec. 8 Date Analyzed: 05/10/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 2000.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	----------Gasoline Range Organics	1320000	

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1311

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-01

Sample wt/vol: 5.5 (g/mL) G Lab File ID: 1J425

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. 12 Date Analyzed: 05/20/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	benzene	2.0	U	5 = U
108-88-3	toluene	1.3	J	
100-41-4	ethylbenzene	2.5		
1330-20-7	xylenes (total)	1.4	J	5 = J

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1311

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 7T444

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: 12 decanted: (Y/N) N Date Extracted: 05/11/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	379	U
91-58-7	2-chloronaphthalene	379	U
208-96-8	acenaphthylene	379	U
83-32-9	acenaphthene	379	U
86-73-7	fluorene	379	U
85-01-8	phenanthrene	379	U
120-12-7	anthracene	379	U
206-44-0	fluoranthene	379	U
129-00-0	pyrene	379	U
56-55-3	benzo(a)anthracene	379	U
218-01-9	chrysene	379	U
205-99-2	benzo(b)fluoranthene	379	U
207-08-9	benzo(k)fluoranthene	379	U
50-32-8	benzo(a)pyrene	38.2	J
193-39-5	indeno(1,2,3-cd)pyrene	379	U
53-70-3	dibenz(a,h)anthracene	379	U
191-24-2	benzo(g,h,i)perylene	379	U

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FORM I SV-1 OLM03.0

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF1311

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-01

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 077F7701

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: 12 decanted: (Y/N) N Date Extracted: 05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/21/99

Injection Volume: 1.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	17.8	B	J F08, H0. H04

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1311

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-01

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1J104

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. 12 Date Analyzed: 05/17/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

DATA VALIDATION COPY

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	1050		=

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1411

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-02

Sample wt/vol: 5.6 (g/mL) G Lab File ID: 1J507

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. 11 Date Analyzed: 05/21/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	benzene	2.0	U
108-88-3	toluene	0.70	J
100-41-4	ethylbenzene	4.9	
1330-20-7	xylenes (total)	3.0	U

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1411

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-02

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 7T445

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: 11 decanted: (Y/N) N Date Extracted: 05/11/99

Concentrated Extract Volume: 1.00 (mL) Date Analyzed: 05/14/99

Injection Volume: 1.0 (uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
91-20-3	naphthalene	1500	U	U
91-58-7	2-chloronaphthalene	1500	U	
208-96-8	acenaphthylene	1500	U	
83-32-9	acenaphthene	1500	U	
86-73-7	fluorene	1500	U	
85-01-8	phenanthrene	1500 ~~77.2~~	JB	U F01, F01
120-12-7	anthracene	1500	U	U
206-44-0	fluoranthene	1500	U	
129-00-0	pyrene	1500	U	
56-55-3	benzo(a)anthracene	1500	U	
218-01-9	chrysene	1500	U	
205-99-2	benzo(b)fluoranthene	1500	U	
207-08-9	benzo(k)fluoranthene	1500	U	
50-32-8	benzo(a)pyrene	1500	U	
193-39-5	indeno(1,2,3-cd)pyrene	1500	U	
53-70-3	dibenz(a,h)anthracene	1500	U	
191-24-2	benzo(g,h,i)perylene	1500	U	

MMP 6/17/99

FORM 1 Science Applications08-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF1411

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-02

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 078F7801

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: 11 decanted: (Y/N) N Date Extracted:05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/21/99

Injection Volume: 1.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	14.4	B	=F08

FORM I SV

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1411

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-02

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1J208

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. 11 Date Analyzed: 05/18/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

DATA VALIDATION COPY

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics_____	112	U	U

FORM I VOA

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1511

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-03

Sample wt/vol: 5.8 (g/mL) G Lab File ID: 1J427

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. 11 Date Analyzed: 05/21/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	benzene	1.9	U	U
108-88-3	toluene	1.9	U	
100-41-4	ethylbenzene	1.9	U	
1330-20-7	xylenes (total)	4.8	U	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1511

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-03

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 7T446

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: 11 decanted: (Y/N) N Date Extracted: 05/11/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	374	U
91-58-7	2-chloronaphthalene	374	U
208-96-8	acenaphthylene	374	U
83-32-9	acenaphthene	374	U
86-73-7	fluorene	374	U
85-01-8	phenanthrene	374	U
120-12-7	anthracene	374	U
206-44-0	fluoranthene	374	U
129-00-0	pyrene	374	U
56-55-3	benzo(a)anthracene	374	U
218-01-9	chrysene	374	U
205-99-2	benzo(b)fluoranthene	374	U
207-08-9	benzo(k)fluoranthene	374	U
50-32-8	benzo(a)pyrene	374	U
193-39-5	indeno(1,2,3-cd)pyrene	374	U
53-70-3	dibenz(a,h)anthracene	374	U
191-24-2	benzo(g,h,i)perylene	374	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF1511

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-03

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 025F2501

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: 11 decanted: (Y/N) N Date Extracted:05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/22/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics_____	2.8	B	= F08

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1511

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-03

Sample wt/vol: 5.1 (g/mL) G Lab File ID: 1J106

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. 11 Date Analyzed: 05/17/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

DATA VALIDATION COPY

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics_____	111	U	U

FORM I VOA

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1611

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-04

Sample wt/vol: 5.7 (g/mL) G Lab File ID: 1J428

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. 16 Date Analyzed: 05/21/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	benzene	2.1	U
108-88-3	toluene	2.1	U
100-41-4	ethylbenzene	2.1	U
1330-20-7	xylenes (total)	5.2	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1611

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 7T447

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: 16 decanted: (Y/N) N Date Extracted: 05/11/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	397	U
91-58-7	2-chloronaphthalene	397	U
208-96-8	acenaphthylene	397	U
83-32-9	acenaphthene	397	U
86-73-7	fluorene	397	U
85-01-8	phenanthrene	397	U
120-12-7	anthracene	397	U
206-44-0	fluoranthene	397	U
129-00-0	pyrene	397	U
56-55-3	benzo(a)anthracene	397	U
218-01-9	chrysene	397	U
205-99-2	benzo(b)fluoranthene	397	U
207-08-9	benzo(k)fluoranthene	397	U
50-32-8	benzo(a)pyrene	397	U
193-39-5	indeno(1,2,3-cd)pyrene	397	U
53-70-3	dibenz(a,h)anthracene	397	U
191-24-2	benzo(g,h,i)perylene	397	U

FORM 1 Science Applications08-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF1611

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-04

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 048F4801

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: 16 decanted: (Y/N) N Date Extracted:05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/21/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	0.65	JB	U F01, F06

FORM I SV

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1611

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-04

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1J107

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. 16 Date Analyzed: 05/17/99

DATA VALIDATION COPY

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	118	U	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1711

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-05

Sample wt/vol: 5.8 (g/mL) G Lab File ID: 1J434

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. 20 Date Analyzed: 05/21/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	benzene	3.6	
108-88-3	toluene	2.1	U
100-41-4	ethylbenzene	2.1	U
1330-20-7	xylenes (total)	5.4	U

FORM I VOA OLM03.0

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1711

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-05

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 7T448

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: 20 decanted: (Y/N) N Date Extracted: 05/11/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	417	U
91-58-7	2-chloronaphthalene	417	U
208-96-8	acenaphthylene	417	U
83-32-9	acenaphthene	417	U
86-73-7	fluorene	417	U
85-01-8	phenanthrene	417	U
120-12-7	anthracene	417	U
206-44-0	fluoranthene	417	U
129-00-0	pyrene	417	U
56-55-3	benzo(a)anthracene	417	U
218-01-9	chrysene	417	U
205-99-2	benzo(b)fluoranthene	417	U
207-08-9	benzo(k)fluoranthene	417	U
50-32-8	benzo(a)pyrene	417	U
193-39-5	indeno(1,2,3-cd)pyrene	417	U
53-70-3	dibenz(a,h)anthracene	417	U
191-24-2	benzo(g,h,i)perylene	417	U

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FORM I Science Applications09-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF1711

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-05

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 049F4901

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: 20 decanted: (Y/N) N Date Extracted:05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/21/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	0.43	JB	U F01, F0L

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1711

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-05

Sample wt/vol: 5.1 (g/mL) G Lab File ID: 1J108

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. 20 Date Analyzed: 05/17/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	123	U	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1811

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-06

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1J435

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. 17 Date Analyzed: 05/21/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	benzene	2.4	U
108-88-3	toluene	2.4	U
100-41-4	ethylbenzene	2.4	U
1330-20-7	xylenes (total)	6.0	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1811

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-06

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 7T449

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: 17 decanted: (Y/N) N Date Extracted:05/11/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	402	U
91-58-7	2-chloronaphthalene	402	U
208-96-8	acenaphthylene	402	U
83-32-9	acenaphthene	402	U
86-73-7	fluorene	402	U
85-01-8	phenanthrene	402	U
120-12-7	anthracene	402	U
206-44-0	fluoranthene	402	U
129-00-0	pyrene	402	U
56-55-3	benzo(a)anthracene	402	U
218-01-9	chrysene	402	U
205-99-2	benzo(b)fluoranthene	402	U
207-08-9	benzo(k)fluoranthene	402	U
50-32-8	benzo(a)pyrene	402	U
193-39-5	indeno(1,2,3-cd)pyrene	402	U
53-70-3	dibenz(a,h)anthracene	402	U
191-24-2	benzo(g,h,i)perylene	402	U

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FORM I SV-1 OLM03.0

117

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF1811

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-06

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 050F5001

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: 17 decanted: (Y/N) N Date Extracted:05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/21/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	0.84	B	= F08

FORM I SV

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1811

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-06

Sample wt/vol: 1.0 (g/mL) G Lab File ID: 1J205

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. 17 Date Analyzed: 05/18/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics____	5140	____	=

FORM I VOA

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1911

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-07

Sample wt/vol: 5.6 (g/mL) G Lab File ID: 1J436

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. 19 Date Analyzed: 05/21/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	benzene	2.2	U
108-88-3	toluene	2.2	U
100-41-4	ethylbenzene	2.2	U
1330-20-7	xylenes (total)	5.5	U

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1911

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-07

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 7T450

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: 19 decanted: (Y/N) N Date Extracted: 05/11/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
91-20-3	naphthalene	412	U	U
91-58-7	2-chloronaphthalene	412	U	
208-96-8	acenaphthylene	412	U	
83-32-9	acenaphthene	412	U	
86-73-7	fluorene	412	U	
85-01-8	phenanthrene	412 ~~85.9~~	JB	U FD1, FD
120-12-7	anthracene	412	U	
206-44-0	fluoranthene	180	J	U
129-00-0	pyrene	412 ~~190~~	JB	J
56-55-3	benzo(a)anthracene	112	J	U FD1, FD6
218-01-9	chrysene	118	J	
205-99-2	benzo(b)fluoranthene	89.1	J	J
207-08-9	benzo(k)fluoranthene	82.6	J	
50-32-8	benzo(a)pyrene	84.2	J	
193-39-5	indeno(1,2,3-cd)pyrene	153	J	
53-70-3	dibenz(a,h)anthracene	412	U	U
191-24-2	benzo(g,h,i)perylene	41.4	J	J

6/17/99

FORM 1 Science Applications09-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF1911

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-07

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 051F5101

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: 19 decanted: (Y/N) N Date Extracted:05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/21/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	Diesel Range Organics	0.47	JB	U FD1, FD6

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1911

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-07

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1J209

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. 19 Date Analyzed: 05/18/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	274		=

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2011

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-08

Sample wt/vol: 5.5 (g/mL) G Lab File ID: 1J437

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. 18 Date Analyzed: 05/21/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ml) Soil Aliquot Volume: 150 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	benzene	6.5	
108-88-3	toluene	3.3	
100-41-4	ethylbenzene	21.0	
1330-20-7	xylenes (total)	5.6	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2011

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-08

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 7T451

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: 18 decanted: (Y/N) N Date Extracted:05/11/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	406	U
91-58-7	2-chloronaphthalene	406	U
208-96-8	acenaphthylene	406	U
83-32-9	acenaphthene	406	U
86-73-7	fluorene	406	U
85-01-8	phenanthrene	406	U
120-12-7	anthracene	406	U
206-44-0	fluoranthene	406	U
129-00-0	pyrene	406	U
56-55-3	benzo(a)anthracene	406	U
218-01-9	chrysene	406	U
205-99-2	benzo(b)fluoranthene	406	U
207-08-9	benzo(k)fluoranthene	406	U
50-32-8	benzo(a)pyrene	406	U
193-39-5	indeno(1,2,3-cd)pyrene	406	U
53-70-3	dibenz(a,h)anthracene	406	U
191-24-2	benzo(g,h,i)perylene	406	U

U

FORM I SV-1 OLM03.0

FORM 1 Science Applications09-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF2011

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-08

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 052F5201

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: 18 decanted: (Y/N) N Date Extracted:05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/21/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

DATA VALIDATION COPY

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	2.0	B	= F08

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2011

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-08

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1J2010

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. 18 Date Analyzed: 05/18/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	----------Gasoline Range Organics	186	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2311

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-09

Sample wt/vol: 4.8 (g/mL) G Lab File ID: 1J511

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. 9 Date Analyzed: 05/21/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	benzene	2.3	U
108-88-3	toluene	2.3	U
100-41-4	ethylbenzene	2.3	U
1330-20-7	xylenes (total)	3.4	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2311

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-09

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 7T452

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: 9 decanted: (Y/N) N Date Extracted: 05/11/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	3660	U
91-58-7	2-chloronaphthalene	3660	U
208-96-8	acenaphthylene	3660	U
83-32-9	acenaphthene	3660	U
86-73-7	fluorene	3660	U
85-01-8	phenanthrene	3660	U
120-12-7	anthracene	3660	U
206-44-0	fluoranthene	3660	U
129-00-0	pyrene	3660	U
56-55-3	benzo(a)anthracene	3660	U
218-01-9	chrysene	3660	U
205-99-2	benzo(b)fluoranthene	3660	U
207-08-9	benzo(k)fluoranthene	3660	U
50-32-8	benzo(a)pyrene	3660	U
193-39-5	indeno(1,2,3-cd)pyrene	3660	U
53-70-3	dibenz(a,h)anthracene	3660	U
191-24-2	benzo(g,h,i)perylene	3660	U

FORM 1 Science Applications09-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF231

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-09

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 026F2601

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: 9 decanted: (Y/N) N Date Extracted:05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/22/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	5.6	B	= FD8

FORM I SV

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2311

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-09

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1J1013

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. 9 Date Analyzed: 05/17/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	----------Gasoline Range Organics	132	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2411

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-10

Sample wt/vol: 5.2 (g/mL) G Lab File ID: 1J512

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. 9 Date Analyzed: 05/21/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	benzene	2.1	U	U
108-88-3	toluene	0.68	J	J
100-41-4	ethylbenzene	2.1	U	U
1330-20-7	xylenes (total)	3.2	U	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2411

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-10

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 7T505

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: 9 decanted: (Y/N) N Date Extracted: 05/11/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	1460	U
91-58-7	2-chloronaphthalene	1460	U
208-96-8	acenaphthylene	1460	U
83-32-9	acenaphthene	1460	U
86-73-7	fluorene	1460	U
85-01-8	phenanthrene	1460	U
120-12-7	anthracene	1460	U
206-44-0	fluoranthene	115	J
129-00-0	pyrene	1460 ~~177~~	JB
56-55-3	benzo(a)anthracene	156	J
218-01-9	chrysene	184	J
205-99-2	benzo(b)fluoranthene	137	J
207-08-9	benzo(k)fluoranthene	190	J
50-32-8	benzo(a)pyrene	159	J
193-39-5	indeno(1,2,3-cd)pyrene	498	J
53-70-3	dibenz(a,h)anthracene	1460	U
191-24-2	benzo(g,h,i)perylene	129	J

U F01, F0_

FORM I SV-1 OLM03.0

FORM 1 Science Applications09-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF2411

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-10

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 027F2701

Level: (low/med) LOW DATA VALIDATION COPY Date Received: 05/09/99

% Moisture: 9 decanted: (Y/N) N Date Extracted:05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/22/99

Injection Volume: 1.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	21.5	B	= F08

FORM I SV

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2411

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252609S

Matrix: (soil/water) SOIL Lab Sample ID: 9905248-10

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1J1014

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. 9 Date Analyzed: 05/17/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

DATA VALIDATION COPY

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics_____	109	U	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2511

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-01

Sample wt/vol: 4.7 (g/mL) G Lab File ID: 2J618

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. 22 Date Analyzed: 05/22/99

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	benzene	2.7	U	U
108-88-3	toluene	1.5	J	J
100-41-4	ethylbenzene	2.7	U	U
1330-20-7	xylenes (total)	6.8 ~~4.5~~	JB	U F01, F06

MMP 6/28/99

FORM I VOA OLM03.0

31

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2511

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-01

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 4T633

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: 22 decanted: (Y/N) N Date Extracted: 05/13/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/15/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	420	U
91-58-7	2-chloronaphthalene	420	U
208-96-8	acenaphthylene	420	U
83-32-9	acenaphthene	420	U
86-73-7	fluorene	420	U
85-01-8	phenanthrene	420	U
120-12-7	anthracene	420	U
206-44-0	fluoranthene	420	U
129-00-0	pyrene	420	U
56-55-3	benzo(a)anthracene	420	U
218-01-9	chrysene	420	U
205-99-2	benzo(b)fluoranthene	420	U
207-08-9	benzo(k)fluoranthene	420	U
50-32-8	benzo(a)pyrene	420	U
193-39-5	indeno(1,2,3-cd)pyrene	420	U
53-70-3	dibenz(a,h)anthracene	420	U
191-24-2	benzo(g,h,i)perylene	420	U

U

FORM 1 Science Applications12-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF2511

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-01

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 030F3001

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: 22 decanted: (Y/N) N Date Extracted:05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/22/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	3.4	B	= F08

FORM I SV

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2511

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-01

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1J2011

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. 22 Date Analyzed: 05/18/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics_____	128	U	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2611

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-02

Sample wt/vol: 5.6 (g/mL) G Lab File ID: 2J611

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. 26 Date Analyzed: 05/22/99

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	benzene	7.8		C C11
108-88-3	toluene	2.4	U	
100-41-4	ethylbenzene	2.4	U	
1330-20-7	xylenes (total)	6.0 ~~4.0~~	JB	C F01, F06

MWP 6/9/99

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2611

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-02

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 4T634

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: 26 decanted: (Y/N) N Date Extracted:05/13/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/15/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	443	U
91-58-7	2-chloronaphthalene	443	U
208-96-8	acenaphthylene	443	U
83-32-9	acenaphthene	443	U
86-73-7	fluorene	443	U
85-01-8	phenanthrene	443	U
120-12-7	anthracene	443	U
206-44-0	fluoranthene	443	U
129-00-0	pyrene	443	U
56-55-3	benzo(a)anthracene	443	U
218-01-9	chrysene	443	U
205-99-2	benzo(b)fluoranthene	443	U
207-08-9	benzo(k)fluoranthene	443	U
50-32-8	benzo(a)pyrene	443	U
193-39-5	indeno(1,2,3-cd)pyrene	443	U
53-70-3	dibenz(a,h)anthracene	443	U
191-24-2	benzo(g,h,i)perylene	443	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF2611

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-02

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 060F6001

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: 26 decanted: (Y/N) N Date Extracted:05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/21/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	0.47	JB	U F01, F06

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2611

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-02

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1J1016

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. 26 Date Analyzed: 05/17/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	134	U	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2711

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-03

Sample wt/vol: 6.1 (g/mL) G Lab File ID: 2J612

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. 20 Date Analyzed: 05/22/99

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q	
71-43-2	benzene		2.1	U	U
108-88-3	toluene		2.1	U	U
100-41-4	ethylbenzene		2.1	U	U
1330-20-7	xylenes (total)	5.1	~~3.4~~	JB	U F01, F06

NMP 6/18/99

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2711

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-03

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 4T635

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: 20 decanted: (Y/N) N Date Extracted: 05/13/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/15/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	410	U
91-58-7	2-chloronaphthalene	410	U
208-96-8	acenaphthylene	410	U
83-32-9	acenaphthene	410	U
86-73-7	fluorene	410	U
85-01-8	phenanthrene	410	U
120-12-7	anthracene	410	U
206-44-0	fluoranthene	410	U
129-00-0	pyrene	410	U
56-55-3	benzo(a)anthracene	410	U
218-01-9	chrysene	410	U
205-99-2	benzo(b)fluoranthene	410	U
207-08-9	benzo(k)fluoranthene	410	U
50-32-8	benzo(a)pyrene	410	U
193-39-5	indeno(1,2,3-cd)pyrene	410	U
53-70-3	dibenz(a,h)anthracene	410	U
191-24-2	benzo(g,h,i)perylene	410	U

FORM 1 Science Applications12-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF2711

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-03

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 061F6101

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: 20 decanted: (Y/N) N Date Extracted:05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/21/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	0.36	JB	U FD1, FD6

FORM I SV

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2711

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-03

Sample wt/vol: 5.1 (g/mL) G Lab File ID: 1J1017

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. 20 Date Analyzed: 05/17/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics_____	123	U	U

FORM I VOA

198

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2811

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-04

Sample wt/vol: 5.9 (g/mL) G Lab File ID: 2J613

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. 17 Date Analyzed: 05/22/99

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	benzene	2.0	U	U
108-88-3	toluene	2.0	U	U
100-41-4	ethylbenzene	2.0	U	U
1330-20-7	xylenes (total)	5.1 ~~3.4~~	JB	UF01,F06

mmf
6/18/99

FORM I VOA OLM03.0

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2811

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-04

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 4T636

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: 17 decanted: (Y/N) N Date Extracted: 05/13/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/16/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	395	U
91-58-7	2-chloronaphthalene	395	U
208-96-8	acenaphthylene	395	U
83-32-9	acenaphthene	395	U
86-73-7	fluorene	395	U
85-01-8	phenanthrene	395	U
120-12-7	anthracene	395	U
206-44-0	fluoranthene	395	U
129-00-0	pyrene	395	U
56-55-3	benzo(a)anthracene	395	U
218-01-9	chrysene	395	U
205-99-2	benzo(b)fluoranthene	395	U
207-08-9	benzo(k)fluoranthene	395	U
50-32-8	benzo(a)pyrene	395	U
193-39-5	indeno(1,2,3-cd)pyrene	395	U
53-70-3	dibenz(a,h)anthracene	395	U
191-24-2	benzo(g,h,i)perylene	395	U

U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF2811

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-04

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 062F6201

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: 17 decanted: (Y/N) N Date Extracted:05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/21/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	2.0	B	= FD8

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2811

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-04

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1J1018

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. 17 Date Analyzed: 05/17/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	120	U	U

FORM I VOA

199

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2911

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-05

Sample wt/vol: 4.7 (g/mL) G Lab File ID: 2J614

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. 11 Date Analyzed: 05/22/99

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	benzene	2.4	U	U
108-88-3	toluene	2.4	U	U
100-41-4	ethylbenzene	2.4	U	U
1330-20-7	xylenes (total)	6.0 ~~3.8~~	JB	U F01, F06

MAP
6/18/99

FORM I VOA OLM03.0

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2911

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-05

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 4T637

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: 11 decanted: (Y/N) N Date Extracted: 05/13/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/16/99

Injection Volume: 1.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	1470	U
91-58-7	2-chloronaphthalene	1470	U
208-96-8	acenaphthylene	1470	U
83-32-9	acenaphthene	1470	U
86-73-7	fluorene	1470	U
85-01-8	phenanthrene	1470	U
120-12-7	anthracene	1470	U
206-44-0	fluoranthene	1470	U
129-00-0	pyrene	1470	U
56-55-3	benzo(a)anthracene	1470	U
218-01-9	chrysene	1470	U
205-99-2	benzo(b)fluoranthene	1470	U
207-08-9	benzo(k)fluoranthene	1470	U
50-32-8	benzo(a)pyrene	1470	U
193-39-5	indeno(1,2,3-cd)pyrene	1470	U
53-70-3	dibenz(a,h)anthracene	1470	U
191-24-2	benzo(g,h,i)perylene	1470	U

FORM 1 Science Applications12-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF2911

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-05

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 031F3101

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: 11 decanted: (Y/N) N Date Extracted:05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/22/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics_____	2.5	B	= FOR

FORM I SV

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2911

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-05

Sample wt/vol: 5.1 (g/mL) G Lab File ID: 1J1019

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. 11 Date Analyzed: 05/17/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	216		J G01

FORM I VOA

200

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1 of 2 9905229

CHAIN OF CUSTODY RECORD

COC NO.: HP0002

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1956-200

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

	Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	Iron not filtered	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1/2	AF1012	5/4/99	1755	water	2	2					1	5		24 HR TURN BTEX
3/4	AF0912	5/4/99	1650		2	2				1		5		
5/6	AF0112	5/4/99	1500		2					1		3		
7/8	AF0612	5/4/99	1600		2					1		3		
9/10	AF0712	5/4/99	1140		2						1	3		
11/12	AF1014	5/4/99	1755		2						1	3		
13/14	AF1212	5/4/99	1340		2						1	3		
15	HP0001	5/4/99	830		2							2		
16	AF0615	5/4/99	1525		2							2		
1	AF0611	5/4/99	1530	Soil	1		1	1				3		
2	AF0711	5/4/99	1030		1		1	1				3		
3	AF0911	5/4/99	1635		1		1	1				3		
4	AF1011	5/4/99	1730		1		1	1				3		

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	5/5/99 11:10	P. Mauer	5/5/99 14:10
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RECEIVED BY: Raymond Reed	Date/Time 5/5/99 11:10	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY: Raymond Reed	Date/Time 5/5/99 14:00	RECEIVED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS:

Cooler ID: # 804

Cooler Temperature: 3°C

FEDEX NUMBER:

BTEX water
24 HR. TURN

V-129

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9905124% 2 of 2

CHAIN OF CUSTODY RECORD

COC NO.: HPØØZ

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1956-200

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

	Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
5	AFØ111	5/4/99	1410	Soil	1		1		1		3		400Z .2
6	AF1211	5/4/99	1315	↓	1		1	1			3		.1

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS: 47	Cooler Temperature: 3°C
Laura Lumley	5/5/99	P. Powell	5/5/99		
COMPANY NAME: SAIC	11:10	COMPANY NAME: GEL	14:10	Cooler ID: # 804	FEDEX NUMBER:
RECEIVED BY: Raynd Reed	Date/Time 5/5/99	RELINQUISHED BY:	Date/Time		
COMPANY NAME: GEL	11:10	COMPANY NAME:			
RELINQUISHED BY: Raynd Reed	Date/Time 5/5/99	RECEIVED BY:	Date/Time		
COMPANY NAME: G.E.L.	14:00	COMPANY NAME:			

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9905173/ 1 of 2

CHAIN OF CUSTODY RECORD

COC NO.: HP0004

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1958-200

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	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	Iron Not Filtered	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1	AF0514	5/5/99	1550	water	Z	Z					1	5		BTEX - 24 HR TURN
2	AF0212	5/5/99	1110		Z						1	3		
3	AF0312	5/5/99	1005		Z						1	3		
4	AF0316	5/5/99	1445		Z						1	3		
5	AF0412	5/5/99	1700		Z						1	3		
6	AF0512	5/5/99	1550		Z						1	3		
7	AF0612	5/5/99	1555		Z						1	3		
8	AF1112	5/5/99	1211		Z						1	3		
9	AP0002	5/5/99	745		2							2		
	AF0613	5/5/99	1420	Soil	1		1					2		(9905217-01
	AF0611	5/5/99	1420		1		1	1				3		-02
	AF0211	5/5/99	1100		1		1	1				3		-03
	AF0311	5/5/99	951		1		1	1				3		-04

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	5/6/99 1145	P. Mauck	5/6/99 15:35
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RECEIVED BY: M. Rocha	Date/Time 5/6/99 1145	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY: M. Rocha	Date/Time 5/6/99 1535	RECEIVED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS:

Cooler ID: #833

Cooler Temperature: 3°C

FEDEX NUMBER:

BTEX Water 24 HR TURN

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2012

CHAIN OF CUSTODY RECORD

COC NO.: HP0004

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1958-200

PROJECT MANAGER: Patty Stoll

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

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AF0411	5/5/99	1650	Soil	1		1	1			3		FB5313-35
AF0511	5/5/99	1540		1		1	1			3		FB5313-36
AF1111	5/5/99	1210		1		1	1			3		FB5313-37
AF1113	5/5/99	1210	↓	1		1	1			3		FB5313-38
		2 EDSC										

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29407

PHONE NO: (843) 556-8171

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	5/5/99	P. Mauck	5/6/99
COMPANY NAME: SAIC	1145	COMPANY NAME: GEL	15:35
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time
	5/6/99		
COMPANY NAME: GEL	1145	COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
	5/6/99		
COMPANY NAME: GEL	1535	COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 51

Cooler ID: #4633

Cooler Temperature: 3°C

FEDEX NUMBER:

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2012

CHAIN OF CUSTODY RECORD

COC NO.: HP011

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1958-200

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	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
17	AF2112	5/7/99	844	water	2						2		
18	AF2124	5/7/99	920		2						2		
19	AF2192	5/7/99	1410		2						2		
20	HP0002	5/7/99	745		2						2		
1	AF1311	5/7/99	1505	Soil	1		1	1			3		9903
	AF1411	5/7/99	1642		1		1	1			3		
	AF1511	5/7/99	1578		1		1	1			3		
	AF1611	5/7/99	1341		1		1	1			3		
											53		

4011 - 3

4011

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	5/6/99 1040	P. Warner	5/8/99 15:50
COMPANY NAME: SAIC		COMPANY NAME: Gel	
RECEIVED BY: [illegible]	Date/Time 5/8/99 1040	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY: [illegible]	Date/Time 5/8/99 1502	RECEIVED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 53

Cooler Temperature: 3° C

Cooler ID: #612

FEDEX NUMBER:

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99052537 2 of 2

CHAIN OF CUSTODY RECORD

COC NO.: HP015

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1958-200

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

	Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
6	AF2252	5/4/99	1035	water	2						2		99052537
7	AF2262	5/4/99	1110		2						2		
8	AF2272	5/4/99	1315		2						2		
9	AF2282	5/4/99	1410		2						2		
10	AF2226	5/4/99	906		2						2		
11	HP0006	5/4/99	745		2						2		
05248-05	AF1711	5/4/99	1350	Soil	1		1	1			3		
-06	AF1811	5/4/99	932		1		1	1			3		
-07	AF1911	5/4/99	1036		1		1	1			3		
-08	AF2011	5/4/99	900		1		1	1			3		
-09	AF2311	5/4/99	1030		1		1	1			3		
-10	AF2411	5/4/99	1145		1		1	1			3		

REQUESTED PARAMETERS

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	5/4/99 1035	P. Morel	5/4/99 13:30
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time
COMPANY NAME:	5/4/99 1050	COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME:	5/5/99 1350	COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 65

Cooler ID: #799

Cooler Temperature: 3°c

FEDEX NUMBER:

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1 of 2

9905397

CHAIN OF CUSTODY RECORD

COC NO.: HPØ23

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1958-200

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

	Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
8	AFØ319	5/12/99	ØØØØ	water	2	2						4		
9	AFZ512	5/11/99	Ø933		2						1	3		
10	AFZ612	5/11/99	1119		2						1	3		
11	AFZ712	5/11/99	1030		2						1	3		
12	AFZ612	5/11/99	1215		2						1	3		
13	AFZ912	5/11/99	1448		2						1	3		
14	AFØ119	5/11/99	1540		2							2		
15	AFØ219	5/11/99	1550		2							2		
16	HPØØØ9	5/11/99	745		2							2		
01	AFZ511	5/11/99	Ø91Ø	Soil	1		1	1				3		99053989
02	AFZ611	5/11/99	1100		1		1	1				3		
03	AFZ711	5/11/99	1009		1		1	1				3		
04	AFZ811	5/11/99	1201		1		1	1				3		

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RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	5/12/99 1145	P. Nolen	5/12/99 15:30
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time
[signature]	5/12/99 1145		
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
[signature]	5/12/99 1530		
COMPANY NAME: GEL		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 49

Cooler ID: # 795

Cooler Temperature: 3°c

FEDEX NUMBER:

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1905398% 2 of 2

CHAIN OF CUSTODY RECORD

COC NO.: HP023

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04 - 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

	Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
Q5	AFZ911	5/11/99	1435	soil	1		1	1			3		
Q6	AFØ11Ø	5/11/99	1541		1		1	1			3		
Q7	AFØ21Ø	5/11/99	1551		1		1	1			3		
Q8	AFØ31Ø	5/12/99	Ø9Ø1		1		1	1			3		

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REQUESTED PARAMETERS

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:	Cooler Temperature: 3°c
Laura Lumley	5/12/99	P. Power	5/12/99	Cooler ID: #795	FEDEX NUMBER:
COMPANY NAME: SAIC	1145	COMPANY NAME: GEL	15:30		
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time		
COMPANY NAME: GEL	5/12/99 1145	COMPANY NAME:			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time		
COMPANY NAME: GEL	5/12/99 1530	COMPANY NAME:			

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0110

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-06

Sample wt/vol: 5.2 (g/mL) G Lab File ID: 2J615

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. 37 Date Analyzed: 05/22/99

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q	
71-43-2	benzene		3.0	U	U
108-88-3	toluene		2.4	J	J
100-41-4	ethylbenzene	3	~~2.6~~	JB	U FO1, FO6
1330-20-7	xylenes (total)	7.6	~~5.0~~	JB	U FO1, FO6

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0110

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-06

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 4T638

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: 37 decanted: (Y/N) N Date Extracted:05/13/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/16/99

Injection Volume: 1.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	2080	U
91-58-7	2-chloronaphthalene	2080	U
208-96-8	acenaphthylene	2080	U
83-32-9	acenaphthene	2080	U
86-73-7	fluorene	2080	U
85-01-8	phenanthrene	2080	U
120-12-7	anthracene	2080	U
206-44-0	fluoranthene	2080	U
129-00-0	pyrene	2080	U
56-55-3	benzo(a)anthracene	2080	U
218-01-9	chrysene	2080	U
205-99-2	benzo(b)fluoranthene	2080	U
207-08-9	benzo(k)fluoranthene	2080	U
50-32-8	benzo(a)pyrene	2080	U
193-39-5	indeno(1,2,3-cd)pyrene	2080	U
53-70-3	dibenz(a,h)anthracene	2080	U
191-24-2	benzo(g,h,i)perylene	2080	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF0110

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-06

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 064F6401

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: 37 decanted: (Y/N) N Date Extracted:05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/21/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	1.8	B	= F08

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0110

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-06

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1J1020

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. 37 Date Analyzed: 05/17/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics_____	159	U	U

DATA VALIDATION COPY

FORM I VOA

193

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0210

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-07

Sample wt/vol: 5.4 (g/mL) G Lab File ID: 2J616

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. 29 Date Analyzed: 05/22/99

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	benzene	2.6	U	U
108-88-3	toluene	2.6	U	U
100-41-4	ethylbenzene	2.6 ~~2.2~~	JB	U FD1, FD6
1330-20-7	xylenes (total)	6.5 ~~4.3~~	JB	U FD1, FD6

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0210

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-07

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 4T639

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: 29 decanted: (Y/N) N Date Extracted:05/13/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/16/99

Injection Volume: 1.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	1850	U
91-58-7	2-chloronaphthalene	1850	U
208-96-8	acenaphthylene	1850	U
83-32-9	acenaphthene	1850	U
86-73-7	fluorene	1850	U
85-01-8	phenanthrene	1850	U
120-12-7	anthracene	1850	U
206-44-0	fluoranthene	1850	U
129-00-0	pyrene	1850	U
56-55-3	benzo(a)anthracene	1850	U
218-01-9	chrysene	1850	U
205-99-2	benzo(b)fluoranthene	1850	U
207-08-9	benzo(k)fluoranthene	1850	U
50-32-8	benzo(a)pyrene	1850	U
193-39-5	indeno(1,2,3-cd)pyrene	1850	U
53-70-3	dibenz(a,h)anthracene	1850	U
191-24-2	benzo(g,h,i)perylene	1850	U

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FORM 1 Science Applications12-MAY-1999 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF0210

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-07

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 032F3201

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: 29 decanted: (Y/N) N Date Extracted:05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/22/99

Injection Volume: 1.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics_____	9.8	B	= F08

FORM I SV

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0210

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-07

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1J1021

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. 29 Date Analyzed: 05/17/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg), UG/KG	Q	
	----------Gasoline Range Organics_____	141	U	U

FORM I VOA

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0310

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-08

Sample wt/vol: 5.6 (g/mL) G Lab File ID: 2J617

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. 24 Date Analyzed: 05/22/99

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	benzene	0.66	J	J
108-88-3	toluene	2.4	U	U
100-41-4	ethylbenzene	2.4	U	U
1330-20-7	xylenes (total)	5.8 ~~2.8~~	JB	U FD1,FD6

MMP
6/18/99

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0310

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-08

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 4T640

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: 24 decanted: (Y/N) N Date Extracted:05/13/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/16/99

Injection Volume: 1.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	1720	U
91-58-7	2-chloronaphthalene	1720	U
208-96-8	acenaphthylene	1720	U
83-32-9	acenaphthene	1720	U
86-73-7	fluorene	1720	U
85-01-8	phenanthrene	1720	U
120-12-7	anthracene	1720	U
206-44-0	fluoranthene	1720	U
129-00-0	pyrene	1720	U
56-55-3	benzo(a)anthracene	1720	U
218-01-9	chrysene	1720	U
205-99-2	benzo(b)fluoranthene	1720	U
207-08-9	benzo(k)fluoranthene	1720	U
50-32-8	benzo(a)pyrene	1720	U
193-39-5	indeno(1,2,3-cd)pyrene	1720	U
53-70-3	dibenz(a,h)anthracene	1720	U
191-24-2	benzo(g,h,i)perylene	1720	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF0310

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-08

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 033F3301

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: 24 decanted: (Y/N) N Date Extracted:05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/22/99

Injection Volume: 1.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	13.0	B	= FØ8

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0310

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252614S

Matrix: (soil/water) SOIL Lab Sample ID: 9905398-08

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1J2015

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. 24 Date Analyzed: 05/18/99

GC Column: J&W DB-624(FID) ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	206		J GD2

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195

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1905398% 2 of 2

CHAIN OF CUSTODY RECORD

COC NO.: HP023

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04 - 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

	Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
25	AFZ911	5/11/99	1435	soil	1		1	1			3		
26	AFØ11Ø	5/11/99	1541		1		1	1			3		
27	AFØ21Ø	5/11/99	1551		1		1	1			3		
28	AFØ31Ø	5/12/99	Ø9Ø1	↓	1		1	1			3		

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5/12/99

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	5/12/99	P. Nower	5/12/99
COMPANY NAME: SAIC	1145	COMPANY NAME: GEL	15:30
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL	5/12/99 1145	COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME: GEL	5/12/99 1530	COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS:

Cooler Temperature: 3°c

Cooler ID: #795

FEDEX NUMBER:

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APPENDIX VI

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

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1.0 Alternate Concentration Limits

Benzene, benzo(a)pyrene, and naphthalene were selected as COPCs for groundwater at the site. The modeling results estimated a DAF of 4.8 for benzene and a DAF of 3600 for naphthalene at the drainage ditch. The compound specific regulatory levels or risk-based screening values were used in conjunction with the DAF to develop constituent specific ACLs, which are presented in Table VI-A. As indicated in Table VI-A, the maximum concentration of each constituent observed during each CAP-Part A and CAP-Part B SI is adjacent to the calculated ACL.

Table VI-A. Alternate Concentration Limits for Contaminants in Groundwater

Contaminant	Regulatory Level (µg/L)	Drainage Ditch		Maximum Observed Concentration	
		DAF[1]	ACL[2] (µg/L)	CAP-Part B	CAP-Part A
Benzene	71.28 [a]	4.8	340	9940	250
Benzo(a)pyrene	0.0311 [b]	3600	936	18.6	ND
Naphthalene	6.5 [b]	3600	23,400	59.5	90

[1] DAF = Maximum Observed Concentration ÷ Predicted Concentration at the Receptor
= 9940 ÷ 2080 ≈ 4.8 at the drainage ditch
[2] ACL = Regulatory Level × DAF
[a] In-Stream Water Quality Standard
[b] Risk-based screening criteria
ND Not detected.

2.0 Alternate Threshold Levels

The highest benzene concentration in soil above the water table was 3.3 mg/kg in sample HAAF-260-PIPE-D-2-S that was located at 2.5 ft BGS during the in-place closure sampling. The nearest potential receptor location is a drainage ditch, which is located 75 feet downgradient of the area of highest contamination. Thus, the dilution attenuation for benzene from the source to the drainage ditch line was considered in the ATL calculations. The DAF for benzene is calculated for migration of leachate to the water table based on SESOIL modeling results. The ATLs for soil are presented in Table VI-B along with the maximum observed concentrations for benzene.

The ATL for benzene can be calculated using the following steps:

- Step 1 – calculate the fractional organic carbon (f_{cs}) content of the contaminated soil:

  f_{cs} = 0.002 (geometric mean of site specific total organic carbon data, dimensionless)

- Step 2 – calculate the contaminant concentration in soil pore water (C_w) directly in contact with contaminated soil:

$$C_w = \frac{C_s}{K_{oc} \times f_{cs}} = \frac{3.3\ mg/kg}{(81\ mg/L)(0.002)} = 20.4\ mg/L$$

where: C_s = maximum concentration in soil above the water table
K_{oc} = organic carbon partitioning coefficient (GA UST CAP-Part A Guidance, Appendix I, Table 1)
f_{cs} = fractional organic carbon content (calculated in step 1)

- Step 3 – calculate the dilution attenuation factor for migration of leachate (DAF_l) to the water table based on the SESOIL predicted maximum contaminant concentration in groundwater:

$$DAF_l = \frac{C_w}{C_{max,w}} = \frac{20.4\ mg/L}{7.13\ mg/L} = 2.86\ (dimesionless)$$

where: C_w = concentration in soil pore water directly in contact with contaminated soil
$C_{max,w}$ = SESOIL predicted maximum concentration in the leachate at the water table interface

- Step 4 – calculate the alternate threshold level:

$$ATL = (K_{oc})\ (f_{cs})\ (C_{std})\ (DAF_l)\ (DAF_w)$$

where: K_{oc} = organic carbon partitioning coefficient (GA UST CAP-Part A Guidance, Appendix I, Table 1)
f_{cs} = fractional organic carbon content (calculated in step 1)
Cstd = applicable water quality standard
DAF_l = dilution attenuation factor for the migration of leachate
DAF_w = dilution attenuation factor for the migration of groundwater (calculated for ACLs in Section 1.0)

Contaminant	K_{oc} (mL/g)	f_{cs}	C_{std} (mg/L)	DAF_l	DAF_w	ATL (mg/kg)
Benzene	81	0.002	0.07128	2.86	4.8	0.159

Table VI-B. Alternate Threshold Levels for Contaminated Soil

Contaminant	ATL (mg/kg)	Maximum Observed Concentration	
		In-Place Closure/CAP-Part A	CAP-Part B
Benzene	0.159	3.3	0.0859

APPENDIX VII

MONITORING WELL DETAILS

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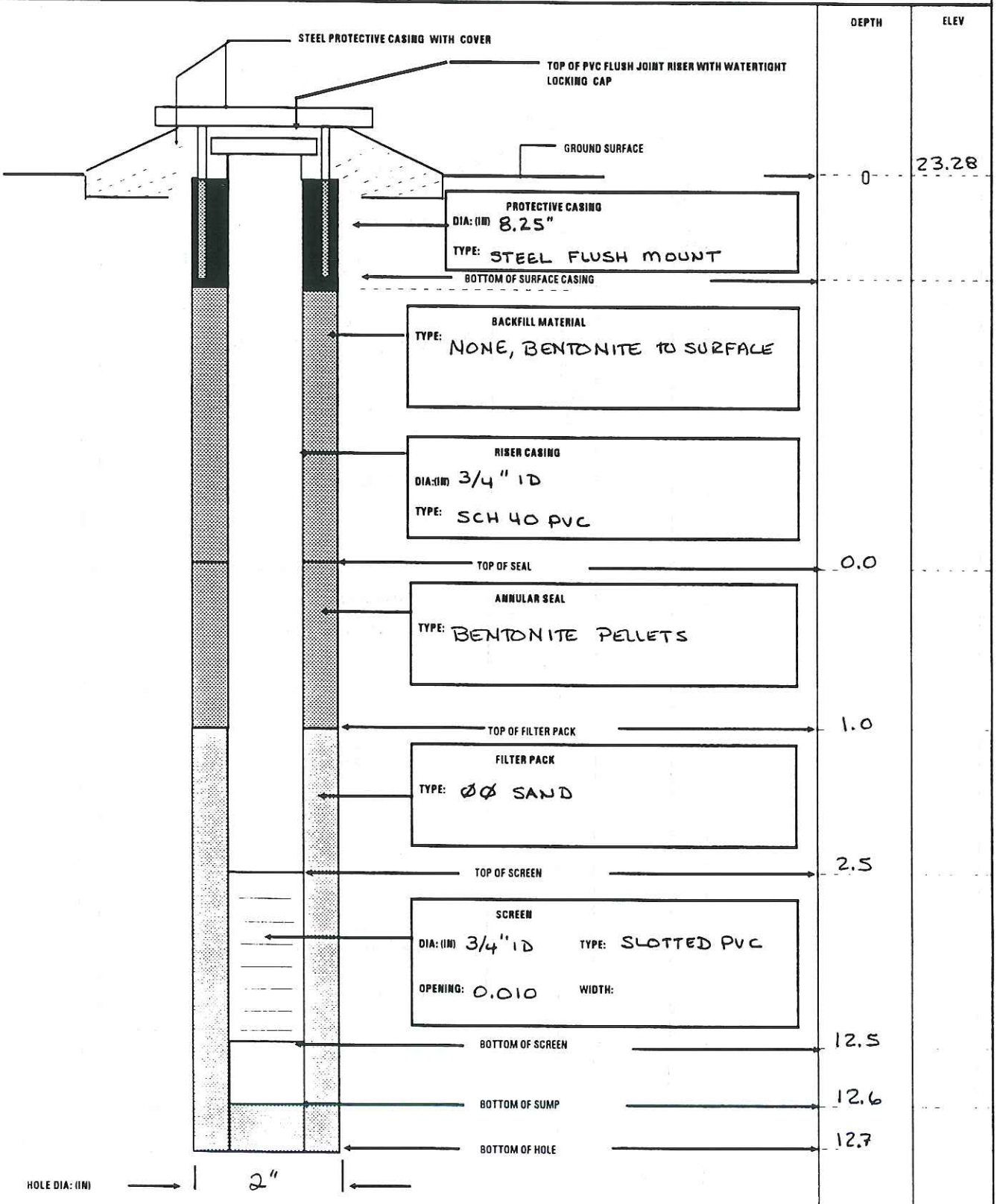
MONITORING WELL

PROJECT: HAAF USTs 25&26

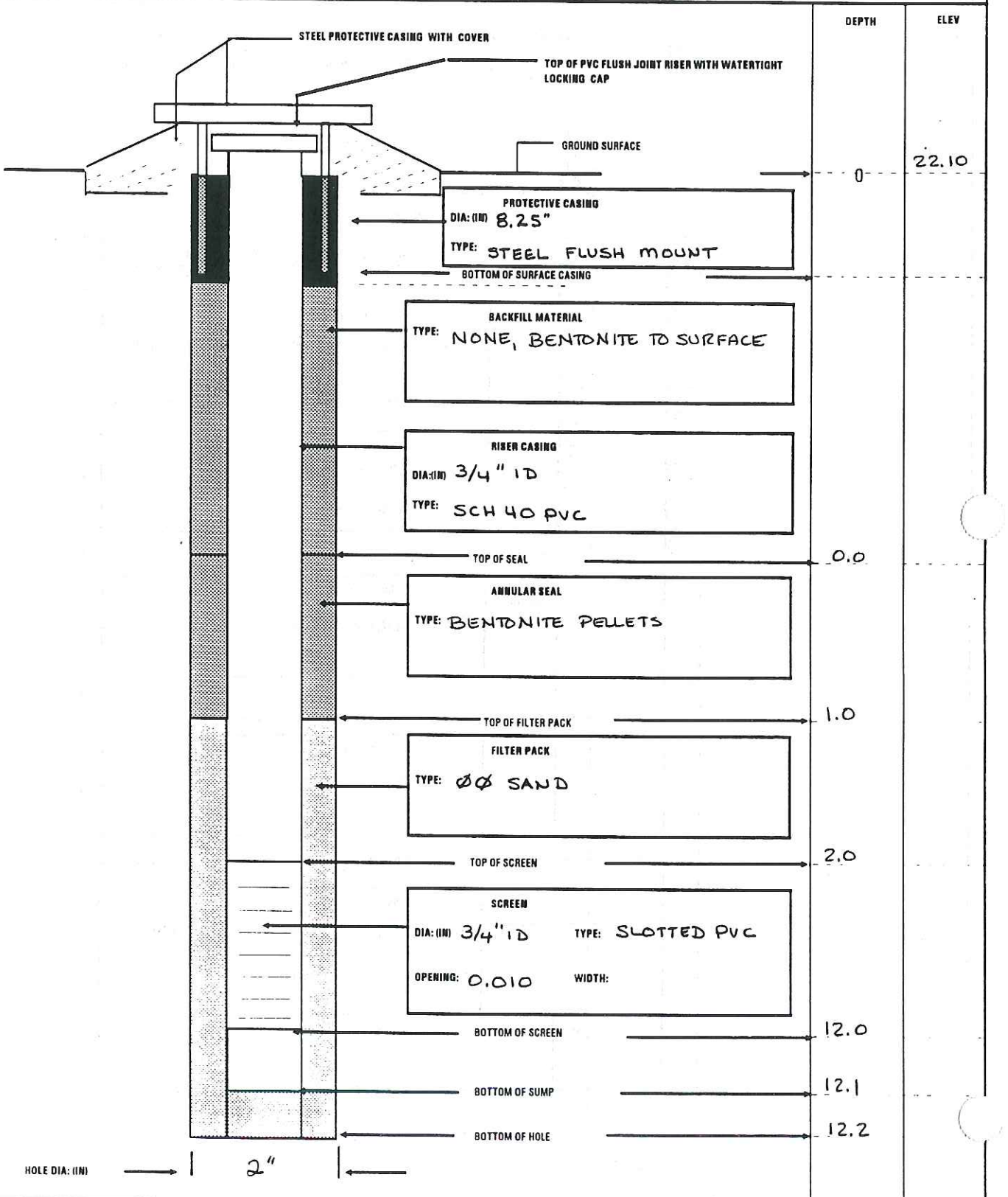
WELL NUMBER: AF-01	**BEGIN:** 5/4/99	**END:** 5/4/99
COORDINATES: N: 734225.90 E: 979645.78	**REFERENCE POINT:** TOC	**ELEVATION:** 23.02



MONITORING WELL

PROJECT: HAAF USTs 25&26

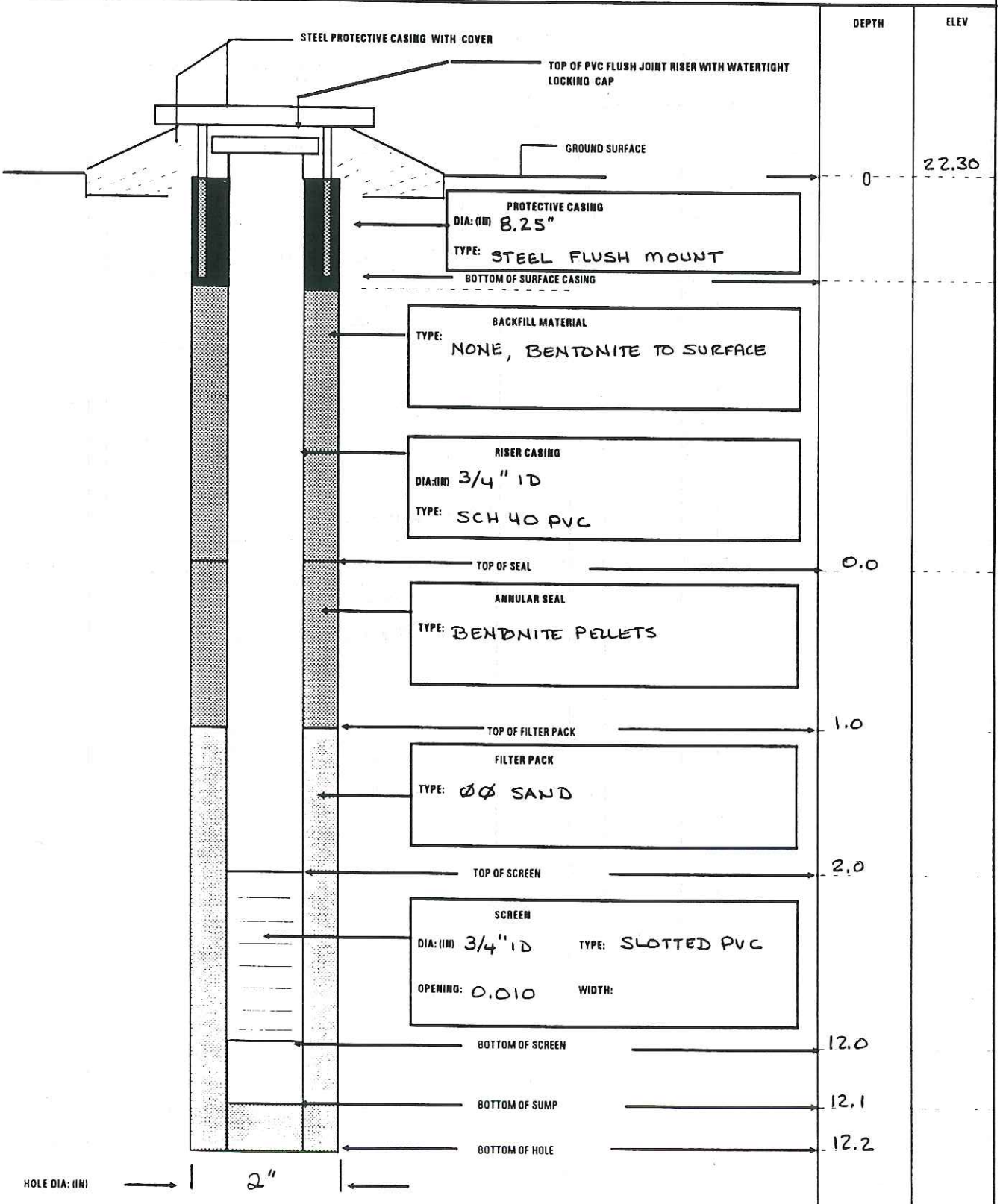
WELL NUMBER: AF-02	**BEGIN:** 5/5/99	**END:** 5/5/99
COORDINATES: N: 734103.05 E: 979556.81	**REFERENCE POINT:** TOC	**ELEVATION:** 21.97



MONITORING WELL

PROJECT: HAAF USTs 25&26

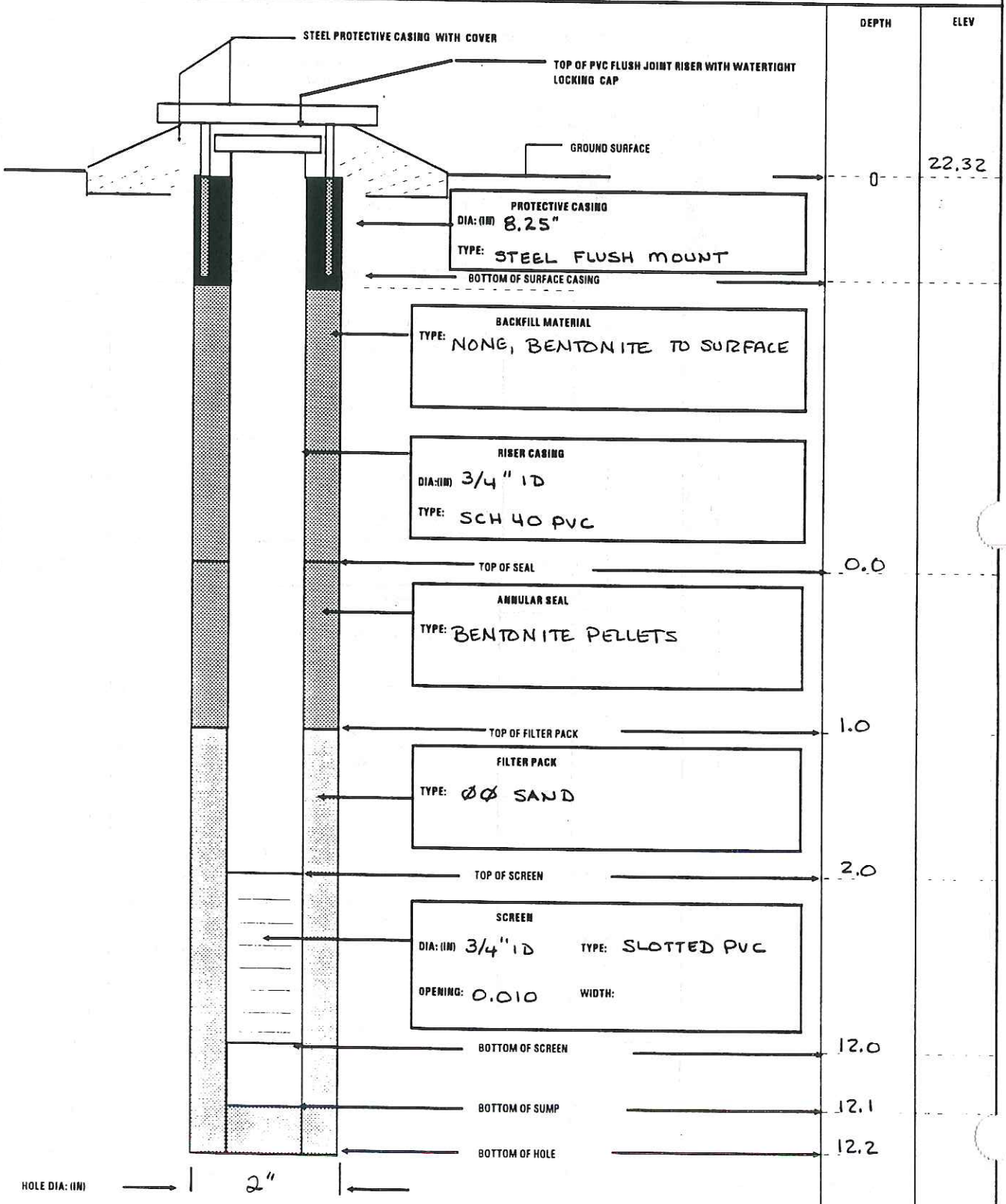
WELL NUMBER: AF-03	**BEGIN:** 5/5/99	**END:** 5/5/99
COORDINATES: N: 734073.65 E: 979520.84	**REFERENCE POINT:** TOC	**ELEVATION:** 22.30



MONITORING WELL

PROJECT: HAAF USTs 25&26

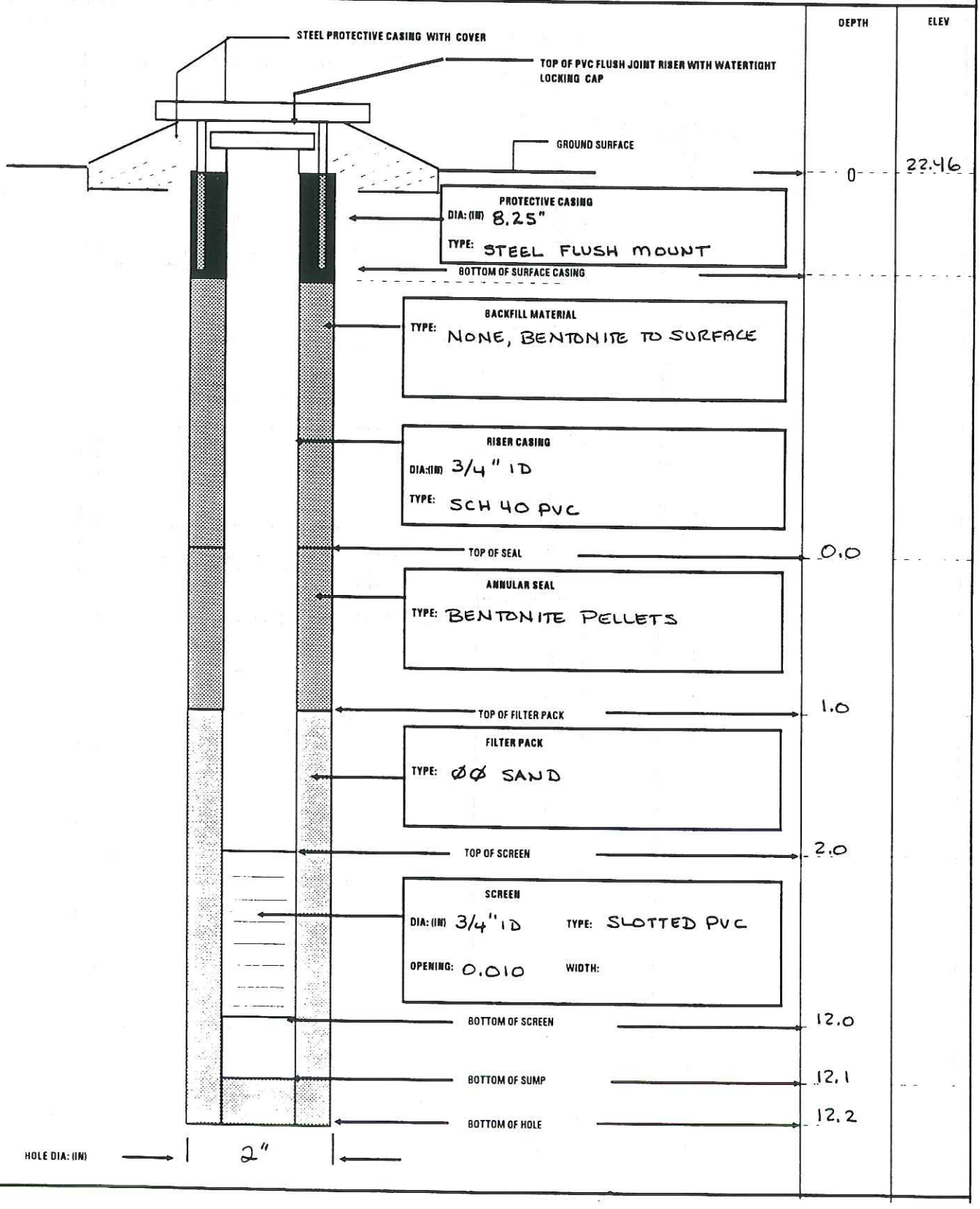
WELL NUMBER: AF-04	**BEGIN:** 5/5/99	**END:** 5/5/99
COORDINATES: N: 734170.32 E: 979621.51	**REFERENCE POINT:** TOC	**ELEVATION:** 22.24



MONITORING WELL

PROJECT: HAAF USTs 25&26

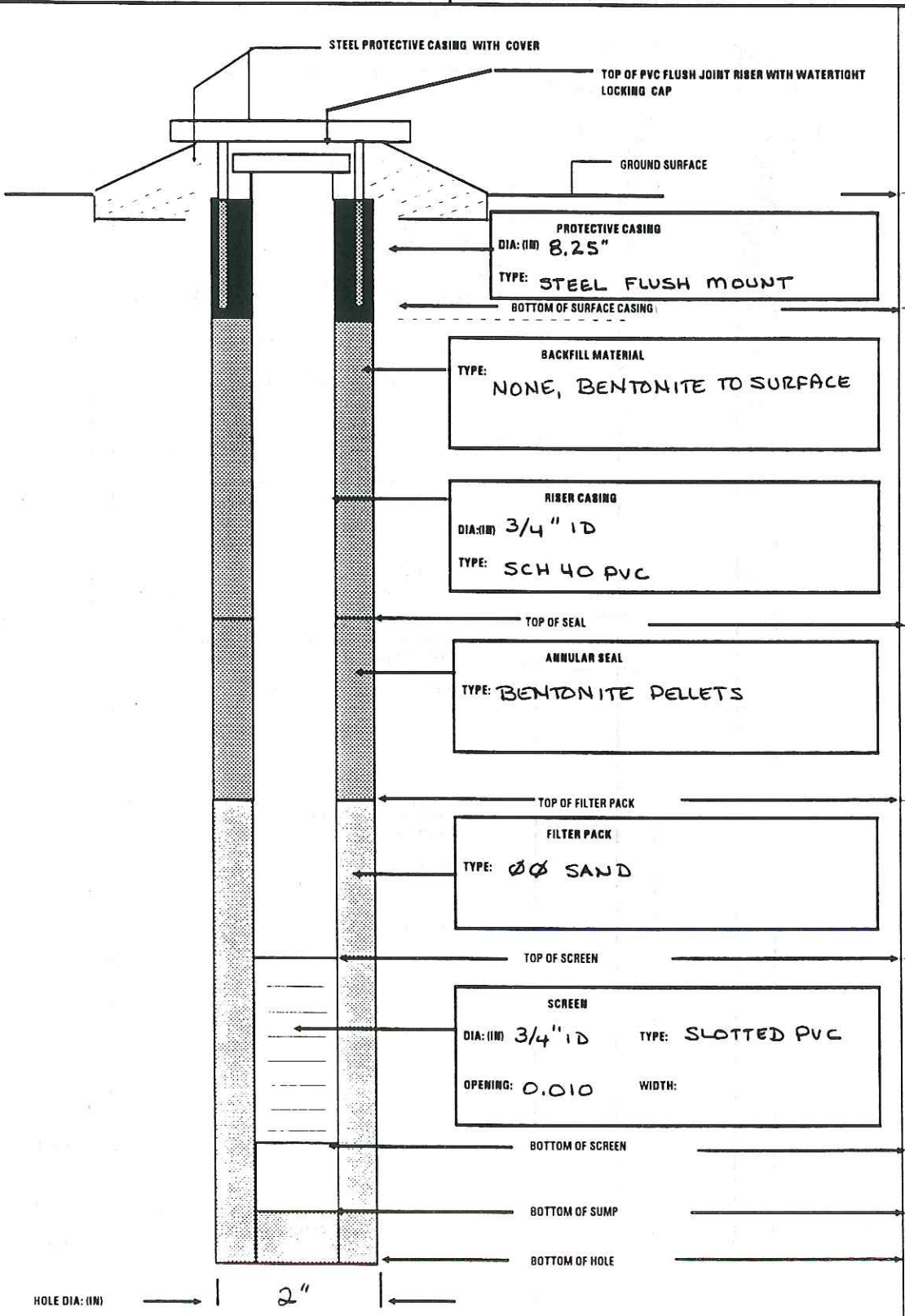
WELL NUMBER: AF-05	**BEGIN:** 5/5/99	**END:** 5/5/99
COORDINATES: N: 734139.42 E: 979582.77	**REFERENCE POINT:** TOC	**ELEVATION:** 22.21



MONITORING WELL

PROJECT: HAAF USTs 25&26

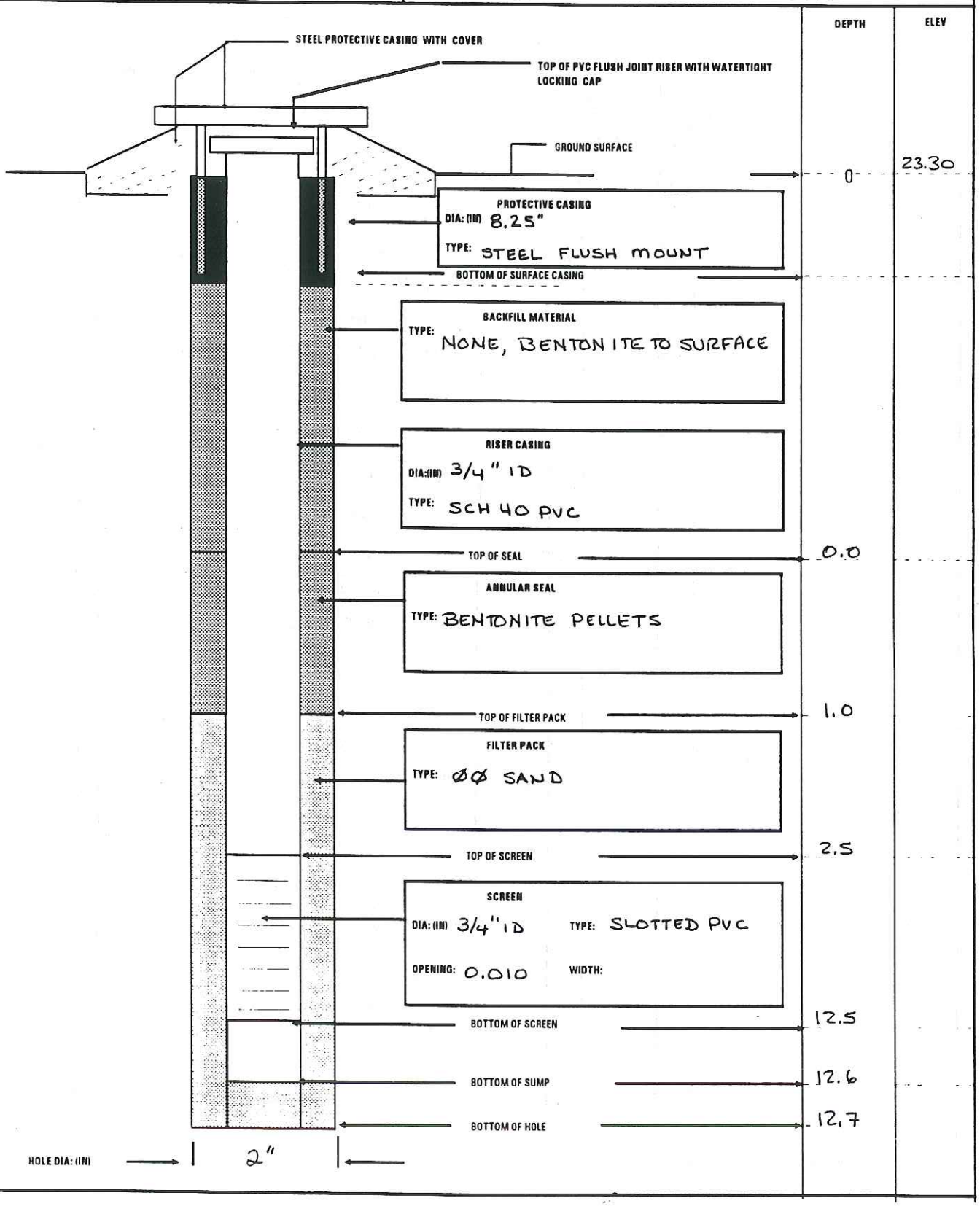
WELL NUMBER: AF-07	**BEGIN:** 5/4/99	**END:** 5/4/99
COORDINATES: N: 734145.20 E: 979553.53	**REFERENCE POINT:** TOC	**ELEVATION:** 22.90



MONITORING WELL

PROJECT: HAAF USTs 25&26

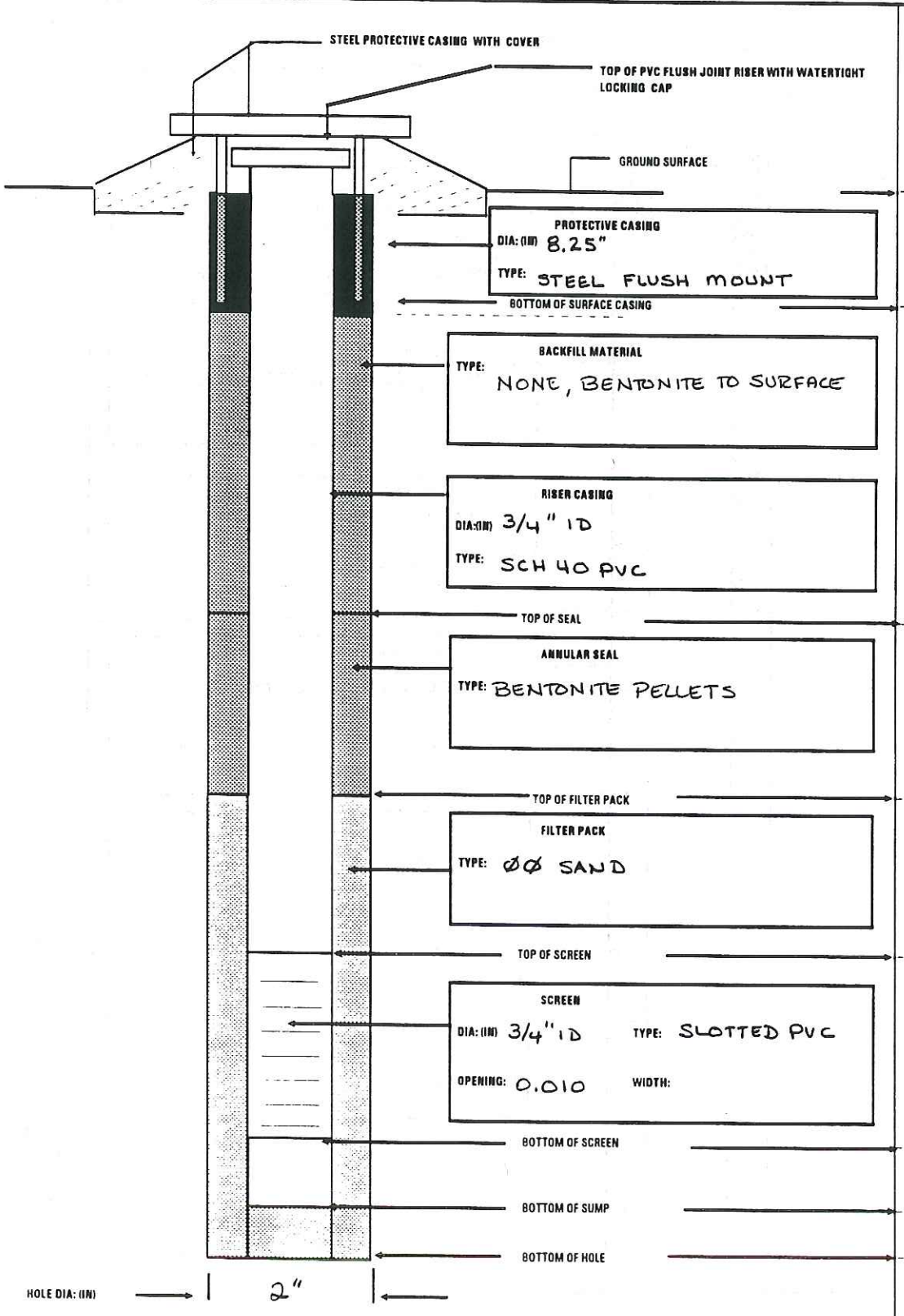
WELL NUMBER: AF-08	**BEGIN:** 5/4/99	**END:** 5/4/99
COORDINATES: N: 734249.25 E: 979597.57	**REFERENCE POINT:** TOC	**ELEVATION:** 23.10



MONITORING WELL

PROJECT: HAAF USTs 25&26

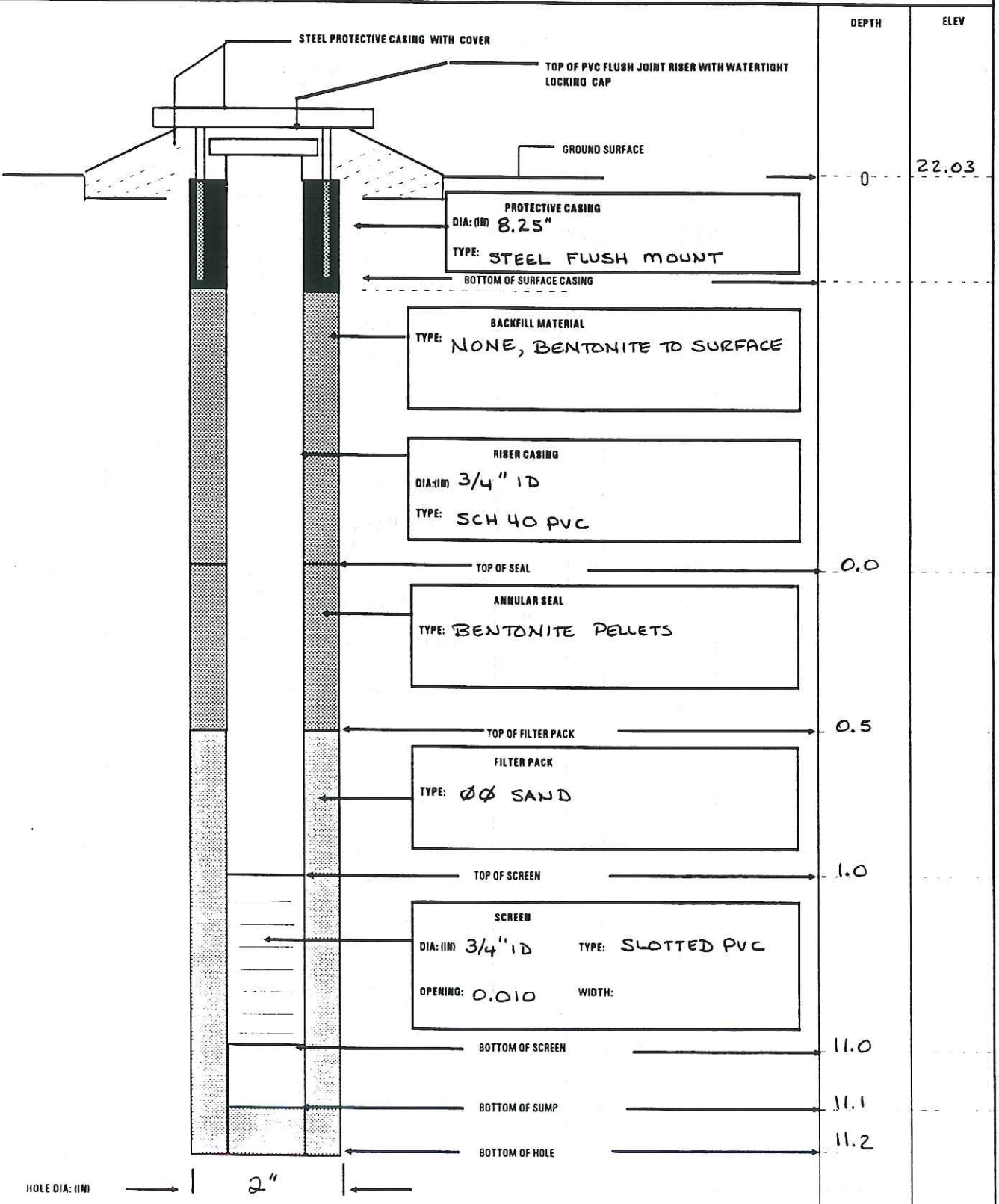
WELL NUMBER: AF-09	**BEGIN:** 5/4/99	**END:** 5/4/99
COORDINATES: N: 734211.34 E: 979549.77	**REFERENCE POINT:** TOC	**ELEVATION:** 22.93



MONITORING WELL

PROJECT: HAAF USTs 25&26

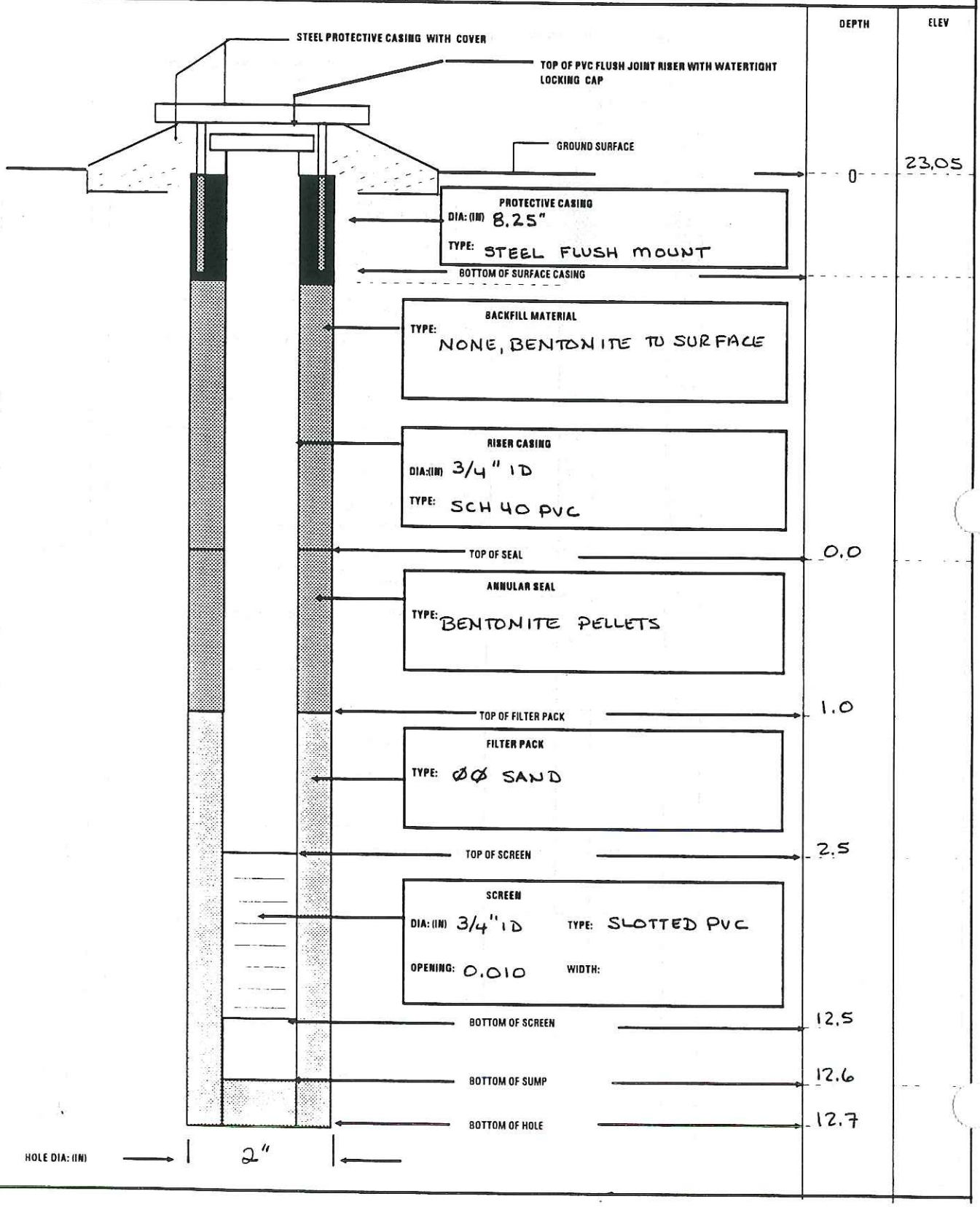
WELL NUMBER: AF-11	**BEGIN:** 5/5/99	**END:** 5/5/99
COORDINATES: N: 734167.54 E: 979635.77	**REFERENCE POINT:** TOC	**ELEVATION:** 21.93



MONITORING WELL

PROJECT: HAAF USTs 25&26

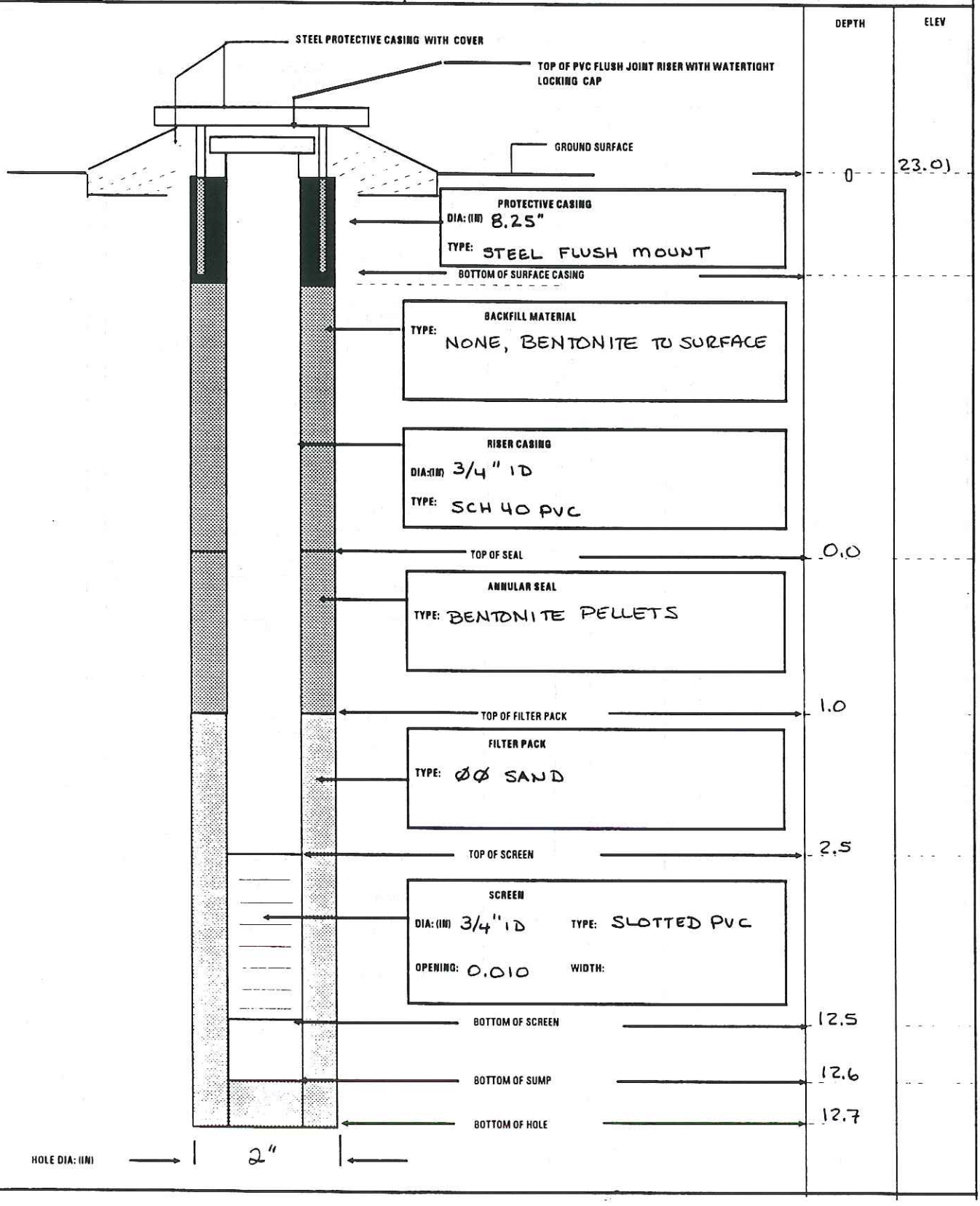
WELL NUMBER: AF-12	**BEGIN:** 5/4/99	**END:** 5/4/99
COORDINATES: N: 734165.46 E: 979578.22	**REFERENCE POINT:** TOC	**ELEVATION:** 22.86



MONITORING WELL

PROJECT: HAAF USTs 25&26

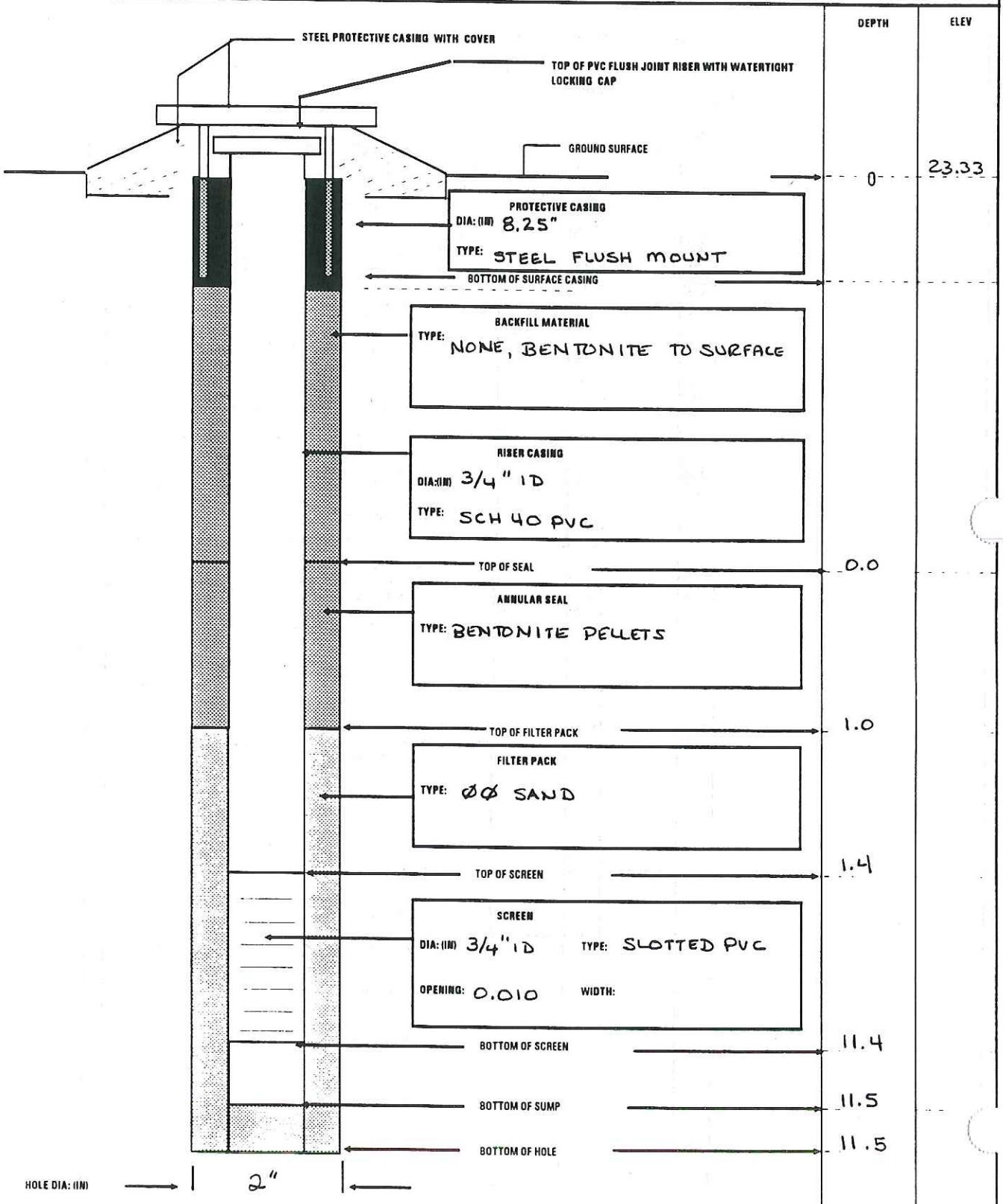
WELL NUMBER: AF-13	**BEGIN:** 5/7/99	**END:** 5/7/99
COORDINATES: N: 73243.82 E: 979567.47	**REFERENCE POINT:** TOC	**ELEVATION:** 22.79



MONITORING WELL

PROJECT: HAAF USTs 25&26

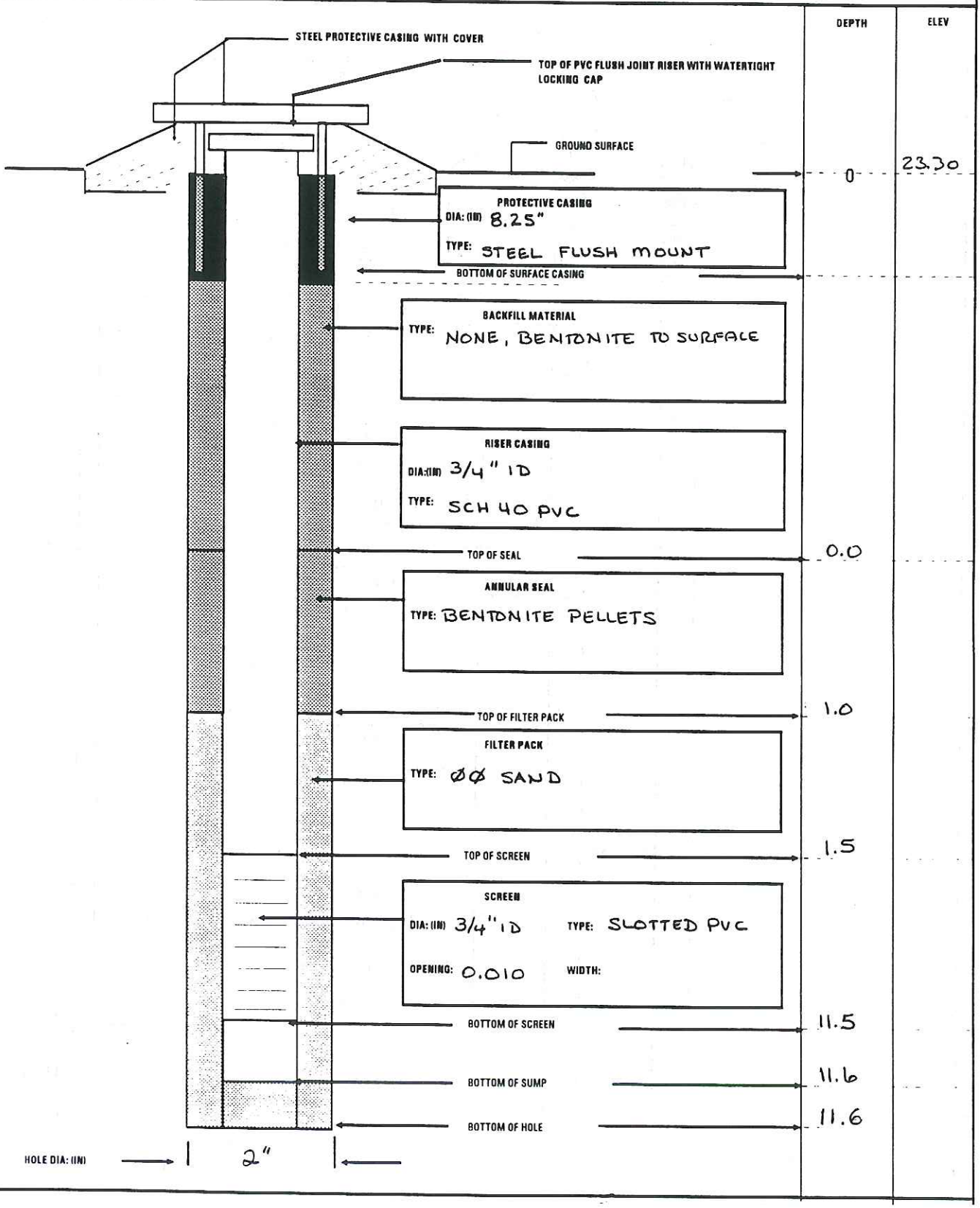
WELL NUMBER: AF-14	**BEGIN:** 5/7/99	**END:** 5/7/99
COORDINATES: N: 734284.56 E: 979617.09	**REFERENCE POINT:** TOC	**ELEVATION:** 23.04



MONITORING WELL

PROJECT: HAAF USTs 25&26

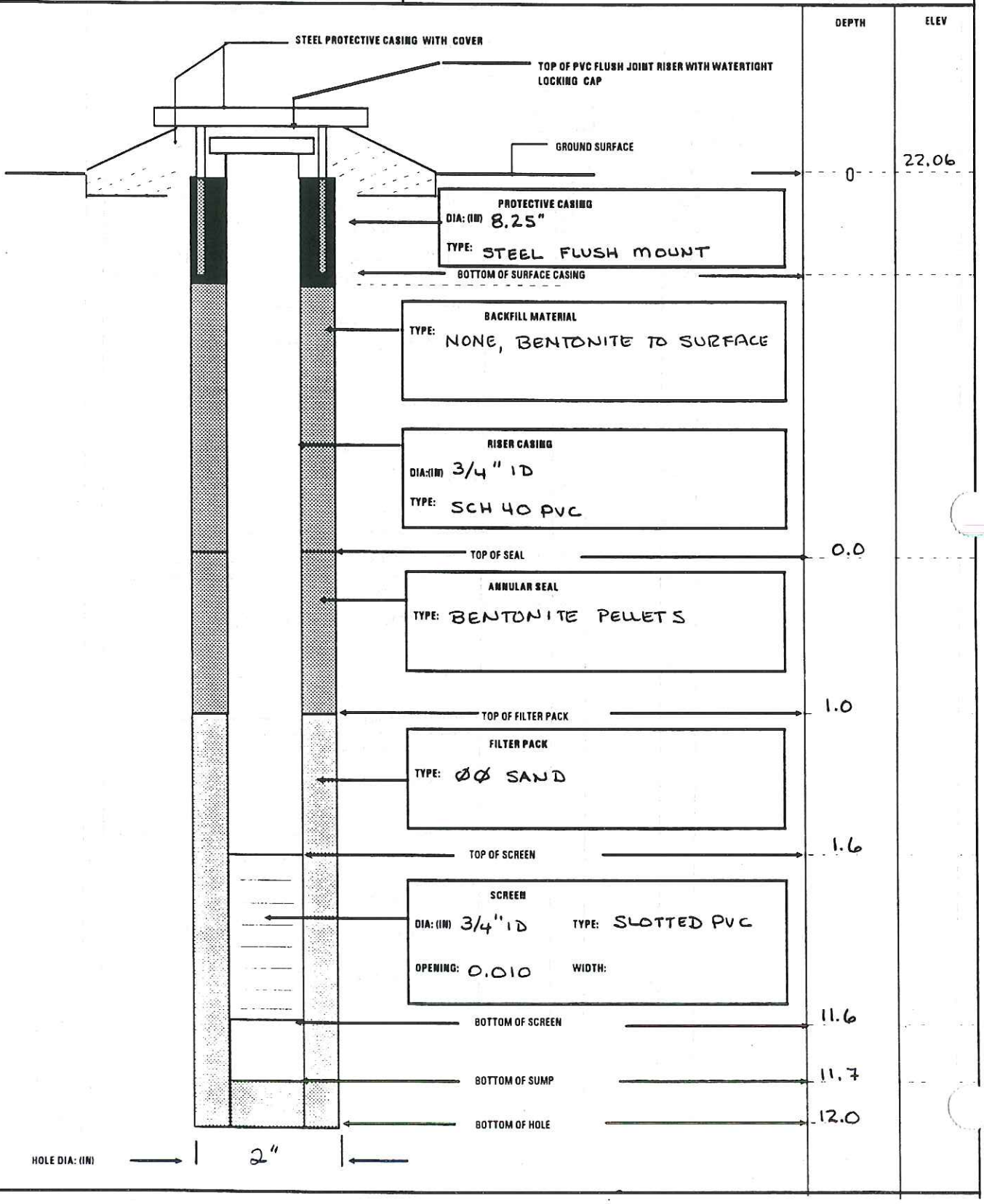
WELL NUMBER: AF-15	**BEGIN:** 5/7/99	**END:** 5/7/99
COORDINATES: N: 734253.79 E: 979641.17	**REFERENCE POINT:** TOC	**ELEVATION:** 23.28



MONITORING WELL

PROJECT: HAAF, USTs 25&26

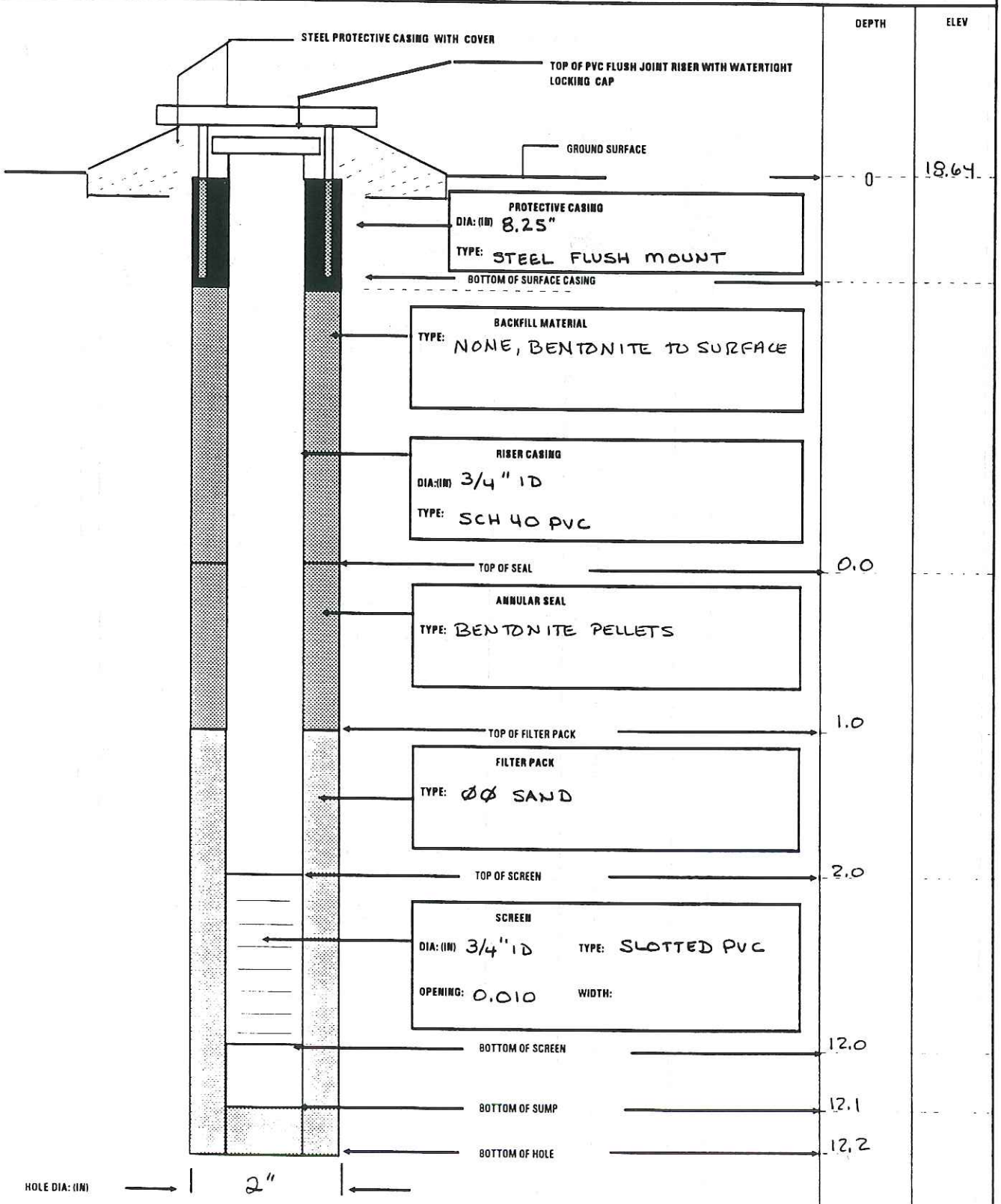
WELL NUMBER: AF-16	**BEGIN:** 5/7/99	**END:** 5/7/99
COORDINATES: N: 734223.09 E: 979682.24	**REFERENCE POINT:** TOC	**ELEVATION:** 22.17



MONITORING WELL

PROJECT: HAAF USTs 25&26

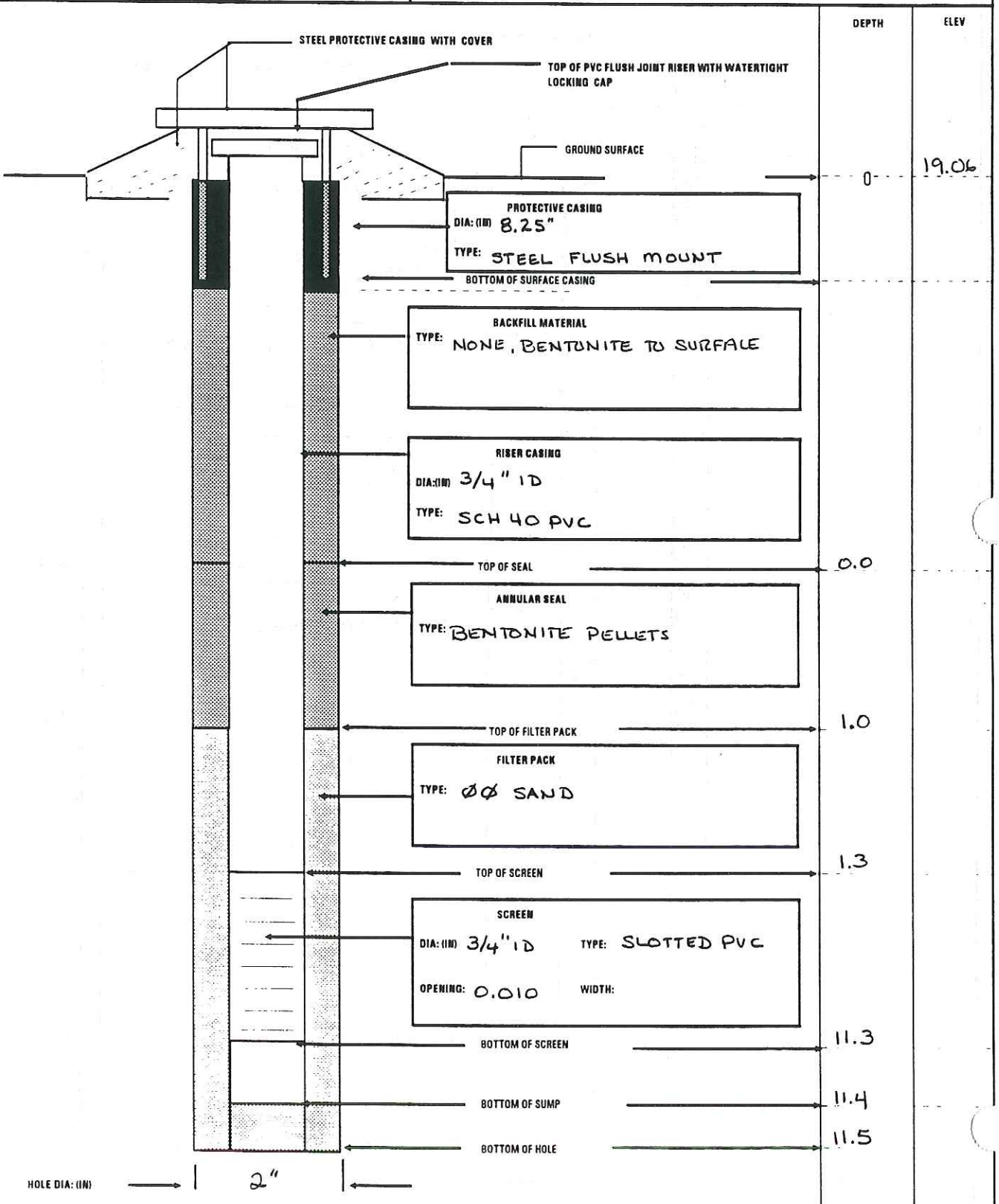
WELL NUMBER: AF-17	**BEGIN:** 5/8/99	**END:** 5/8/99
COORDINATES: N: 734023.58 E: 979539.92	**REFERENCE POINT:** TOC	**ELEVATION:** 18.93



MONITORING WELL

PROJECT: HAAF USTs 25&26

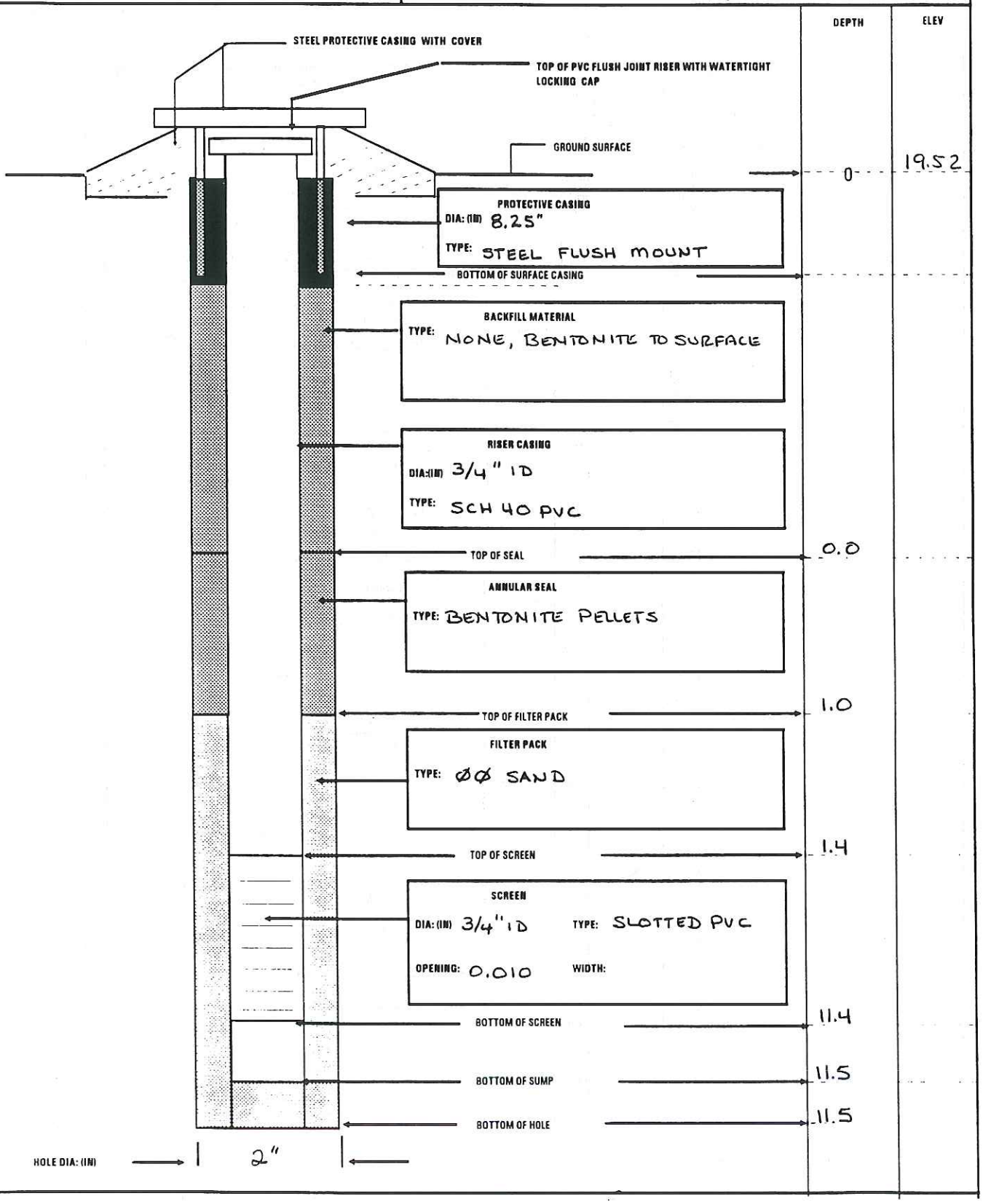
WELL NUMBER: AF-18	**BEGIN:** 5/8/99	**END:** 5/8/99
COORDINATES: N: 734051.22 E: 979517.96	**REFERENCE POINT:** TOC	**ELEVATION:** 19.33



MONITORING WELL

PROJECT: HAAF USTs 25&26

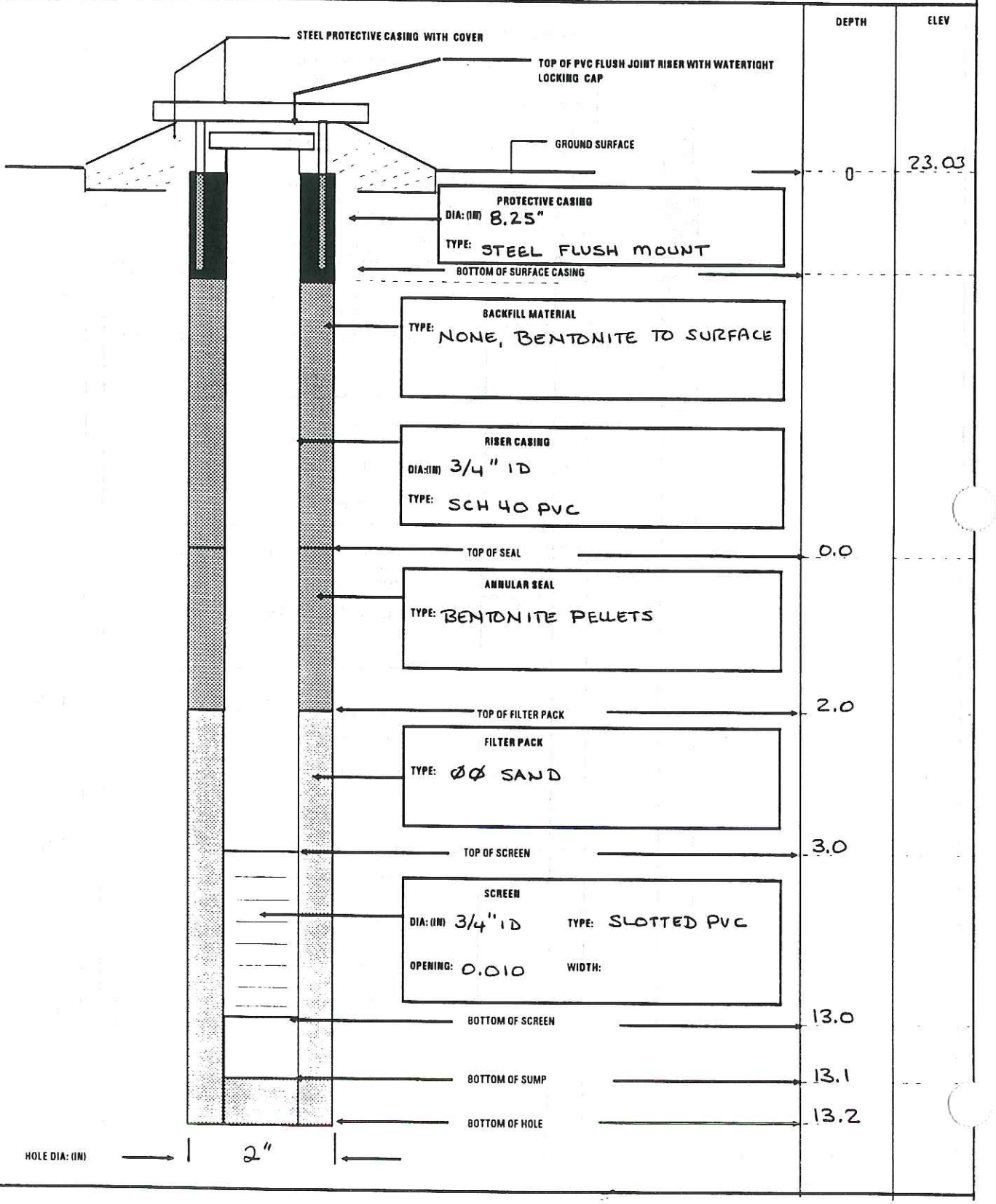
WELL NUMBER: AF-19	**BEGIN:** 5/8/99	**END:** 5/8/99
COORDINATES: N: 734038.69 E: 979490.11	**REFERENCE POINT:** TOC	**ELEVATION:** 19.70



MONITORING WELL

PROJECT: HAAF USTs 25&26

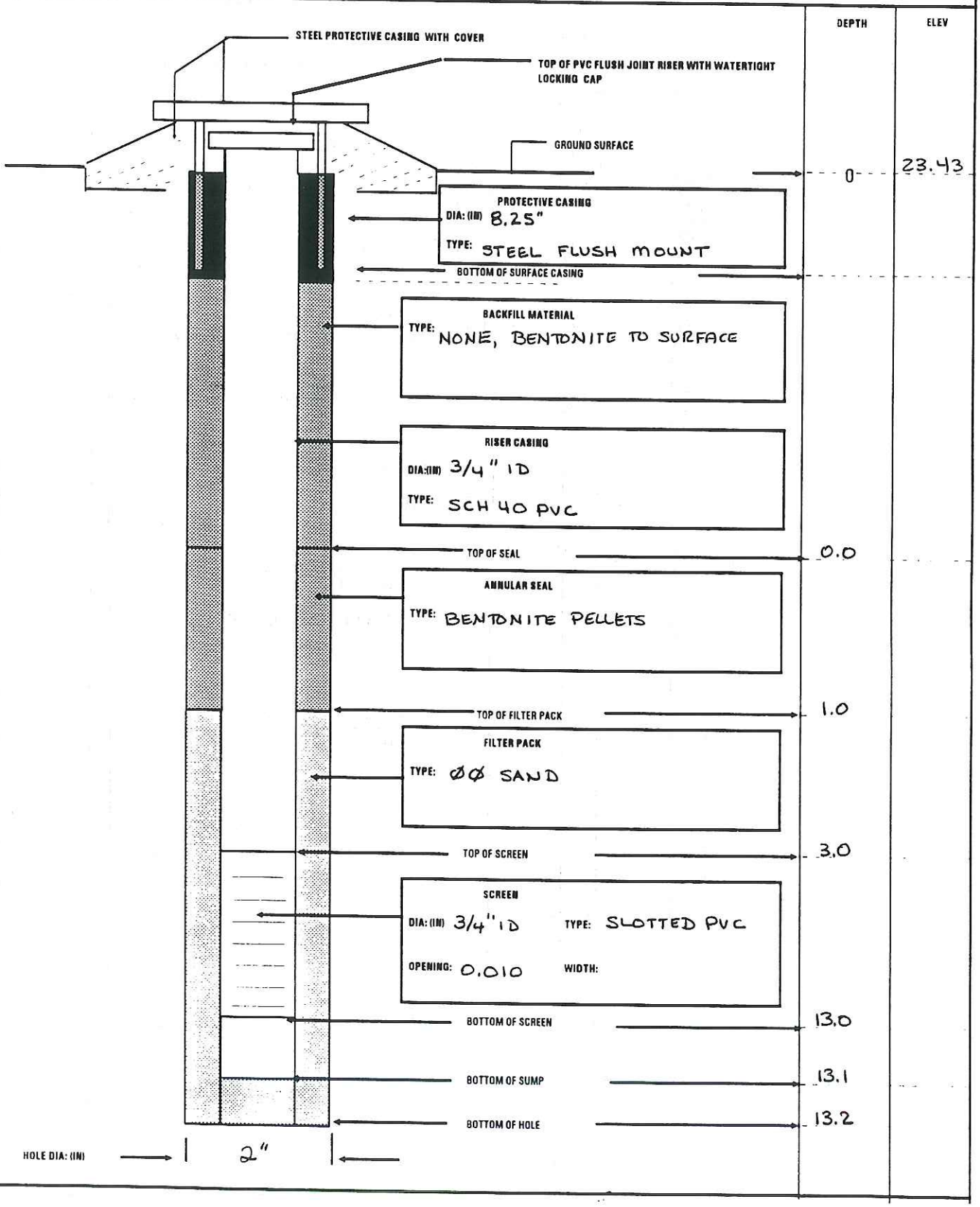
WELL NUMBER: AF-20	**BEGIN:** 5/8/99	**END:** 5/8/99
COORDINATES: N: 734086.22 E: 979494.33	**REFERENCE POINT:** TOC	**ELEVATION:** 22.84



MONITORING WELL

PROJECT: HAAF USTs 25&26

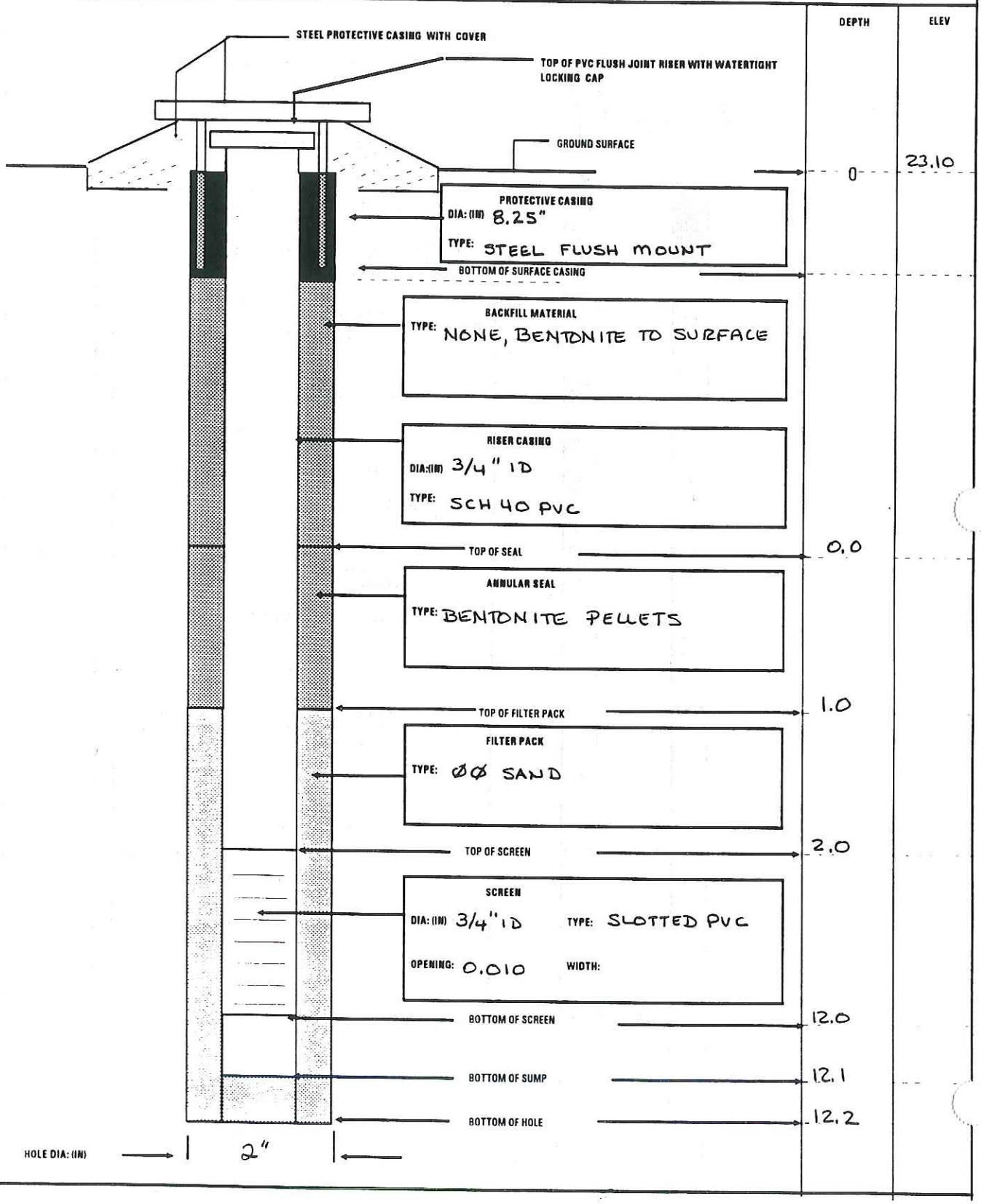
WELL NUMBER: AF-23	**BEGIN:** 5/8/99	**END:** 5/8/99
COORDINATES: N: 734097.56 E: 979456.29	**REFERENCE POINT:** TOC	**ELEVATION:** 23.25



MONITORING WELL

PROJECT: HAAF USTs 25&26

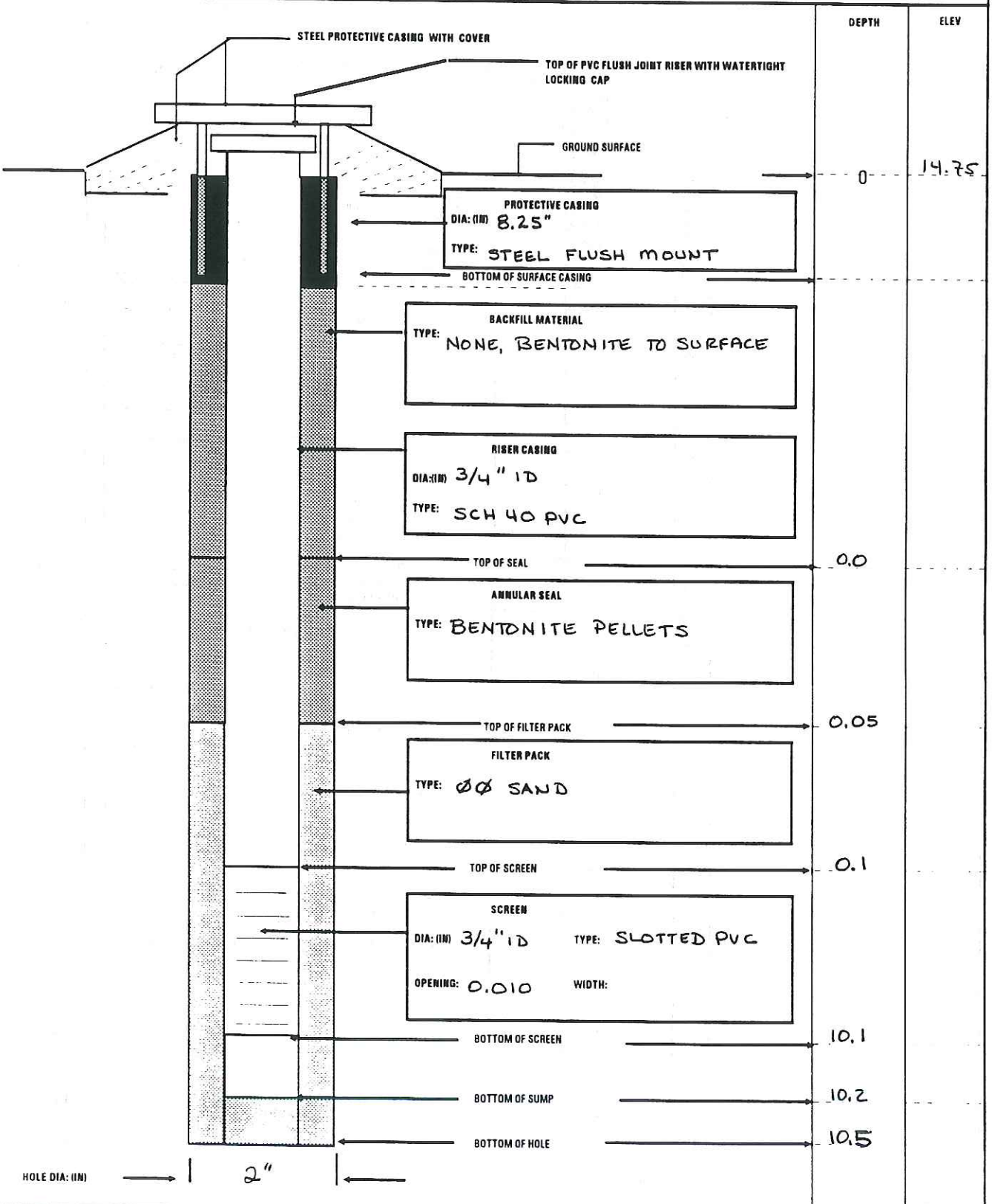
WELL NUMBER: AF-24	**BEGIN:** 5/8/99	**END:** 5/8/99
COORDINATES: N: 734199.08 E: 979473.21	**REFERENCE POINT:** TOC	**ELEVATION:** 22.85



MONITORING WELL

PROJECT: HAAF USTs 25&26

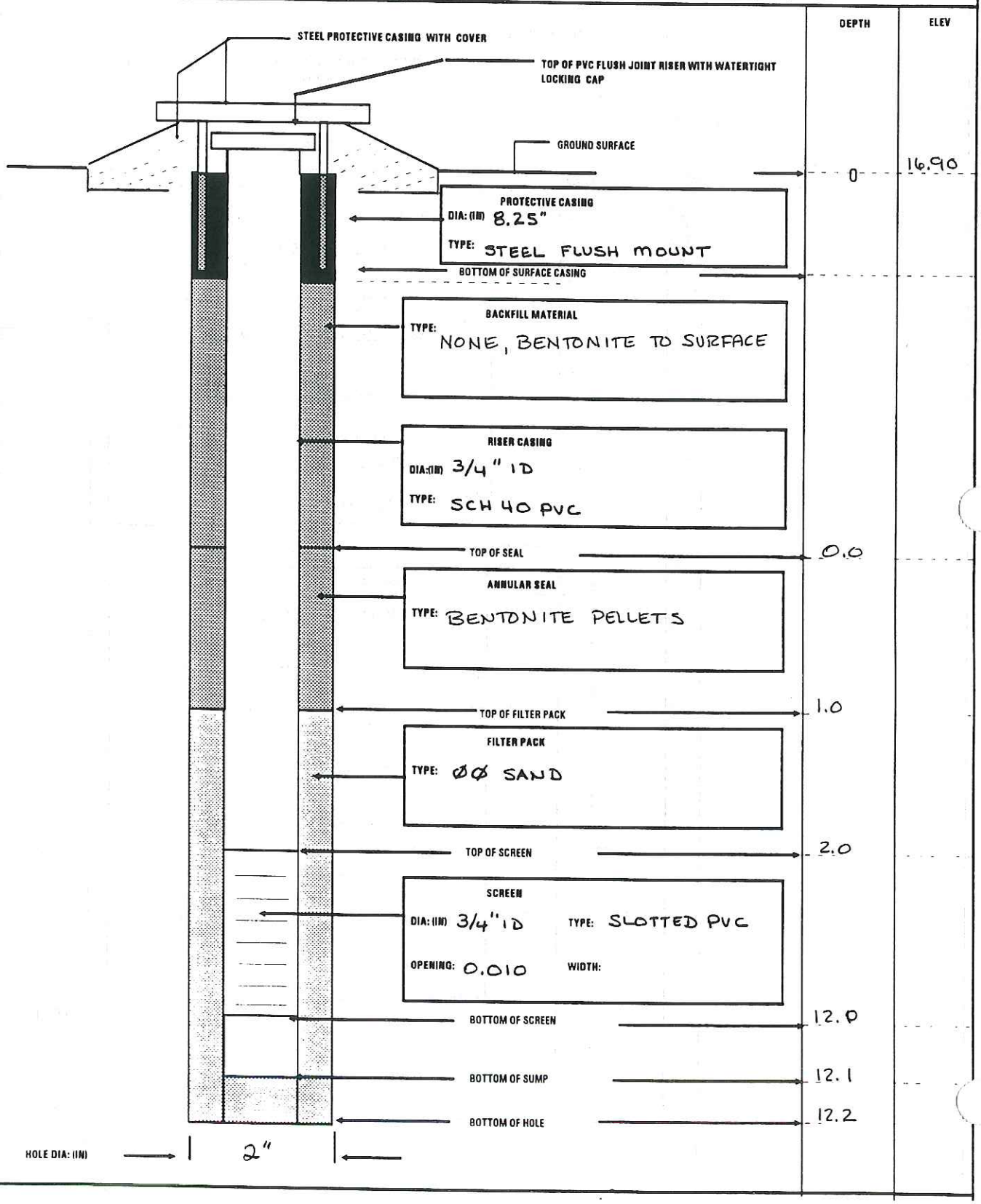
WELL NUMBER: AF-25	**BEGIN:** 5/11/99	**END:** 5/11/99
COORDINATES: N: 734020.29 E: 979470.48	**REFERENCE POINT:** TOC	**ELEVATION:** 15.01



MONITORING WELL

PROJECT: HAAF USTs 25&26

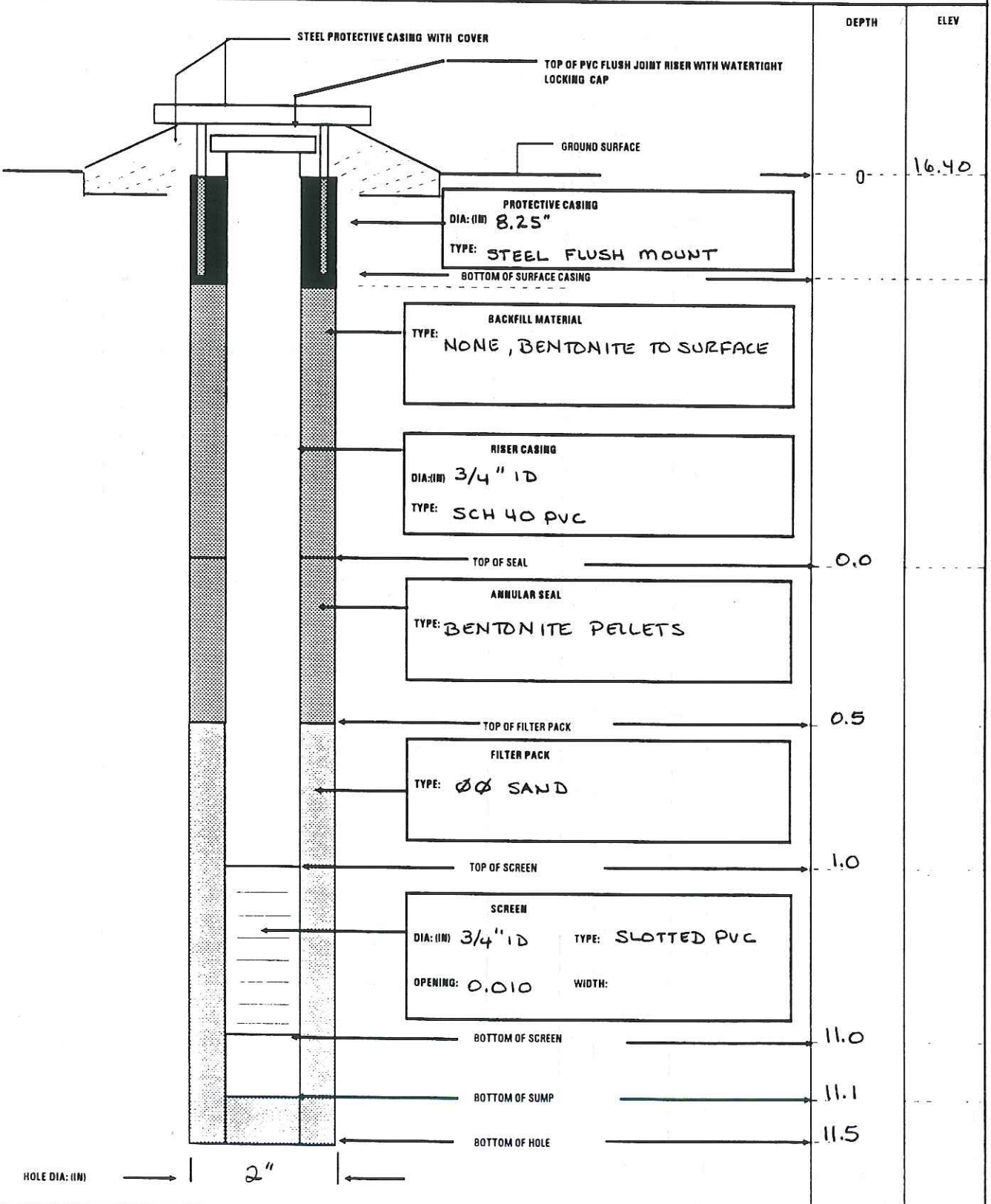
WELL NUMBER: AF-26	**BEGIN:** 5/11/99	**END:** 5/11/99
COORDINATES: N: 733986.65 E: 979544.00	**REFERENCE POINT:** TOC	**ELEVATION:** 17.04



MONITORING WELL

PROJECT: HAAF USTs 25&26

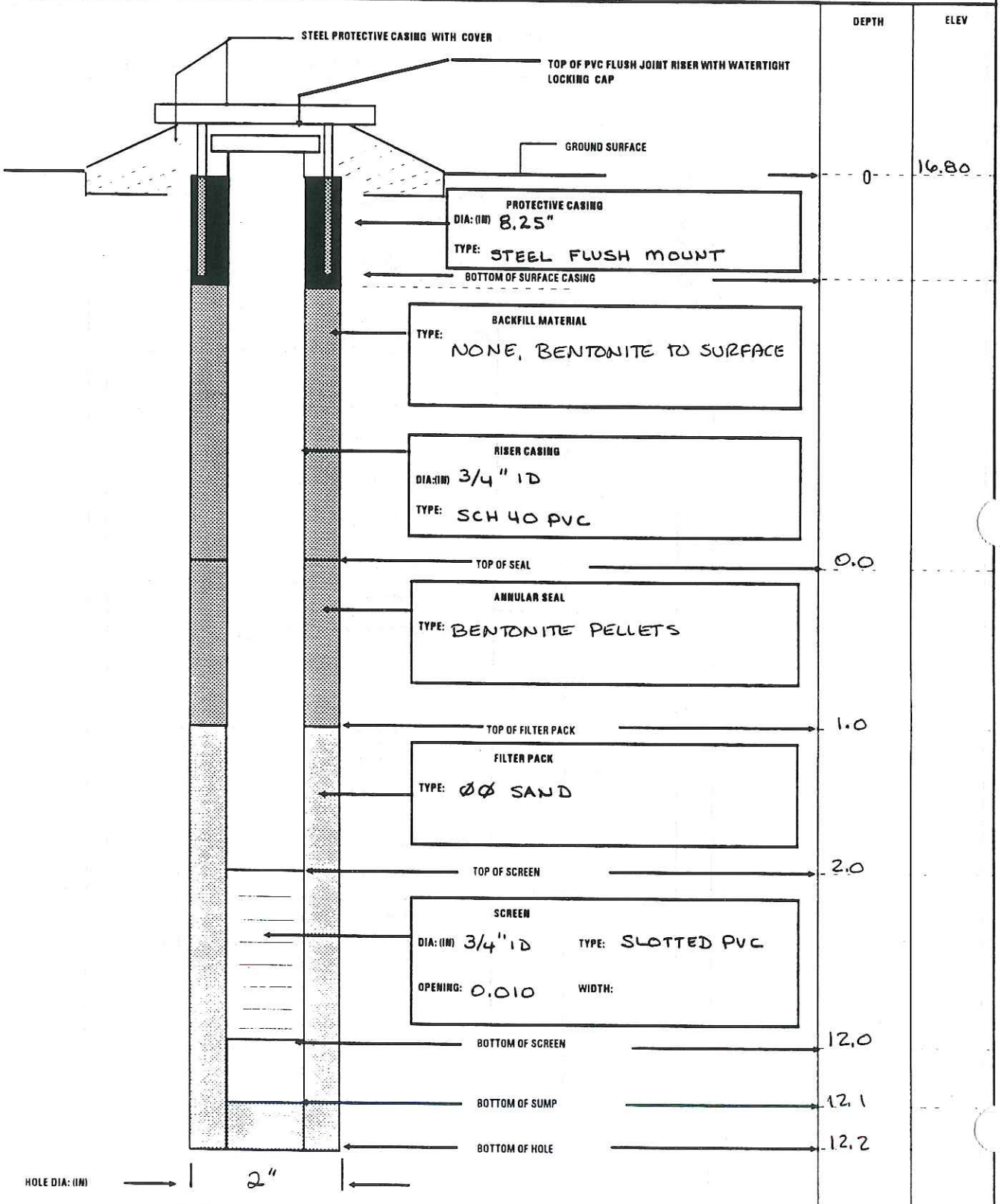
WELL NUMBER: AF-27	**BEGIN:** 5/11/99	**END:** 5/11/99
COORDINATES: N: 734005.71 E: 979516.52	**REFERENCE POINT:** TOC	**ELEVATION:** 16.55



MONITORING WELL

PROJECT: HAAF USTs 25&26

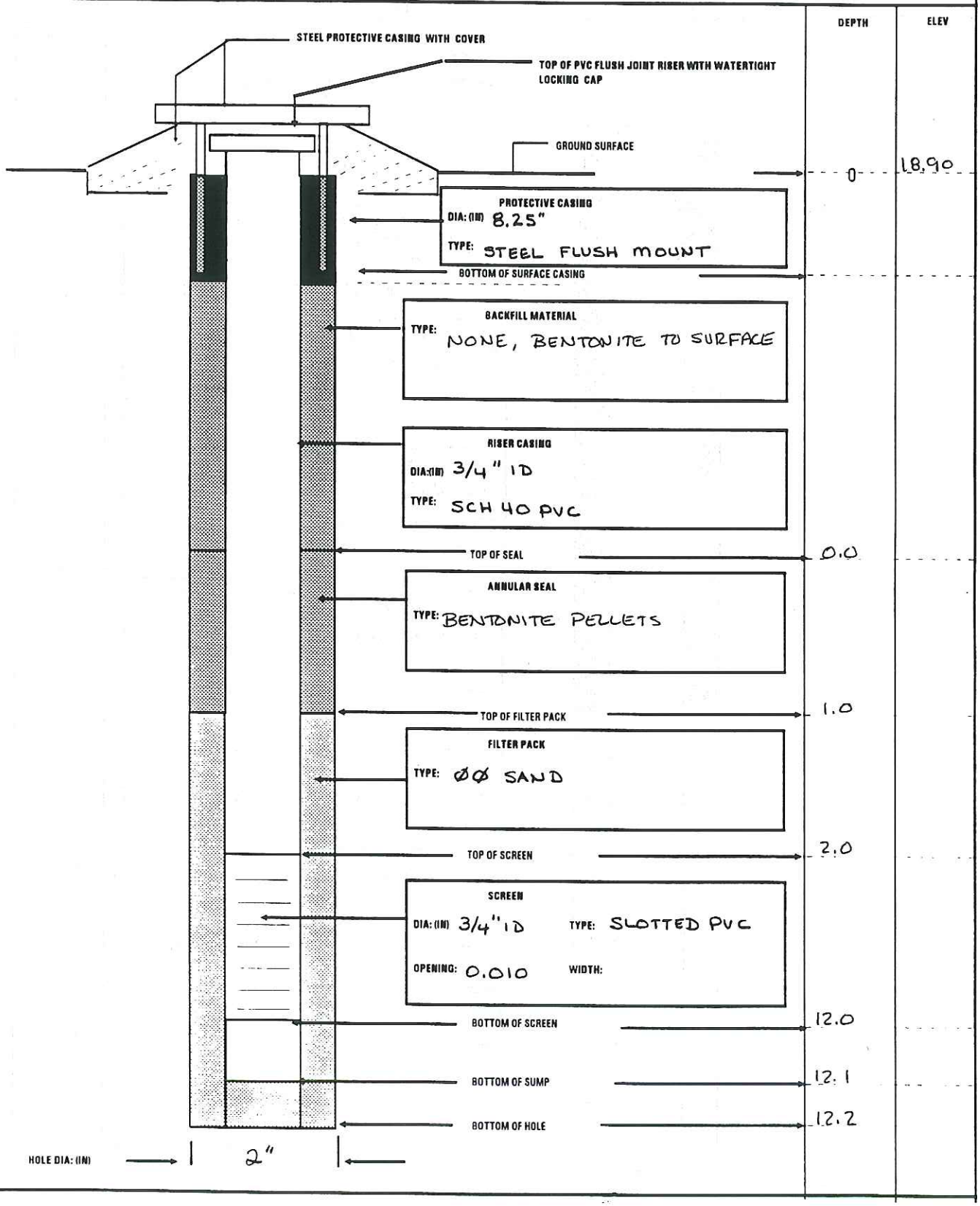
WELL NUMBER: AF-28	**BEGIN:** 5/11/99	**END:** 5/11/99
COORDINATES: N: 734078.69 E: 979000.87	**REFERENCE POINT:** TOC	**ELEVATION:** 17.13



MONITORING WELL

PROJECT: HAAF USTs 25&26

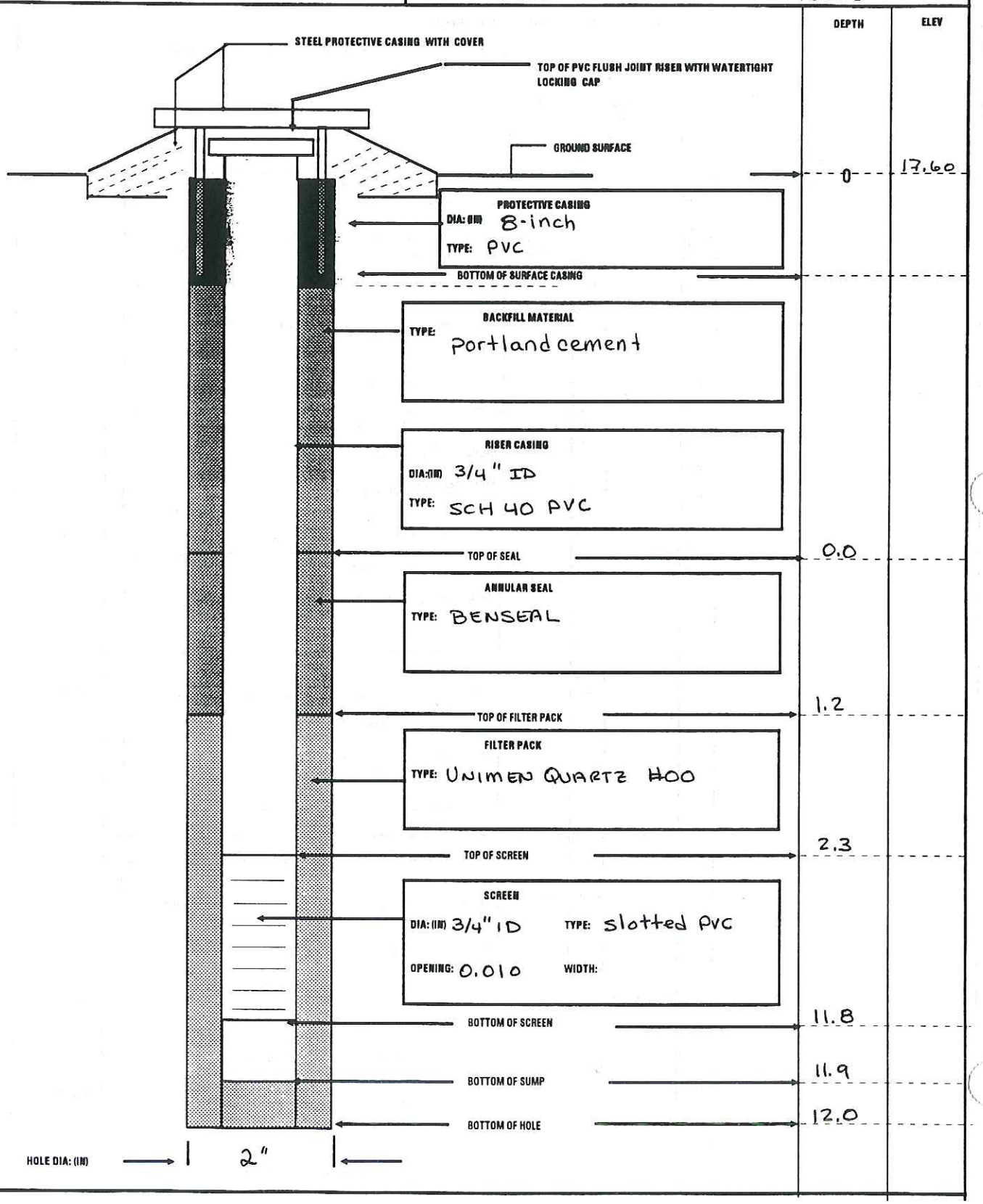
WELL NUMBER: AF-29	**BEGIN:** 5/11/99	**END:** 5/11/99
COORDINATES: N: 734007.36 E: 979587.21	**REFERENCE POINT:** TOC	**ELEVATION:** 19.06



MONITORING WELL

PROJECT: USTs 25 & 26

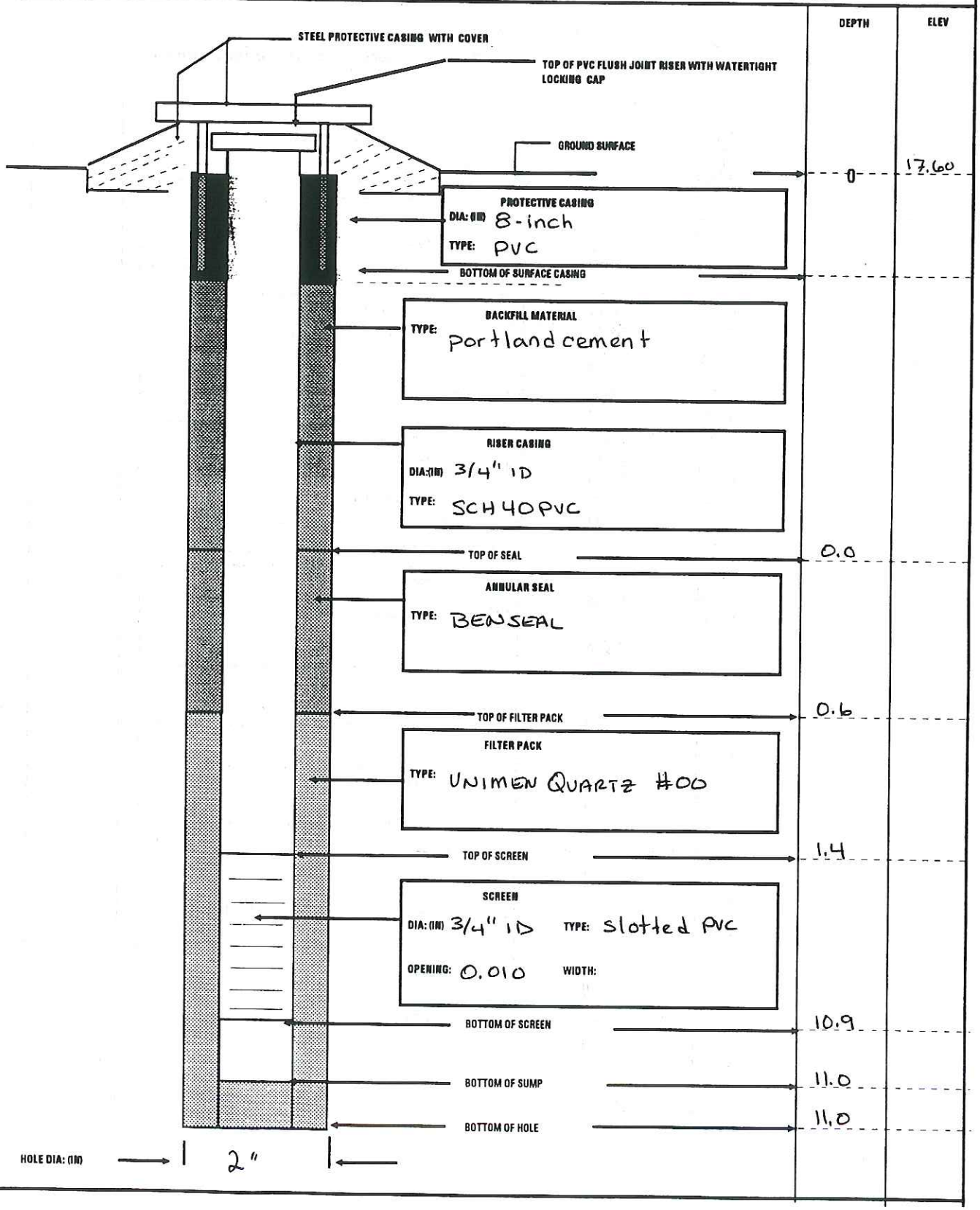
WELL NUMBER: AF-33	**BEGIN:** 9/25/99	**END:** 9/25/99
COORDINATES: N: 734123.31 E: 979659.91	**REFERENCE POINT:** TOC	**ELEVATION:** 18.02



MONITORING WELL

PROJECT: USTs 25 & 26

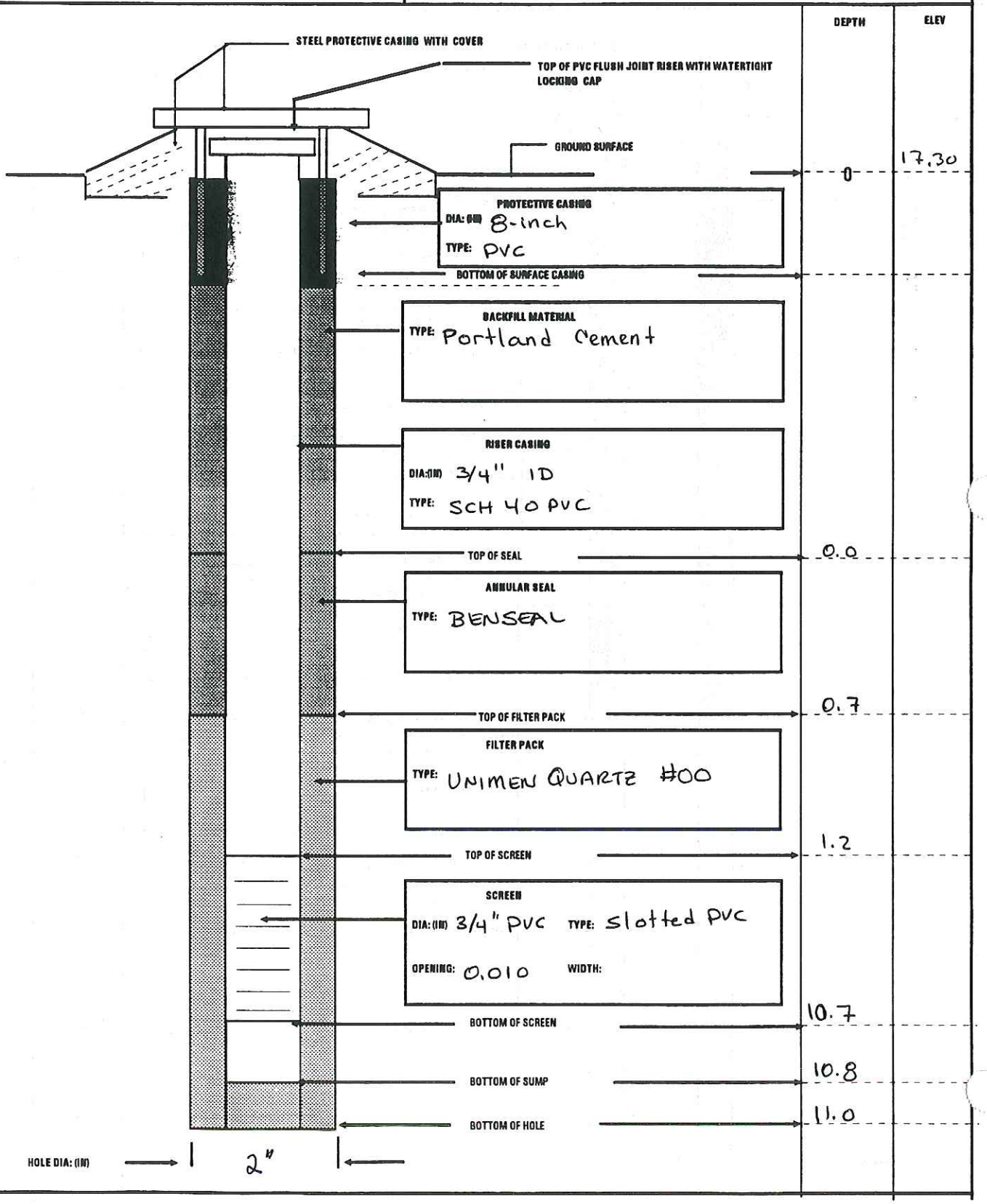
LL NUMBER: AF-34	**BEGIN:** 9/25/99	**END:** 9/25/99
COORDINATES: N: 734007.30 E: 979725.81	**REFERENCE POINT:** TOC	**ELEVATION:** 17.85



MONITORING WELL

PROJECT: USTs 25 & 26

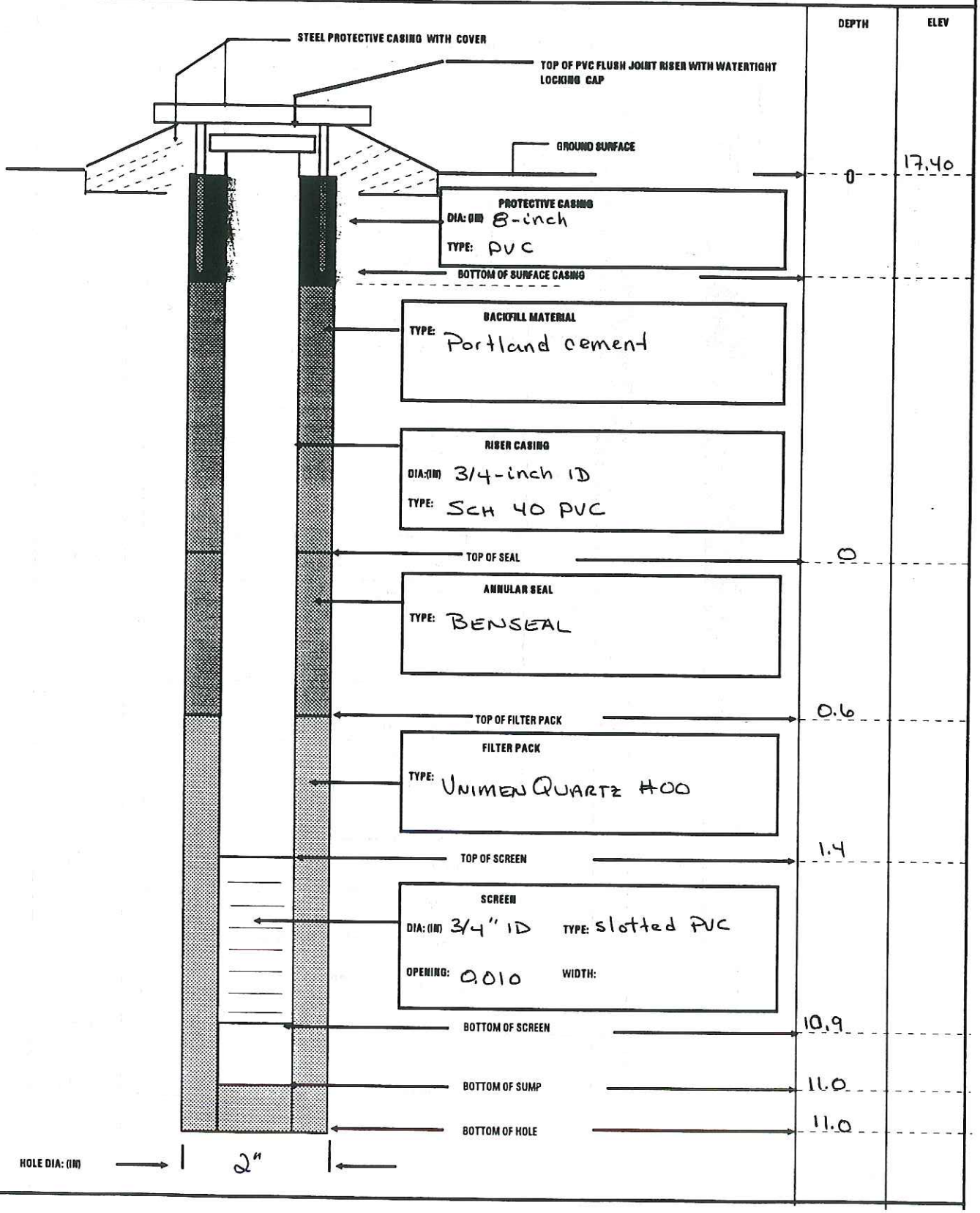
WELL NUMBER: AF-35	**BEGIN:** 9/25/99	**END:** 9/25/99
COORDINATES: N: 734025.16 E: 979653.95	**REFERENCE POINT:** TOC	**ELEVATION:** 17.63



MONITORING WELL

PROJECT: USTs 25 & 26

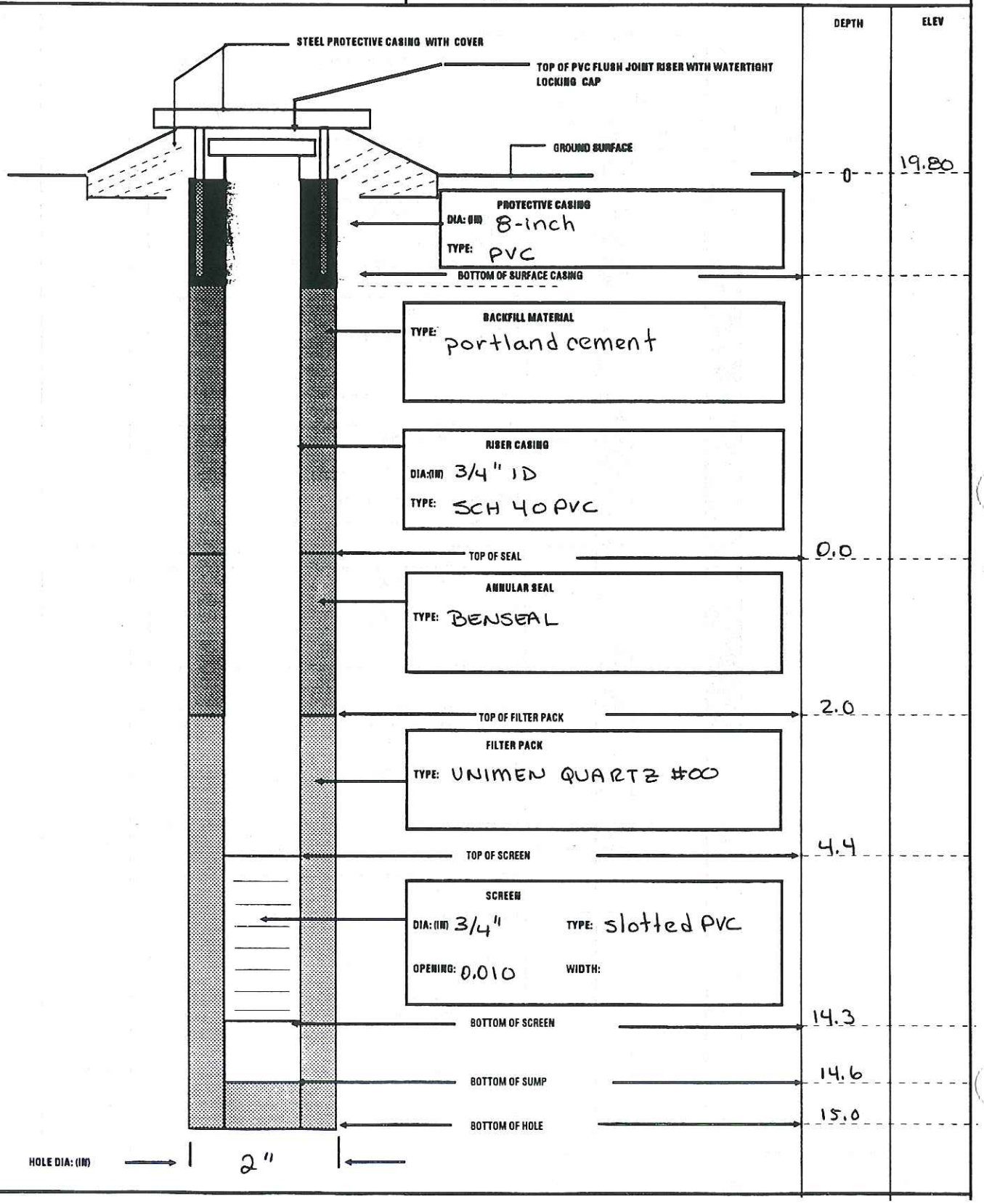
WELL NUMBER: AF-36	**BEGIN:** 9/25/99	**END:** 9/25/99
COORDINATES: N: 733954.70 E: 979592.53	**REFERENCE POINT:** TOC	**ELEVATION:** 17.52



MONITORING WELL

PROJECT: USTs 25 & 26

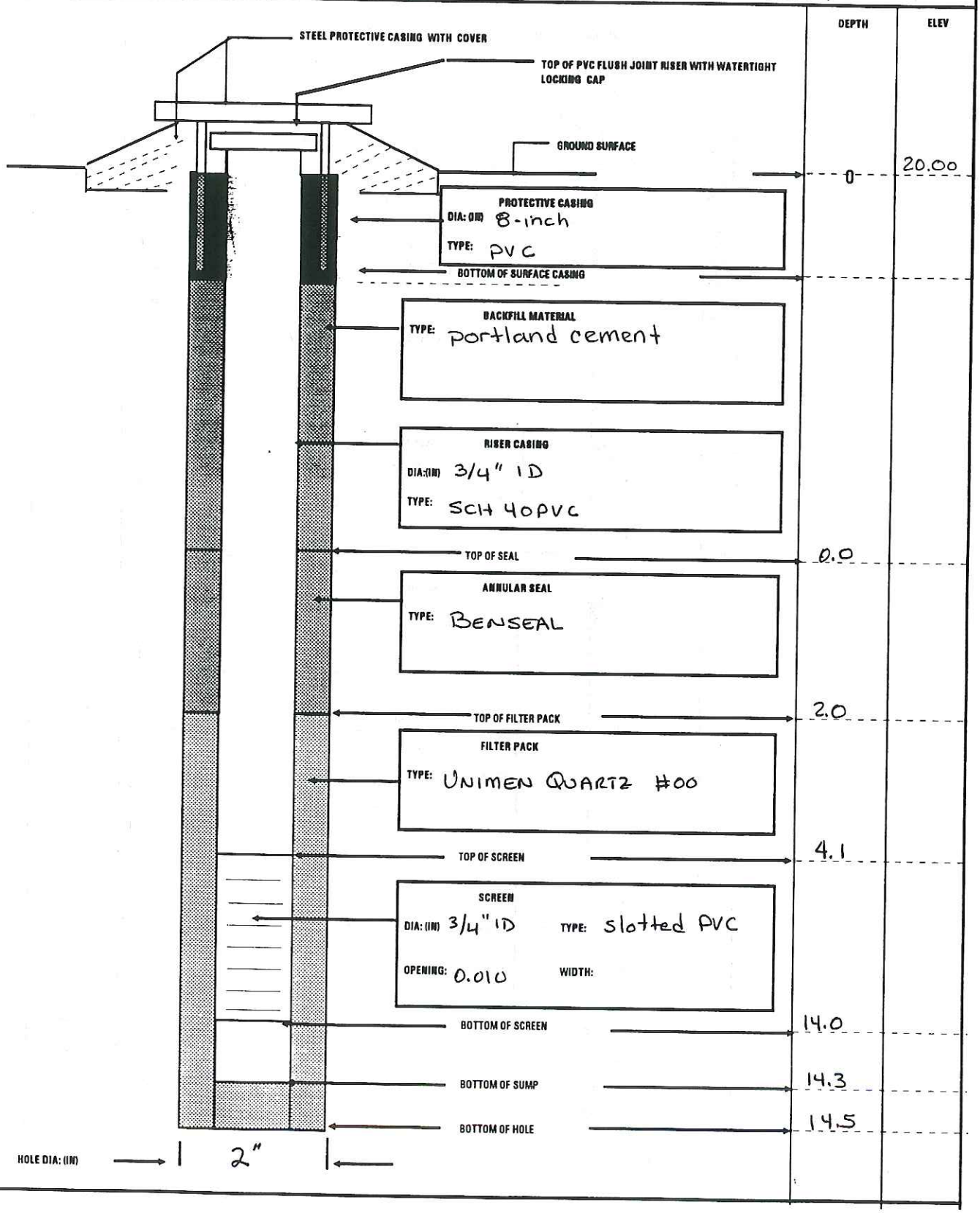
WELL NUMBER: AF-37	**BEGIN:** 9/25/99	**END:** 9/25/99
COORDINATES: N: 733952.49 E: 979506.73	**REFERENCE POINT:** TOC	**ELEVATION:** 20.07



MONITORING WELL

PROJECT: USTs 25 & 26

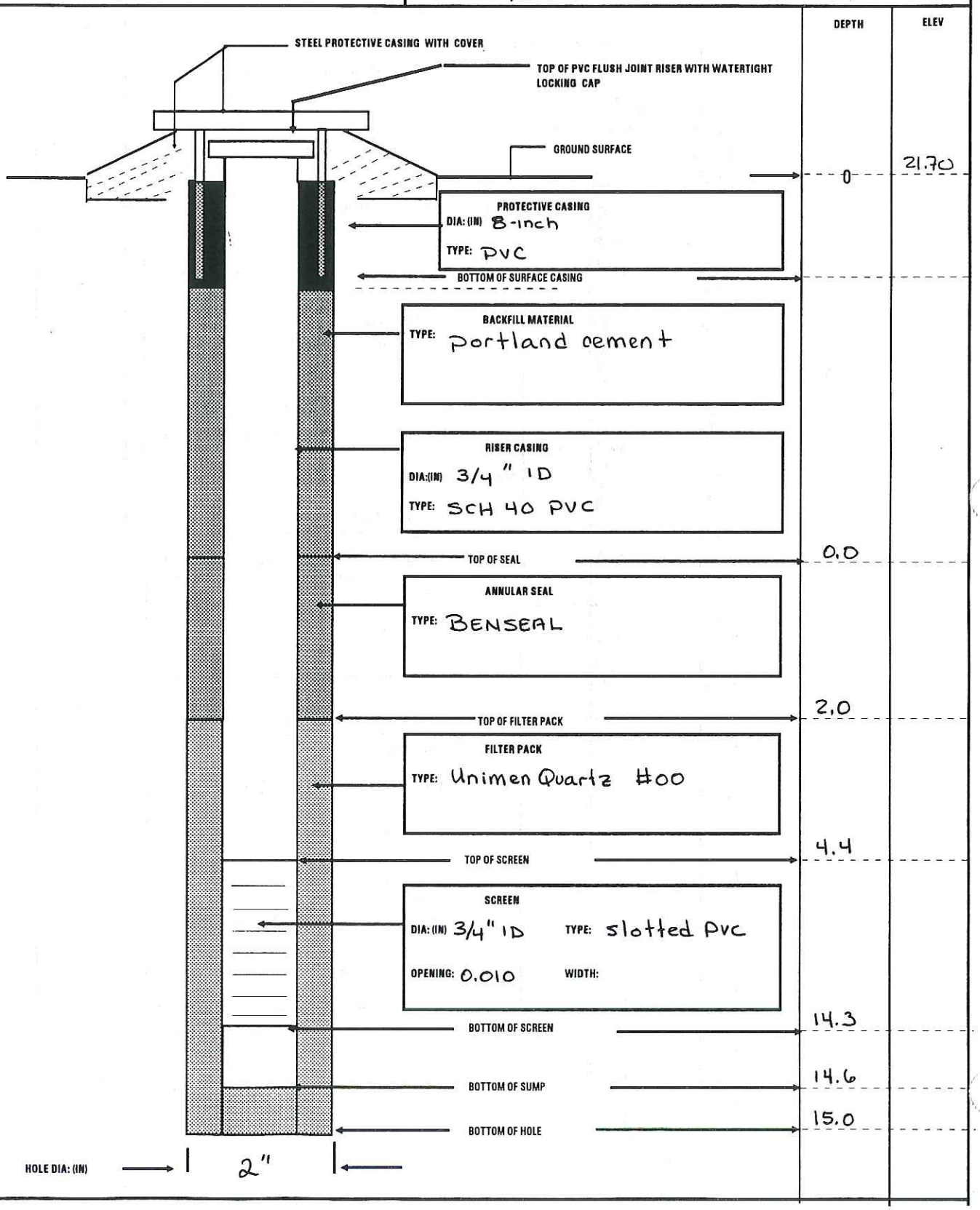
WELL NUMBER: AF-38	**BEGIN:** 9/25/99	**END:** 9/25/99
COORDINATES: N: 733990.35 E: 479405.78	**REFERENCE POINT:** TOC	**ELEVATION:** 20.24



MONITORING WELL

PROJECT: USTs 25 & 26

WELL NUMBER: AF-39	**BEGIN:** 9/25/99	**END:** 9/25/99
COORDINATES: N: 734050.46 E: 979442.65	**REFERENCE POINT:** TOC	**ELEVATION:** 22.14



APPENDIX VIII

GROUNDWATER AND SURFACE WATER LABORATORY RESULTS

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Table VIII-A. Summary of CAP-Part B Groundwater Analytical Results

Station:		In Stream	AF-01	AF-02	AF-03	AF-04	AF-05
Sample ID:	Federal	Water	AF0112	AF0212	AF0312	AF0412	AF0512
Screened Interval (ft BGS):	SDWA	Quality	2.5 - 12.5	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0
Collection Date:	MCLs[1]	Standards[2]	04-May-99	05-May-99	05-May-99	05-May-99	05-May-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71.28	13.2 =	27.4 =	51.8 =	1.5 J	8.2 =
Toluene	1000	200000	0.82 J	1.8 J	1.6 J	1.4 J	2 U
Ethylbenzene	700	28718	2 U	3.4 =	112 =	2 U	5.2 =
Xylenes, Total	10000	NRC	3 U	1.1 J	2.6 J	5 U	5 U
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene	NRC	NRC	10 R	10.4 U	10 UJ	11.1 U	11.1 U
Acenaphthene	NRC	NRC	10 R	10.4 U	10 UJ	11.1 U	11.1 U
Acenaphthylene	NRC	NRC	10 R	10.4 U	10 UJ	11.1 U	11.1 U
Anthracene	NRC	110000	10 R	10.4 U	10 UJ	11.1 U	11.1 U
Benzo(a)anthracene	NRC	0.0311	10 R	10.4 U	10 UJ	11.1 U	11.1 U
Benzo(a)pyrene	0.2	0.0311	10 R	10.4 U	10 UJ	11.1 U	11.1 U
Benzo(b)fluoranthene	NRC	NRC	10 R	10.4 U	10 UJ	11.1 U	11.1 U
Benzo(g,h,i)perylene	NRC	NRC	10 R	10.4 U	10 UJ	11.1 U	11.1 U
Benzo(k)fluoranthene	NRC	0.0311	10 R	10.4 U	10 UJ	11.1 U	11.1 U
Chrysene	NRC	0.0311	10 R	10.4 U	10 UJ	11.1 U	11.1 U
Dibenzo(a,h)anthracene	NRC	0.0311	10 R	10.4 U	10 UJ	11.1 U	11.1 U
Fluoranthene	NRC	370	10 R	10.4 U	10 UJ	11.1 U	11.1 U
Fluorene	NRC	14000	10 R	10.4 U	10 UJ	11.1 U	11.1 U
Indeno(1,2,3-cd)pyrene	NRC	0.0311	10 R	10.4 U	10 UJ	11.1 U	11.1 U
Naphthalene	NRC	NRC	10 R	10.4 U	21.8 J	11.1 U	0.81 J
Phenanthrene	NRC	NRC	10 R	10.4 U	10 UJ	11.1 U	11.1 U
Pyrene	NRC	11000	10 R	10.4 U	10 UJ	11.1 U	11.1 U
OTHER ANALYTES							
Iron (dissolved)	NRC	NRC	177000 =	64800 =	49700 =	297000 =	45000 =

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

1 U.S. Environmental Protection Agency maximum contaminant level

2 GA EPD water quality standards (Chapter 391-03-6.03)

* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.

Laboratory Qualifiers

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

UJ Indicates that 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 CAP-Part B Groundwater Analytical Results (continued)

Station:		In Stream	AF-06	AF-07	AF-08	AF-09	AF-10
Sample ID:	Federal	Water	AF0612	AF0712	AF0812	AF0912	AF1012
Screened Interval (ft BGS):	SDWA	Quality	2.0 - 12.0	2.5 - 12.5	2.5 - 12.5	2.0 - 12.0	2.5 - 12.5
Collection Date:	MCLs[1]	Standards[2]	05-May-99	04-May-99	04-May-99	04-May-99	04-May-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71.28	490 =	9940 =	7.4 =	2.1 =	1.1 J
Toluene	1000	200000	20 =	200 U	0.56 J	0.98 J	2 U
Ethylbenzene	700	28718	31.6 =	952 =	2 U	17.3 =	2 U
Xylenes, Total	10000	NRC	24.6 J	792 =	3 U	0.68 J	3 U
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene	NRC	NRC	10.4 U	400 U	10 R	10 R	10 R
Acenaphthene	NRC	NRC	10.4 U	400 U	10 R	2.4 J	10 R
Acenaphthylene	NRC	NRC	10.4 U	400 U	10 R	10 R	10 R
Anthracene	NRC	110000	10.4 U	400 U	10 R	10 R	10 R
Benzo(a)anthracene	NRC	0.0311	10.4 U	400 U	10 R	10 R	10 R
Benzo(a)pyrene	0.2	0.0311	10.4 U	400 U	4.9 J	10 R	2.5 J
Benzo(b)fluoranthene	NRC	NRC	10.4 U	400 U	10 R	10 R	10 R
Benzo(g,h,i)perylene	NRC	NRC	10.4 U	400 U	10 R	10 R	10 R
Benzo(k)fluoranthene	NRC	0.0311	10.4 U	400 U	10 R	10 R	10 R
Chrysene	NRC	0.0311	10.4 U	400 U	10 R	10 R	10 R
Dibenzo(a,h)anthracene	NRC	0.0311	10.4 U	400 U	10 R	10 R	10 R
Fluoranthene	NRC	370	10.4 U	400 U	10 R	10 R	10 R
Fluorene	NRC	14000	10.4 U	400 U	1.5 J	4.3 J	10 R
Indeno(1,2,3-cd)pyrene	NRC	0.0311	10.4 U	400 U	10 R	10 R	10 R
Naphthalene	NRC	NRC	10.4 U	511 =	10 R	28.7 J	10 R
Phenanthrene	NRC	NRC	10.4 U	400 U	10 R	1.9 J	10 R
Pyrene	NRC	11000	10.4 U	400 U	10 R	0.59 J	10 R
OTHER ANALYTES							
Iron (dissolved)	NRC	NRC	30000 =	73700 =	128000 =	56300 =	78100 =

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

1 U.S. Environmental Protection Agency maximum contaminant level

2 GA EPD water quality standards (Chapter 391-03-6.03)

* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.

Laboratory Qualifiers

U	Indicates the compound was not detected at the concentration reported.
UJ	Indicates that 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 CAP-Part B Groundwater Analytical Results (continued)

Station:		In Stream	AF-11	AF-12	AF-13	AF-14	AF-15
Sample ID:	Federal	Water	AF1112	AF1212	AF1312	AF1412	AF1512
Screened Interval (ft BGS):	SDWA	Quality	1.0 - 11.0	2.5 - 12.5	2.5 - 12.5	1.4 - 11.4	1.5 - 11.5
Collection Date:	MCLs[1]	Standards[2]	05-May-99	04-May-99	07-May-99	07-May-99	07-May-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71.28	2 U	79.3 =	0.98 J	2 U	2 U
Toluene	1000	200000	2 U	20 U	2 U	2 U	2 U
Ethylbenzene	700	28718	2 U	92.3 =	0.57 J	2 U	2 U
Xylenes, Total	10000	NRC	5 U	27.4 J	0.93 J	3 U	3 U
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene	NRC	NRC	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ
Acenaphthene	NRC	NRC	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ
Acenaphthylene	NRC	NRC	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ
Anthracene	NRC	110000	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ
Benzo(a)anthracene	NRC	0.0311	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ
Benzo(a)pyrene	0.2	0.0311	10.8 U	400 U	9.9 U	10.6 UJ	1.6 J
Benzo(b)fluoranthene	NRC	NRC	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ
Benzo(g,h,i)perylene	NRC	NRC	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ
Benzo(k)fluoranthene	NRC	0.0311	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ
Chrysene	NRC	0.0311	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ
Dibenzo(a,h)anthracene	NRC	0.0311	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ
Fluoranthene	NRC	370	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ
Fluorene	NRC	14000	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ
Indeno(1,2,3-cd)pyrene	NRC	0.0311	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ
Naphthalene	NRC	NRC	23.3 =	59.5 J	9.9 U	10.6 UJ	10.2 UJ
Phenanthrene	NRC	NRC	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ
Pyrene	NRC	11000	10.8 U	400 U	9.9 U	10.6 UJ	10.2 UJ
OTHER ANALYTES							
Iron (dissolved)	NRC	NRC	97800 =	176000 =	160000 =	56100 =	101000 =

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

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

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

* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.

Laboratory Qualifiers

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

UJ Indicates that 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 CAP-Part B Groundwater Analytical Results (continued)

Station:		In Stream	AF-16	AF-17	AF-18	AF-19	AF-20
Sample ID:	Federal	Water	AF1612	AF1712	AF1812	AF1912	AF2012
Screened Interval (ft BGS):	SDWA	Quality	1.5 - 11.5	2.5 - 12.5	1.5 - 11.5	1.5 - 11.5	3.0 - 13.0
Collection Date:	MCLs[1]	Standards[2]	07-May-99	08-May-99	08-May-99	08-May-99	08-May-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71.28	2 U	24.5 =	9.6 =	3.5 =	1.6 J
Toluene	1000	200000	2 U	2 U	2 U	2 U	2.8 U
Ethylbenzene	700	28718	2 U	2 U	2 U	2 U	2 U
Xylenes, Total	10000	NRC	3 U	3 U	3 U	3 U	2 J
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene	NRC	NRC	11 UJ	10 U	10 U	10 U	10 U
Acenaphthene	NRC	NRC	11 UJ	10 U	10 U	10 U	10 U
Acenaphthylene	NRC	NRC	11 UJ	10 U	10 U	10 U	10 U
Anthracene	NRC	110000	11 UJ	10 U	10 U	10 U	10 U
Benzo(a)anthracene	NRC	0.0311	11 UJ	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	0.0311	11 UJ	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	NRC	NRC	11 UJ	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	NRC	NRC	11 UJ	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	NRC	0.0311	11 UJ	10 U	10 U	10 U	10 U
Chrysene	NRC	0.0311	11 UJ	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	NRC	0.0311	11 UJ	10 U	10 U	10 U	10 U
Fluoranthene	NRC	370	11 UJ	10 U	10 U	10 U	10 U
Fluorene	NRC	14000	11 UJ	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	NRC	0.0311	11 UJ	10 U	10 U	10 U	10 U
Naphthalene	NRC	NRC	11 UJ	10 U	10 U	10 U	10 U
Phenanthrene	NRC	NRC	11 UJ	10 U	10 U	10 U	10 U
Pyrene	NRC	11000	11 UJ	10 U	10 U	10 U	10 U
OTHER ANALYTES							
Iron (dissolved)	NRC	NRC	104000 =	155000 =	59900 =	23400 =	28900 =

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

1 U.S. Environmental Protection Agency maximum contaminant level

2 GA EPD water quality standards (Chapter 391-03-6.03)

* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.

Laboratory Qualifiers

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UJ	Indicates that 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 CAP-Part B Groundwater Analytical Results (continued)

Station:		In Stream	AF-21	AF-21	AF-21	AF-21	AF-21
Sample ID:	Federal	Water	AF2112	AF2122	AF2132	AF2142	AF2152
Screened Interval (ft BGS):	SDWA	Quality	11.0 - 15.0	16.0 - 20.0	21.0 - 25.0	26.0 - 30.0	31.0 - 35.0
Collection Date:	MCLs[1]	Standards[2]	07-May-99	07-May-99	07-May-99	07-May-99	07-May-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71.28	6520 =	233 =	32.7 =	15.6 =	10.6 =
Toluene	1000	200000	17.9 =	0.92 J	2 U	2 U	2 U
Ethylbenzene	700	28718	144 J	21.3 =	2 U	2 U	2 U
Xylenes, Total	10000	NRC	18.5 =	2.9 J	3 U	3 U	3 U
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene	NRC	NRC	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ	10.2 U
Acenaphthene	NRC	NRC	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ	10.2 U
Acenaphthylene	NRC	NRC	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ	10.2 U
Anthracene	NRC	110000	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ	10.2 U
Benzo(a)anthracene	NRC	0.0311	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ	10.2 U
Benzo(a)pyrene	0.2	0.0311	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ	10.2 U
Benzo(b)fluoranthene	NRC	NRC	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ	10.2 U
Benzo(g,h,i)perylene	NRC	NRC	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ	10.2 U
Benzo(k)fluoranthene	NRC	0.0311	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ	10.2 U
Chrysene	NRC	0.0311	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ	10.2 U
Dibenzo(a,h)anthracene	NRC	0.0311	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ	10.2 U
Fluoranthene	NRC	370	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ	10.2 U
Fluorene	NRC	14000	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ	10.2 U
Indeno(1,2,3-cd)pyrene	NRC	0.0311	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ	10.2 U
Naphthalene	NRC	NRC	5.2 J	1 J	10.4 UJ	10.3 UJ	10.2 U
Phenanthrene	NRC	NRC	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ	10.2 U
Pyrene	NRC	11000	10.3 UJ	11.2 U	10.4 UJ	10.3 UJ	10.2 U
OTHER ANALYTES							
Iron (dissolved)	NRC	NRC					

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

1 U.S. Environmental Protection Agency maximum contaminant level

2 GA EPD water quality standards (Chapter 391-03-6.03)

* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.

Laboratory Qualifiers

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UJ	Indicates that 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 CAP-Part B Groundwater Analytical Results (continued)

Station:		In Stream	AF-21	AF-21	AF-21	AF-21	AF-22
Sample ID:	Federal	Water	AF2162	AF2172	AF2182	AF2192	AF2212
Screened Interval (ft BGS):	SDWA	Quality	36.0 - 40.0	41.0 - 45.0	46.0 - 50.0	51.0 - 55.0	11.0 - 15.0
Collection Date:	MCLs[1]	Standards[2]	07-May-99	07-May-99	07-May-99	07-May-99	08-May-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71.28	22.1 =	7 =	0.86 J	1.9 J	57.2 =
Toluene	1000	200000	2 U	2 U	2 U	2 U	2.4 =
Ethylbenzene	700	28718	3 =	7.1 =	2 U	1.2 J	3.4 =
Xylenes, Total	10000	NRC	1.8 J	6.2 =	3 U	1.2 J	2.4 J
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene	NRC	NRC	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U
Acenaphthene	NRC	NRC	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U
Acenaphthylene	NRC	NRC	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U
Anthracene	NRC	110000	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U
Benzo(a)anthracene	NRC	0.0311	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U
Benzo(a)pyrene	0.2	0.0311	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U
Benzo(b)fluoranthene	NRC	NRC	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U
Benzo(g,h,i)perylene	NRC	NRC	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U
Benzo(k)fluoranthene	NRC	0.0311	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U
Chrysene	NRC	0.0311	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U
Dibenzo(a,h)anthracene	NRC	0.0311	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U
Fluoranthene	NRC	370	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U
Fluorene	NRC	14000	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U
Indeno(1,2,3-cd)pyrene	NRC	0.0311	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U
Naphthalene	NRC	NRC	2.8 J	10.2 UJ	10 U	0.68 J	13 =
Phenanthrene	NRC	NRC	1.9 J	10.2 UJ	10 U	10.4 U	10 U
Pyrene	NRC	11000	10.6 UJ	10.2 UJ	10 U	10.4 U	10 U
OTHER ANALYTES							
Iron (dissolved)	NRC	NRC					

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

1 U.S. Environmental Protection Agency maximum contaminant level

2 GA EPD water quality standards (Chapter 391-03-6.03)

* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.

Laboratory Qualifiers

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UJ Indicates that 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 CAP-Part B Groundwater Analytical Results (continued)

Station:		In Stream	AF-22	AF-22	AF-22	AF-22	AF-22
Sample ID:	Federal	Water	AF2222	AF2232	AF2242	AF2252	AF2262
Screened Interval (ft BGS):	SDWA	Quality	16.0 - 20.0	21.0 - 25.0	26.0 - 30.0	31.0 - 35.0	36.0 - 40.0
Collection Date:	MCLs[1]	Standards[2]	08-May-99	08-May-99	08-May-99	08-May-99	08-May-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71.28	5 =	0.83 J	2 U	2 U	2 U
Toluene	1000	200000	1.3 J	0.88 J	0.76 J	0.68 J	2 U
Ethylbenzene	700	28718	2 U	2 U	2 U	2 U	2 U
Xylenes, Total	10000	NRC	0.65 J	3 U	3 U	3 U	3 U
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene	NRC	NRC	10 U	10 U	10 U	10 UJ	11.6 U
Acenaphthene	NRC	NRC	10 U	10 U	10 U	10 UJ	11.6 U
Acenaphthylene	NRC	NRC	10 U	10 U	10 U	10 UJ	11.6 U
Anthracene	NRC	110000	10 U	10 U	10 U	10 UJ	11.6 U
Benzo(a)anthracene	NRC	0.0311	10 U	10 U	10 U	10 UJ	11.6 U
Benzo(a)pyrene	0.2	0.0311	10 U	10 U	10 U	10 UJ	11.6 U
Benzo(b)fluoranthene	NRC	NRC	10 U	10 U	10 U	10 UJ	11.6 U
Benzo(g,h,i)perylene	NRC	NRC	10 U	10 U	10 U	10 UJ	11.6 U
Benzo(k)fluoranthene	NRC	0.0311	10 U	10 U	10 U	10 UJ	11.6 U
Chrysene	NRC	0.0311	10 U	10 U	10 U	10 UJ	11.6 U
Dibenzo(a,h)anthracene	NRC	0.0311	10 U	10 U	10 U	10 UJ	11.6 U
Fluoranthene	NRC	370	10 U	10 U	10 U	10 UJ	11.6 U
Fluorene	NRC	14000	10 U	10 U	10 U	10 UJ	11.6 U
Indeno(1,2,3-cd)pyrene	NRC	0.0311	10 U	10 U	10 U	10 UJ	11.6 U
Naphthalene	NRC	NRC	10 U	0.74 J	10 U	10 UJ	11.6 U
Phenanthrene	NRC	NRC	10 U	10 U	10 U	10 UJ	11.6 U
Pyrene	NRC	11000	10 U	10 U	10 U	10 UJ	11.6 U
OTHER ANALYTES							
Iron (dissolved)	NRC	NRC					

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

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1 U.S. Environmental Protection Agency maximum contaminant level

2 GA EPD water quality standards (Chapter 391-03-6.03)

* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.

Laboratory Qualifiers

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

Table VIII-A. Summary of CAP-Part B Groundwater Analytical Results (continued)

Station:		In Stream	AF-22	AF-22	AF-23	AF-24	AF-25
Sample ID:	Federal	Water	AF2272	AF2282	AF2312	AF2412	AF2512
Screened Interval (ft BGS):	SDWA	Quality	41.0 - 45.0	46.0 - 50.0	3.0 - 13.0	2.0 - 12.0	0.5 - 10.5
Collection Date:	MCLs[1]	Standards[2]	08-May-99	08-May-99	08-May-99	08-May-99	11-May-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71.28	8.2 =	2 U	0.64 J	2 U	2 =
Toluene	1000	200000	0.83 J	2 U	2 U	2 U	2 U
Ethylbenzene	700	28718	0.33 J	2 U	2 U	2 U	2 U
Xylenes, Total	10000	NRC	0.76 J	3 U	3 U	3 U	0.58 J
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene	NRC	NRC	40 U	10 U	10 UJ	10 U	10.5 U
Acenaphthene	NRC	NRC	40 U	10 U	10 UJ	10 U	10.5 U
Acenaphthylene	NRC	NRC	40 U	10 U	10 UJ	10 U	10.5 U
Anthracene	NRC	110000	40 U	10 U	10 UJ	10 U	10.5 U
Benzo(a)anthracene	NRC	0.0311	40 U	10 U	10 UJ	10 U	10.5 U
Benzo(a)pyrene	0.2	0.0311	40 U	10 U	18.6 J	10 U	10.5 U
Benzo(b)fluoranthene	NRC	NRC	40 U	10 U	10 UJ	10 U	10.5 U
Benzo(g,h,i)perylene	NRC	NRC	40 U	10 U	10 UJ	10 U	10.5 U
Benzo(k)fluoranthene	NRC	0.0311	40 U	10 U	10 UJ	10 U	10.5 U
Chrysene	NRC	0.0311	40 U	10 U	10 UJ	10 U	10.5 U
Dibenzo(a,h)anthracene	NRC	0.0311	40 U	10 U	10 UJ	10 U	10.5 U
Fluoranthene	NRC	370	40 U	10 U	10 UJ	10 U	10.5 U
Fluorene	NRC	14000	40 U	10 U	10 UJ	10 U	10.5 U
Indeno(1,2,3-cd)pyrene	NRC	0.0311	40 U	10 U	10 UJ	10 U	10.5 U
Naphthalene	NRC	NRC	4.5 J	10 U	10 UJ	10 U	10.5 U
Phenanthrene	NRC	NRC	40 U	10 U	10 UJ	10 U	10.5 U
Pyrene	NRC	11000	40 U	10 U	10 UJ	10 U	10.5 U
OTHER ANALYTES							
Iron (dissolved)	NRC	NRC			95500 =	270 =	59300 =

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

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

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

* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.

Laboratory Qualifiers

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= 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 CAP-Part B Groundwater Analytical Results (continued)

Station:		In Stream	AF-26	AF-27	AF-28	AF-29	AF-01
Sample ID:	Federal	Water	AF2612	AF2712	AF2812	AF2912	AF0122
Screened Interval (ft BGS):	SDWA	Quality	2.0 - 12.0	1.0 - 11.0	2.0 - 12.0	2.0 - 12.0	2.5 - 12.5
Collection Date:	MCLs[1]	Standards[2]	11-May-99	11-May-99	11-May-99	11-May-99	26-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71.28	15.3 =	2.4 =	32.4 =	11.3 =	2 U
Toluene	1000	200000	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	700	28718	2 U	2 U	2.4 =	2 U	2 U
Xylenes, Total	10000	NRC	3 U	3 U	3 U	3 U	6 U
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene	NRC	NRC	10 U	10.5 U	10 U	10 U	*
Acenaphthene	NRC	NRC	10 U	10.5 U	0.79 J	10 U	*
Acenaphthylene	NRC	NRC	10 U	10.5 U	10 U	10 U	*
Anthracene	NRC	110000	10 U	10.5 U	10 U	10 U	*
Benzo(a)anthracene	NRC	0.0311	10 U	10.5 U	10 U	10 U	*
Benzo(a)pyrene	0.2	0.0311	10 U	10.5 U	10 U	10 U	*
Benzo(b)fluoranthene	NRC	NRC	10 U	10.5 U	10 U	10 U	*
Benzo(g,h,i)perylene	NRC	NRC	10 U	10.5 U	10 U	10 U	*
Benzo(k)fluoranthene	NRC	0.0311	10 U	10.5 U	10 U	10 U	*
Chrysene	NRC	0.0311	10 U	10.5 U	10 U	10 U	*
Dibenzo(a,h)anthracene	NRC	0.0311	10 U	10.5 U	10 U	10 U	*
Fluoranthene	NRC	370	10 U	10.5 U	10 U	10 U	*
Fluorene	NRC	14000	10 U	10.5 U	10 U	10 U	*
Indeno(1,2,3-cd)pyrene	NRC	0.0311	10 U	10.5 U	10 U	10 U	*
Naphthalene	NRC	NRC	10 U	10.5 U	1.4 J	10 U	*
Phenanthrene	NRC	NRC	10 U	10.5 U	10 U	10 U	*
Pyrene	NRC	11000	10 U	10.5 U	10 U	10 U	*
OTHER ANALYTES							
Iron (dissolved)	NRC	NRC	79700 =	72100 =	56000 =	25800 =	

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

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

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Table VIII-A. Summary of CAP-Part B Groundwater Analytical Results (continued)

Station:		In Stream	AF-02	AF-03	AF-04	AF-05	AF-07
Sample ID:	Federal	Water	AF0222	AF0322	AF0422	AF0522	AF0722
Screened Interval (ft BGS):	SDWA	Quality	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.5 - 12.5
Collection Date:	MCLs[1]	Standards[2]	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71.28	8.4 =	2.2 =	2 U	11.8 =	9130 =
Toluene	1000	200000	0.65 J	2 U	2 U	3 =	24.8 =
Ethylbenzene	700	28718	2 U	1.6 J	2 U	9.5 =	493 =
Xylenes, Total	10000	NRC	6 U	0.96 J	6 U	46.5 =	246 =
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene	NRC	NRC	*	*	*	*	*
Acenaphthene	NRC	NRC	*	*	*	*	*
Acenaphthylene	NRC	NRC	*	*	*	*	*
Anthracene	NRC	110000	*	*	*	*	*
Benzo(a)anthracene	NRC	0.0311	*	*	*	*	*
Benzo(a)pyrene	0.2	0.0311	*	*	*	*	*
Benzo(b)fluoranthene	NRC	NRC	*	*	*	*	*
Benzo(g,h,i)perylene	NRC	NRC	*	*	*	*	*
Benzo(k)fluoranthene	NRC	0.0311	*	*	*	*	*
Chrysene	NRC	0.0311	*	*	*	*	*
Dibenzo(a,h)anthracene	NRC	0.0311	*	*	*	*	*
Fluoranthene	NRC	370	*	*	*	*	*
Fluorene	NRC	14000	*	*	*	*	*
Indeno(1,2,3-cd)pyrene	NRC	0.0311	*	*	*	*	*
Naphthalene	NRC	NRC	*	*	*	*	*
Phenanthrene	NRC	NRC	*	*	*	*	*
Pyrene	NRC	11000	*	*	*	*	*
OTHER ANALYTES							
Iron (dissolved)	NRC	NRC					

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

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Table VIII-A. Summary of CAP-Part B Groundwater Analytical Results (continued)

Station:		In Stream	AF-08	AF-09	AF-11	AF-12	AF-13
Sample ID:	Federal	Water	AF0822	AF0922	AF1122	AF1222	AF1322
Screened Interval (ft BGS):	SDWA	Quality	2.5 - 12.5	2.0 - 12.0	1.0 - 11.0	2.5 - 12.5	2.5 - 12.5
Collection Date:	MCLs[1]	Standards[2]	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71.28	2 U	11.8 =	2 U	23.4 =	2 U
Toluene	1000	200000	2 U	2 U	2 U	4 U	2 U
Ethylbenzene	700	28718	2 U	27.7 =	2 U	54.8 =	2 U
Xylenes, Total	10000	NRC	6 U	1.4 J	6 U	8.5 J	6 U
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene	NRC	NRC	*	*	*	*	*
Acenaphthene	NRC	NRC	*	*	*	*	*
Acenaphthylene	NRC	NRC	*	*	*	*	*
Anthracene	NRC	110000	*	*	*	*	*
Benzo(a)anthracene	NRC	0.0311	*	*	*	*	*
Benzo(a)pyrene	0.2	0.0311	*	*	*	*	*
Benzo(b)fluoranthene	NRC	NRC	*	*	*	*	*
Benzo(g,h,i)perylene	NRC	NRC	*	*	*	*	*
Benzo(k)fluoranthene	NRC	0.0311	*	*	*	*	*
Chrysene	NRC	0.0311	*	*	*	*	*
Dibenzo(a,h)anthracene	NRC	0.0311	*	*	*	*	*
Fluoranthene	NRC	370	*	*	*	*	*
Fluorene	NRC	14000	*	*	*	*	*
Indeno(1,2,3-cd)pyrene	NRC	0.0311	*	*	*	*	*
Naphthalene	NRC	NRC	*	*	*	*	*
Phenanthrene	NRC	NRC	*	*	*	*	*
Pyrene	NRC	11000	*	*	*	*	*
OTHER ANALYTES							
Iron (dissolved)	NRC	NRC					

NOTES:

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Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

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Table VIII-A. Summary of CAP-Part B Groundwater Analytical Results (continued)

Station:		In Stream	AF-14	AF-15	AF-16	AF-17	AF-18
Sample ID:	Federal	Water	AF1422	AF1522	AF1622	AF1722	AF1822
Screened Interval (ft BGS):	SDWA	Quality	1.4 - 11.4	1.5 - 11.5	1.5 - 11.5	2.5 - 12.5	1.5 - 11.5
Collection Date:	MCLs[1]	Standards[2]	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71.28	2 U	2 U	2 U	14 =	10.3 =
Toluene	1000	200000	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	700	28718	2 U	2 U	2 U	2 U	2 U
Xylenes, Total	10000	NRC	6 U	6 U	6 U	6 U	6 U
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene	NRC	NRC	*	*	*	*	*
Acenaphthene	NRC	NRC	*	*	*	*	*
Acenaphthylene	NRC	NRC	*	*	*	*	*
Anthracene	NRC	110000	*	*	*	*	*
Benzo(a)anthracene	NRC	0.0311	*	*	*	*	*
Benzo(a)pyrene	0.2	0.0311	*	*	*	*	*
Benzo(b)fluoranthene	NRC	NRC	*	*	*	*	*
Benzo(g,h,i)perylene	NRC	NRC	*	*	*	*	*
Benzo(k)fluoranthene	NRC	0.0311	*	*	*	*	*
Chrysene	NRC	0.0311	*	*	*	*	*
Dibenzo(a,h)anthracene	NRC	0.0311	*	*	*	*	*
Fluoranthene	NRC	370	*	*	*	*	*
Fluorene	NRC	14000	*	*	*	*	*
Indeno(1,2,3-cd)pyrene	NRC	0.0311	*	*	*	*	*
Naphthalene	NRC	NRC	*	*	*	*	*
Phenanthrene	NRC	NRC	*	*	*	*	*
Pyrene	NRC	11000	*	*	*	*	*
OTHER ANALYTES							
Iron (dissolved)	NRC	NRC					

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

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

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

* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.

Laboratory Qualifiers

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

UJ Indicates that 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 CAP-Part B Groundwater Analytical Results (continued)

Station:		In Stream	AF-19	AF-20	AF-23	AF-24	AF-25
Sample ID:	Federal	Water	AF1922	AF2022	AF2322	AF2422	AF2522
Screened Interval (ft BGS):	SDWA	Quality	1.5 - 11.5	3.0 - 13.0	3.0 - 13.0	2.0 - 12.0	0.5 - 10.5
Collection Date:	MCLs[1]	Standards[2]	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71.28	3.5 =	2.1 =	1.1 J	2 U	4.8 =
Toluene	1000	200000	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	700	28718	2 U	2 U	2 U	2 U	0.59 J
Xylenes, Total	10000	NRC	6 U	6 U	6 U	6 U	6 U
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene	NRC	NRC	*	*	*	*	*
Acenaphthene	NRC	NRC	*	*	*	*	*
Acenaphthylene	NRC	NRC	*	*	*	*	*
Anthracene	NRC	110000	*	*	*	*	*
Benzo(a)anthracene	NRC	0.0311	*	*	*	*	*
Benzo(a)pyrene	0.2	0.0311	*	*	*	*	*
Benzo(b)fluoranthene	NRC	NRC	*	*	*	*	*
Benzo(g,h,i)perylene	NRC	NRC	*	*	*	*	*
Benzo(k)fluoranthene	NRC	0.0311	*	*	*	*	*
Chrysene	NRC	0.0311	*	*	*	*	*
Dibenzo(a,h)anthracene	NRC	0.0311	*	*	*	*	*
Fluoranthene	NRC	370	*	*	*	*	*
Fluorene	NRC	14000	*	*	*	*	*
Indeno(1,2,3-cd)pyrene	NRC	0.0311	*	*	*	*	*
Naphthalene	NRC	NRC	*	*	*	*	*
Phenanthrene	NRC	NRC	*	*	*	*	*
Pyrene	NRC	11000	*	*	*	*	*
OTHER ANALYTES							
Iron (dissolved)	NRC	NRC					

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

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2 GA EPD water quality standards (Chapter 391-03-6.03)

* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.

Laboratory Qualifiers

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Table VIII-A. Summary of CAP-Part B Groundwater Analytical Results (continued)

Station:		In Stream	AF-26	AF-27	AF-28	AF-29	AF-30
Sample ID:	Federal	Water	AF2622	AF2722	AF2822	AF2922	AF3012
Screened Interval (ft BGS):	SDWA	Quality	2.0 - 12.0	1.0 - 11.0	2.0 - 12.0	2.0 - 12.0	11.0 - 15.0
Collection Date:	MCLs[1]	Standards[2]	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71.28	16.6 =	5.1 J	3.9 =	53.6 =	7670 J
Toluene	1000	200000	4 U	20 U	2 U	2 U	19 =
Ethylbenzene	700	28718	4 U	20 U	2 U	2 U	500 J
Xylenes, Total	10000	NRC	12 U	60 U	6 U	6 U	72.7 =
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene	NRC	NRC	*	*	*	*	*
Acenaphthene	NRC	NRC	*	*	*	*	*
Acenaphthylene	NRC	NRC	*	*	*	*	*
Anthracene	NRC	110000	*	*	*	*	*
Benzo(a)anthracene	NRC	0.0311	*	*	*	*	*
Benzo(a)pyrene	0.2	0.0311	*	*	*	*	*
Benzo(b)fluoranthene	NRC	NRC	*	*	*	*	*
Benzo(g,h,i)perylene	NRC	NRC	*	*	*	*	*
Benzo(k)fluoranthene	NRC	0.0311	*	*	*	*	*
Chrysene	NRC	0.0311	*	*	*	*	*
Dibenzo(a,h)anthracene	NRC	0.0311	*	*	*	*	*
Fluoranthene	NRC	370	*	*	*	*	*
Fluorene	NRC	14000	*	*	*	*	*
Indeno(1,2,3-cd)pyrene	NRC	0.0311	*	*	*	*	*
Naphthalene	NRC	NRC	*	*	*	*	*
Phenanthrene	NRC	NRC	*	*	*	*	*
Pyrene	NRC	11000	*	*	*	*	*
OTHER ANALYTES							
Iron (dissolved)	NRC	NRC					

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

1 U.S. Environmental Protection Agency maximum contaminant level

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Laboratory Qualifiers

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Table VIII-A. Summary of CAP-Part B Groundwater Analytical Results (continued)

Station:		In Stream	AF-30	AF-30	AF-30	AF-30	AF-30
Sample ID:	Federal	Water	AF3022	AF3032	AF3042	AF3052	AF3062
Screened Interval (ft BGS):	SDWA	Quality	16.0 - 20.0	21.0 - 25.0	26.0 - 30.0	31.0 - 35.0	36.0 - 40.0
Collection Date:	MCLs[1]	Standards[2]	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71.28	2290 =	37.9 =	16.2 =	11 =	6.4 =
Toluene	1000	200000	5.5 =	0.55 J	2 U	2 U	2 U
Ethylbenzene	700	28718	168 =	2.7 =	1.3 J	0.53 J	0.67 J
Xylenes, Total	10000	NRC	9.6 =	1.8 J	6 U	0.51 J	0.67 J
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene	NRC	NRC	*	*	*	*	*
Acenaphthene	NRC	NRC	*	*	*	*	*
Acenaphthylene	NRC	NRC	*	*	*	*	*
Anthracene	NRC	110000	*	*	*	*	*
Benzo(a)anthracene	NRC	0.0311	*	*	*	*	*
Benzo(a)pyrene	0.2	0.0311	*	*	*	*	*
Benzo(b)fluoranthene	NRC	NRC	*	*	*	*	*
Benzo(g,h,i)perylene	NRC	NRC	*	*	*	*	*
Benzo(k)fluoranthene	NRC	0.0311	*	*	*	*	*
Chrysene	NRC	0.0311	*	*	*	*	*
Dibenzo(a,h)anthracene	NRC	0.0311	*	*	*	*	*
Fluoranthene	NRC	370	*	*	*	*	*
Fluorene	NRC	14000	*	*	*	*	*
Indeno(1,2,3-cd)pyrene	NRC	0.0311	*	*	*	*	*
Naphthalene	NRC	NRC	*	*	*	*	*
Phenanthrene	NRC	NRC	*	*	*	*	*
Pyrene	NRC	11000	*	*	*	*	*
OTHER ANALYTES							
Iron (dissolved)	NRC	NRC					

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

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

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Table VIII-A. Summary of CAP-Part B Groundwater Analytical Results (continued)

Station:		In Stream	AF-30	AF-30	AF-31	AF-31	AF-31
Sample ID:	Federal	Water	AF3072	AF3082	AF3112	AF3122	AF3132
Screened Interval (ft BGS):	SDWA	Quality	41.0 - 45.0	46.0 - 50.0	6.0 - 10.0	11.0 - 15.0	16.0 - 20.0
Collection Date:	MCLs[1]	Standards[2]	26-Sep-99	26-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71.28	5.5 =	6.8 =	11.1 =	0.99 J	2 U
Toluene	1000	200000	0.78 J	0.5 J	10 U	2 U	2 U
Ethylbenzene	700	28718	5.5 =	1.8 J	10 U	2 U	2 U
Xylenes, Total	10000	NRC	9.3 =	2.9 J	30 U	6 U	6 U
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene	NRC	NRC	*	*	*	*	*
Acenaphthene	NRC	NRC	*	*	*	*	*
Acenaphthylene	NRC	NRC	*	*	*	*	*
Anthracene	NRC	110000	*	*	*	*	*
Benzo(a)anthracene	NRC	0.0311	*	*	*	*	*
Benzo(a)pyrene	0.2	0.0311	*	*	*	*	*
Benzo(b)fluoranthene	NRC	NRC	*	*	*	*	*
Benzo(g,h,i)perylene	NRC	NRC	*	*	*	*	*
Benzo(k)fluoranthene	NRC	0.0311	*	*	*	*	*
Chrysene	NRC	0.0311	*	*	*	*	*
Dibenzo(a,h)anthracene	NRC	0.0311	*	*	*	*	*
Fluoranthene	NRC	370	*	*	*	*	*
Fluorene	NRC	14000	*	*	*	*	*
Indeno(1,2,3-cd)pyrene	NRC	0.0311	*	*	*	*	*
Naphthalene	NRC	NRC	*	*	*	*	*
Phenanthrene	NRC	NRC	*	*	*	*	*
Pyrene	NRC	11000	*	*	*	*	*
OTHER ANALYTES							
Iron (dissolved)	NRC	NRC					

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

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Table VIII-A. Summary of CAP-Part B Groundwater Analytical Results (continued)

Station:		In Stream	AF-31	AF-31	AF-31	AF-31	AF-31
Sample ID:	Federal	Water	AF3142	AF3152	AF3162	AF3172	AF3182
Screened Interval (ft BGS):	SDWA	Quality	21.0 - 25.0	26.0 - 30.0	31.0 - 35.0	36.0 - 40.0	41.0 - 45.0
Collection Date:	MCLs[1]	Standards[2]	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71.28	2 U	2 U	2 U	2 U	2 U
Toluene	1000	200000	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	700	28718	2 U	2 U	2 U	2 U	2 U
Xylenes, Total	10000	NRC	6 U	6 U	6 U	6 U	6 U
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene	NRC	NRC	*	*	*	*	*
Acenaphthene	NRC	NRC	*	*	*	*	*
Acenaphthylene	NRC	NRC	*	*	*	*	*
Anthracene	NRC	110000	*	*	*	*	*
Benzo(a)anthracene	NRC	0.0311	*	*	*	*	*
Benzo(a)pyrene	0.2	0.0311	*	*	*	*	*
Benzo(b)fluoranthene	NRC	NRC	*	*	*	*	*
Benzo(g,h,i)perylene	NRC	NRC	*	*	*	*	*
Benzo(k)fluoranthene	NRC	0.0311	*	*	*	*	*
Chrysene	NRC	0.0311	*	*	*	*	*
Dibenzo(a,h)anthracene	NRC	0.0311	*	*	*	*	*
Fluoranthene	NRC	370	*	*	*	*	*
Fluorene	NRC	14000	*	*	*	*	*
Indeno(1,2,3-cd)pyrene	NRC	0.0311	*	*	*	*	*
Naphthalene	NRC	NRC	*	*	*	*	*
Phenanthrene	NRC	NRC	*	*	*	*	*
Pyrene	NRC	11000	*	*	*	*	*
OTHER ANALYTES							
Iron (dissolved)	NRC	NRC					

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

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Table VIII-A. Summary of CAP-Part B Groundwater Analytical Results (continued)

Station:		In Stream	AF-31	AF-32	AF-32	AF-32	AF-32
Sample ID:	Federal	Water	AF3192	AF3212	AF3222	AF3232	AF3242
Screened Interval (ft BGS):	SDWA	Quality	46.0 - 50.0	11.0 - 15.0	16.0 - 20.0	21.0 - 25.0	26.0 - 30.0
Collection Date:	MCLs[1]	Standards[2]	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71.28	2 U	2.1 =	2 U	2 U	2 U
Toluene	1000	200000	2 U	2 U	0.52 J	2 U	2 U
Ethylbenzene	700	28718	2 U	2 U	2 U	2 U	2 U
Xylenes, Total	10000	NRC	6 U	6 U	6 U	6 U	6 U
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene	NRC	NRC	*	*	*	*	*
Acenaphthene	NRC	NRC	*	*	*	*	*
Acenaphthylene	NRC	NRC	*	*	*	*	*
Anthracene	NRC	110000	*	*	*	*	*
Benzo(a)anthracene	NRC	0.0311	*	*	*	*	*
Benzo(a)pyrene	0.2	0.0311	*	*	*	*	*
Benzo(b)fluoranthene	NRC	NRC	*	*	*	*	*
Benzo(g,h,i)perylene	NRC	NRC	*	*	*	*	*
Benzo(k)fluoranthene	NRC	0.0311	*	*	*	*	*
Chrysene	NRC	0.0311	*	*	*	*	*
Dibenzo(a,h)anthracene	NRC	0.0311	*	*	*	*	*
Fluoranthene	NRC	370	*	*	*	*	*
Fluorene	NRC	14000	*	*	*	*	*
Indeno(1,2,3-cd)pyrene	NRC	0.0311	*	*	*	*	*
Naphthalene	NRC	NRC	*	*	*	*	*
Phenanthrene	NRC	NRC	*	*	*	*	*
Pyrene	NRC	11000	*	*	*	*	*
OTHER ANALYTES							
Iron (dissolved)	NRC	NRC					

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

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Table VIII-A. Summary of CAP-Part B Groundwater Analytical Results (continued)

Station:		In Stream	AF-32	AF-32	AF-32	AF-32	AF-33
Sample ID:	Federal	Water	AF3252	AF3262	AF3272	AF3282	AF3312
Screened Interval (ft BGS):	SDWA	Quality	31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	46.0 - 50.0	2.3 - 11.8
Collection Date:	MCLs[1]	Standards[2]	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71.28	2 U	2 U	2 U	2 U	2 U
Toluene	1000	200000	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	700	28718	2 U	2 U	2 U	2 U	2 U
Xylenes, Total	10000	NRC	6 U	6 U	6 U	6 U	6 U
POLYNUCLEAR HYDROCARBONS							
2-Chloronaphthalene	NRC	NRC	*	*	*	*	10.2 U
Acenaphthene	NRC	NRC	*	*	*	*	10.2 U
Acenaphthylene	NRC	NRC	*	*	*	*	10.2 U
Anthracene	NRC	110000	*	*	*	*	10.2 U
Benzo(a)anthracene	NRC	0.0311	*	*	*	*	10.2 U
Benzo(a)pyrene	0.2	0.0311	*	*	*	*	10.2 U
Benzo(b)fluoranthene	NRC	NRC	*	*	*	*	10.2 U
Benzo(g,h,i)perylene	NRC	NRC	*	*	*	*	10.2 U
Benzo(k)fluoranthene	NRC	0.0311	*	*	*	*	10.2 U
Chrysene	NRC	0.0311	*	*	*	*	10.2 U
Dibenzo(a,h)anthracene	NRC	0.0311	*	*	*	*	10.2 U
Fluoranthene	NRC	370	*	*	*	*	10.2 U
Fluorene	NRC	14000	*	*	*	*	10.2 U
Indeno(1,2,3-cd)pyrene	NRC	0.0311	*	*	*	*	10.2 U
Naphthalene	NRC	NRC	*	*	*	*	10.2 U
Phenanthrene	NRC	NRC	*	*	*	*	10.2 U
Pyrene	NRC	11000	*	*	*	*	10.2 U
OTHER ANALYTES							
Iron (dissolved)	NRC	NRC					

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

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

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

* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.

Laboratory Qualifiers

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

UJ Indicates that 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 CAP-Part B Groundwater Analytical Results (continued)

Station:		In Stream	AF-34	AF-35	AF-36	AF-37	AF-38	AF-39
Sample ID:	Federal	Water	AF3412	AF3512	AF3612	AF3712	AF3812	AF3912
Screened Interval (ft BGS):	SDWA	Quality	1.4 - 10.9	1.2 - 10.7	1.4 - 10.9	4.4 - 14.3	4.1 - 14.1	4.4 - 14.3
Collection Date:	MCLs[1]	Standards[2]	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS								
Benzene	5	71.28	2 U	2.1 =	2.4 =	4.2 =	2 =	0.92 J
Toluene	1000	200000	2 U	2 U	2 U	0.69 J	2 =	2 U
Ethylbenzene	700	28718	2 U	2 U	2 U	0.63 J	1.6 J	2 U
Xylenes, Total	10000	NRC	6 U	6 U	6 U	3.4 J	9.4 =	6 U
POLYNUCLEAR HYDROCARBONS								
2-Chloronaphthalene	NRC	NRC	10.2 U	10 U	10.4 U	10 U	10 U	10 U
Acenaphthene	NRC	NRC	10.2 U	10 U	10.4 U	10 U	10 U	10 U
Acenaphthylene	NRC	NRC	10.2 U	10 U	10.4 U	10 U	10 U	10 U
Anthracene	NRC	110000	10.2 U	10 U	10.4 U	10 U	10 U	10 U
Benzo(a)anthracene	NRC	0.0311	10.2 U	10 U	10.4 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	0.0311	10.2 U	10 U	10.4 U	10 U	10 U	10 U
Benzo(b)fluoranthene	NRC	NRC	10.2 U	10 U	10.4 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	NRC	NRC	10.2 U	10 U	10.4 U	10 U	10 U	10 U
Benzo(k)fluoranthene	NRC	0.0311	10.2 U	10 U	10.4 U	10 U	10 U	10 U
Chrysene	NRC	0.0311	10.2 U	10 U	10.4 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	NRC	0.0311	10.2 U	10 U	10.4 U	10 U	10 U	10 U
Fluoranthene	NRC	370	10.2 U	10 U	10.4 U	10 U	10 U	10 U
Fluorene	NRC	14000	10.2 U	10 U	10.4 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	NRC	0.0311	10.2 U	10 U	10.4 U	10 U	10 U	10 U
Naphthalene	NRC	NRC	10.2 U	10 U	10.4 U	10 U	10 U	10 U
Phenanthrene	NRC	NRC	10.2 U	10 U	10.4 U	10 U	10 U	10 U
Pyrene	NRC	11000	10.2 U	10 U	10.4 U	10 U	10 U	10 U
OTHER ANALYTES								
Iron (dissolved)	NRC	NRC						

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0316 (equipment rinsate), AF0514 (duplicate), AF1014 (duplicate), AF1316 (equipment rinsate), AF1514 (duplicate), AF1816 (equipment rinsate), AF2014 (duplicate), AF2124 (duplicate), AF2226, (equipment rinsate), AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1826 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

Elevated PAH detection limits are a result of associated organic content such as TPH or other organic compounds. During extraction of the PAH compounds, all other organic compounds are extracted, causing a wide range of organic compounds to be present; thus, the target PAHs become small peaks in the chromatograph. As a result, the laboratory dilutes the concentrate, in turn elevating the detection limit.

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

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

* PAH analysis not performed on samples collected in September 1999, if a sample was collected from the well in May 1999.

Laboratory Qualifiers

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

UJ Indicates that 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-B. Summary of VOC Groundwater Analytical Results

Station:		In-Stream	AF-01	AF-02	AF-03	AF-04	AF-05
Sample ID:	Federal	Water	AF0122	AF0222	AF0322	AF0422	AF0522
Screened Interval (ft BGS):	SWDA	Quality	2.5 - 12.5	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0
Collection Date:	MCLs	Standards	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	NRC	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		NRC	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		NRC	2 U	2 U	2 U	2 U	2 U
1,2-Dichloropropane		NRC	2 U	2 U	2 U	2 U	2 U
1,3-cis-Dichloropropene		1700	2 U	2 U	2 U	2 U	2 U
1,3-trans-Dichloropropene		1700	2 U	2 U	2 U	2 U	2 U
2-Butanone		NRC	5 R	5 R	5 U	5 U	5 U
2-Hexanone		NRC	5 U	5 UJ	5 U	5 U	5 U
4-Methyl-2-pentanone		NRC	5 U	5 U	5 U	5 U	5 U
Acetone		NRC	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		NRC	5 U	5 U	5 U	5 U	5 U
Bromoform		360	2 U	2 U	2 U	2 U	2 U
Bromomethane		NRC	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide		NRC	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	21000	2 U	2 U	2 U	2 U	2 U
Chloroethane		NRC	2 U	2 U	2 U	2 U	2 U
Chloroform		470.8	2 U	2 U	2 U	2 U	2 U
Chloromethane		NRC	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		NRC	1.2 J	0.54 J	2 U	2 U	2 U
Styrene	100	NRC	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	1000	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	NRC	6 U	6 U	0.96 J	6 U	46.5 =

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1816 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

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

[2] 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 that 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-B. Summary of VOC Groundwater Analytical Results (continued)

Station:	Federal	In-Stream	AF-07	AF-08	AF-09	AF-11	AF-12
Sample ID:	SWDA	Water	AF0722	AF0822	AF0922	AF1122	AF1222
Screened Interval (ft BGS):	MCLs	Quality	2.5 - 12.5	2.5 - 12.5	2.0 - 12.0	1.0 - 11.0	2.5 - 12.5
Collection Date:		Standards	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	NRC	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		NRC	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		NRC	10 U	2 U	3.9 =	2 U	4 U
1,2-Dichloropropane		NRC	10 U	2 U	2 U	2 U	4 U
1,3-cis-Dichloropropene		1700	10 U	2 U	2 U	2 U	4 U
1,3-trans-Dichloropropene		1700	10 U	2 U	2 U	2 U	4 U
2-Butanone		NRC	25 U	5 U	5 R	5 R	10 R
2-Hexanone		NRC	40.2 =	5 U	5 U	5 U	10 UJ
4-Methyl-2-pentanone		NRC	25 U	5 U	5 U	5 U	10 U
Acetone		NRC	25 U	5 U	5 R	5 U	10 R
Benzene	5	71.28	9130 =	2 U	11.8 =	2 U	23.4 =
Bromodichloromethane		NRC	25 U	5 U	5 U	5 U	10 U
Bromoform		360	10 U	2 U	2 U	2 U	4 U
Bromomethane		NRC	10 U	2 U	2 U	2 U	4 U
Carbon Disulfide		NRC	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	21000	10 U	2 U	2 U	2 U	4 U
Chloroethane		NRC	10 U	2 U	2 U	2 U	4 U
Chloroform		470.8	10 U	2 U	2 U	2 U	4 U
Chloromethane		NRC	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		NRC	13.1 U	2 U	3.9 U	2 U	2 J
Styrene	100	NRC	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	1000	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	NRC	246 =	6 U	1.4 J	6 U	8.5 J

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1816 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

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

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

Laboratory Qualifiers

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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-B. Summary of VOC Groundwater Analytical Results (continued)

Station:		In-Stream	AF-13	AF-14	AF-15	AF-16	AF-17
Sample ID:	Federal	Water	AF1322	AF1422	AF1522	AF1622	AF1722
Screened Interval (ft BGS):	SWDA	Quality	2.5 - 12.5	1.4 - 11.4	1.5 - 11.5	1.5 - 11.5	2.5 - 12.5
Collection Date:	MCLs	Standards	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	NRC	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		NRC	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		NRC	1.5 J	2 U	2 U	2 U	19.9 =
1,2-Dichloropropane		NRC	2 U	2 U	2 U	2 U	2 U
1,3-cis-Dichloropropene		1700	2 U	2 U	2 U	2 U	2 U
1,3-trans-Dichloropropene		1700	2 U	2 U	2 U	2 U	2 U
2-Butanone		NRC	5 U	5 U	5 R	5 U	5 U
2-Hexanone		NRC	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
Acetone		NRC	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		NRC	5 U	5 U	5 U	5 U	5 U
Bromoform		360	2 U	2 U	2 U	2 U	2 U
Bromomethane		NRC	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide		NRC	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	21000	2 U	2 U	2 U	2 U	2 U
Chloroethane		NRC	2 U	2 U	2 U	2 U	2 U
Chloroform		470.8	2 U	2 U	2 U	2 U	2 U
Chloromethane		NRC	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		NRC	2 U	2 U	2 U	2 U	2 U
Styrene	100	NRC	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	1000	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	NRC	6 U	6 U	6 U	6 U	6 U

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1816 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

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

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

Laboratory Qualifiers

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

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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-B. Summary of VOC Groundwater Analytical Results (continued)

Station:		In-Stream	AF-18	AF-19	AF-20	AF-23	AF-24
Sample ID:	Federal	Water	AF1822	AF1922	AF2022	AF2322	AF2422
Screened Interval (ft BGS):	SWDA	Quality	1.5 - 11.5	1.5 - 11.5	3.0 - 13.0	3.0 - 13.0	2.0 - 12.0
Collection Date:	MCLs	Standards	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	NRC	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		NRC	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		NRC	13.2 =	8.3 =	1.7 J	5.3 =	2 U
1,2-Dichloropropane		NRC	2 U	2 U	2 U	2 U	2 U
1,3-cis-Dichloropropene		1700	2 U	2 U	2 U	2 U	2 U
1,3-trans-Dichloropropene		1700	2 U	2 U	2 U	2 U	2 U
2-Butanone		NRC	5 R	5 R	5 R	5.9 J	5 U
2-Hexanone		NRC	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
Acetone		NRC	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		NRC	5 U	5 U	5 U	5 U	5 U
Bromoform		360	2 U	2 U	2 U	2 U	2 U
Bromomethane		NRC	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide		NRC	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	21000	2 U	2 U	2 U	2 U	2 U
Chloroethane		NRC	2 U	2 U	2 U	2 U	2 U
Chloroform		470.8	2 U	2 U	2 U	2 U	2 U
Chloromethane		NRC	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		NRC	4.2 U	2.3 U	4.5 U	2 U	2 U
Styrene	100	NRC	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	1000	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	NRC	6 U	6 U	6 U	6 U	6 U

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1816 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

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

[2] 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 that 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-B. Summary of VOC Groundwater Analytical Results (continued)

Station:		In-Stream	AF-25	AF-26	AF-27	AF-28	AF-29
Sample ID:	Federal	Water	AF2522	AF2622	AF2722	AF2822	AF2922
Screened Interval (ft BGS):	SWDA	Quality	0.5 - 10.5	2.0 - 12.0	1.0 - 11.0	2.0 - 12.0	2.0 - 12.0
Collection Date:	MCLs	Standards	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	NRC	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		NRC	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		NRC	40.2 =	27.9 =	49.3 =	41.9 =	9.5 =
1,2-Dichloropropane		NRC	2 U	4 U	20 U	2 U	2 U
1,3-cis-Dichloropropene		1700	2 U	4 U	20 U	2 U	2 U
1,3-trans-Dichloropropene		1700	2 U	4 U	20 U	2 U	2 U
2-Butanone		NRC	5 U	10 R	50 R	5 U	5 R
2-Hexanone		NRC	5 U	10 U	50 U	5 U	5 U
4-Methyl-2-pentanone		NRC	5 U	10 U	50 U	5 U	5 U
Acetone		NRC	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		NRC	5 U	10 U	50 U	5 U	5 U
Bromoform		360	2 U	4 U	20 U	2 U	2 U
Bromomethane		NRC	2 U	4 U	20 U	2 U	2 U
Carbon Disulfide		NRC	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	21000	2 U	4 U	20 U	2 U	2 U
Chloroethane		NRC	2 U	4 U	20 U	2 U	2 U
Chloroform		470.8	2 U	4 U	20 U	2 U	2 U
Chloromethane		NRC	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		NRC	2 U	1.5 J	12.8 J	2 U	1.2 J
Styrene	100	NRC	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	1000	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	NRC	6 U	12 U	60 U	6 U	6 U

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1816 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

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

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

Laboratory Qualifiers

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

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= Indicates the compound was detected at the concentration reported.

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

Table VIII-B. Summary of VOC Groundwater Analytical Results (continued)

Station:		In-Stream	AF-30	AF-30	AF-30	AF-30	AF-30
Sample ID:	Federal	Water	AF3012	AF3022	AF3032	AF3042	AF3052
Screened Interval (ft BGS):	SWDA	Quality	11.0 – 15.0	16.0 – 20.0	21.0 – 25.0	26.0 – 30.0	31.0 – 35.0
Collection Date:	MCLs	Standards	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99	26-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	NRC	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		NRC	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		NRC	3.3 =	24 =	33 =	90.3 =	24.3 =
1,2-Dichloropropane		NRC	2 U	2 U	2 U	2 U	2 U
1,3-cis-Dichloropropene		1700	2 U	2 U	2 U	2 U	2 U
1,3-trans-Dichloropropene		1700	2 U	2 U	2 U	2 U	2 U
2-Butanone		NRC	5 U	5 U	5 R	5 U	5 R
2-Hexanone		NRC	14.2 =	15.5 =	5 UJ	5 U	5 U
4-Methyl-2-pentanone		NRC	5 U	5 U	5 U	5 U	5 U
Acetone		NRC	8.4 U	10.8 U	5 R	5 U	5 R
Benzene	5	71.28	7670 J	2290 =	37.9 =	16.2 =	11 =
Bromodichloromethane		NRC	5 U	5 U	5 U	5 U	5 U
Bromoform		360	2 U	2 U	2 U	2 U	2 U
Bromomethane		NRC	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide		NRC	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	21000	2 U	2 U	2 U	2 U	2 U
Chloroethane		NRC	2 U	2 U	2 U	2 U	2 U
Chloroform		470.8	2 U	2 U	2 U	2 U	2 U
Chloromethane		NRC	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		NRC	2.2 =	2 U	0.95 J	2 U	4 U
Styrene	100	NRC	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	1000	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	NRC	72.7 =	9.6 =	1.8 J	6 U	0.51 J

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1816 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

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

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

Laboratory Qualifiers

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UJ Indicates that 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-B. Summary of VOC Groundwater Analytical Results (continued)

Station:		In-Stream	AF-30	AF-30	AF-30	AF-31	AF-31
Sample ID:	Federal	Water	AF3062	AF3072	AF3082	AF3112	AF3122
Screened Interval (ft BGS):	SWDA	Quality	36.0 - 40.0	41.0 - 45.0	46.0 - 50.0	6.0 - 10.0	11.0 - 15.0
Collection Date:	MCLs	Standards	26-Sep-99	26-Sep-99	26-Sep-99	25-Sep-99	25-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	NRC	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		NRC	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		NRC	11.3 =	8.7 =	2 U	17.9 =	10.7 =
1,2-Dichloropropane		NRC	2 U	2 U	2 U	10 U	2 U
1,3-cis-Dichloropropene		1700	2 U	2 U	2 U	10 U	2 U
1,3-trans-Dichloropropene		1700	2 U	2 U	2 U	10 U	2 U
2-Butanone		NRC	5 R	5 R	5 R	25 R	5 R
2-Hexanone		NRC	5 U	5 U	5 U	25 U	5 U
4-Methyl-2-pentanone		NRC	5 U	5 U	5 U	25 U	5 U
Acetone		NRC	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		NRC	5 U	5 U	5 U	25 U	5 U
Bromoform		360	2 U	2 U	2 U	10 U	2 U
Bromomethane		NRC	2 U	2 U	2 U	10 U	2 U
Carbon Disulfide		NRC	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	21000	2 U	2 U	2 U	10 U	2 U
Chloroethane		NRC	2 U	2 U	2 U	10 U	2 U
Chloroform		470.8	2 U	2 U	2 U	10 U	2 U
Chloromethane		NRC	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		NRC	3.4 U	2 U	2.9 U	14.4 U	2.4 U
Styrene	100	NRC	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	1000	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	NRC	0.67 J	9.3 =	2.9 J	30 U	6 U

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1816 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

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

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

Laboratory Qualifiers

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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-B. Summary of VOC Groundwater Analytical Results (continued)

Station:		In-Stream	AF-31	AF-31	AF-31	AF-31	AF-31
Sample ID:	Federal	Water	AF3132	AF3142	AF3152	AF3162	AF3172
Screened Interval (ft BGS):	SWDA	Quality	16.0 - 20.0	21.0 - 25.0	26.0 - 30.0	31.0 - 35.0	36.0 - 40.0
Collection Date:	MCLs	Standards	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	NRC	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		NRC	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		NRC	2 U	16.4 =	2 U	2 U	2 U
1,2-Dichloropropane		NRC	2 U	2 U	2 U	2 U	2 U
1,3-cis-Dichloropropene		1700	2 U	2 U	2 U	2 U	2 U
1,3-trans-Dichloropropene		1700	2 U	2 U	2 U	2 U	2 U
2-Butanone		NRC	5 R	5 R	5 R	1.9 J	1.3 J
2-Hexanone		NRC	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
Acetone		NRC	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		NRC	5 U	5 U	5 U	5 U	5 U
Bromoform		360	2 U	2 U	2 U	2 U	2 U
Bromomethane		NRC	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide		NRC	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	21000	2 U	2 U	2 U	2 U	2 U
Chloroethane		NRC	2 U	2 U	2 U	2 U	2 U
Chloroform		470.8	2 U	2 U	2 U	2 U	2 U
Chloromethane		NRC	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		NRC	2.3 U	3 =	2 U	2 U	2.6 U
Styrene	100	NRC	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	1000	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	NRC	6 U	6 U	6 U	6 U	6 U

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1816 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

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

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

Laboratory Qualifiers

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

Table VIII-B. Summary of VOC Groundwater Analytical Results (continued)

Station:		In-Stream	AF-31	AF-31	AF-32	AF-32	AF-32
Sample ID:	Federal	Water	AF3182	AF3192	AF3212	AF3222	AF3232
Screened Interval (ft BGS):	SWDA	Quality	41.0 - 45.0	46.0 - 50.0	11.0 - 15.0	16.0 - 20.0	21.0 - 25.0
Collection Date:	MCLs	Standards	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS							
1,1,1-Trichloroethane	200	NRC	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		NRC	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		NRC	2 U	2 U	6.4 =	2 U	2 U
1,2-Dichloropropane		NRC	2 U	2 U	2 U	2 U	2 U
1,3-cis-Dichloropropene		1700	2 U	2 U	2 U	2 U	2 U
1,3-trans-Dichloropropene		1700	2 U	2 U	2 U	2 U	2 U
2-Butanone		NRC	5 R	5 R	5 R	0.93 J	5 R
2-Hexanone		NRC	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
Acetone		NRC	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		NRC	5 U	5 U	5 U	5 U	5 U
Bromoform		360	2 U	2 U	2 U	2 U	2 U
Bromomethane		NRC	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide		NRC	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	21000	2 U	2 U	2 U	2 U	2 U
Chloroethane		NRC	2 U	2 U	2 U	2 U	2 U
Chloroform		470.8	2 U	2 U	2 U	2 U	2 U
Chloromethane		NRC	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		NRC	2 U	2.9 U	3.4 U	2.1 U	2.9 =
Styrene	100	NRC	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	1000	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	NRC	6 U	6 U	6 U	6 U	6 U

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1816 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

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

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

Laboratory Qualifiers

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

Table VIII-B. Summary of VOC Groundwater Analytical Results (continued)

Station:		In-Stream	AF-32	AF-32	AF-32	AF-32	AF-32	AF-33
Sample ID:	Federal	Water	AF3242	AF3252	AF3262	AF3272	AF3282	AF3312
Screened Interval (ft BGS):	SWDA	Quality	26.0 - 30.0	31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	46.0 - 50.0	2.3 - 11.8
Collection Date:	MCLs	Standards	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
VOLATILE ORGANIC COMPOUNDS								
1,1,1-Trichloroethane	200	NRC	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		NRC	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		NRC	2 U	2 U	2 U	2 U	2 U	6.4 =
1,2-Dichloropropane		NRC	2 U	2 U	2 U	2 U	2 U	2 U
1,3-cis-Dichloropropene		1700	2 U	2 U	2 U	2 U	2 U	2 U
1,3-trans-Dichloropropene		1700	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 R
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 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		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	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	21000	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	2 U	2 U	2 U
Methylene Chloride		NRC	2.8 U	2.6 U	5.4 U	2.7 U	3 U	2.1 =
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	1000	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	NRC	6 U	6 U	6 U	6 U	6 U	6 U

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1816 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

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

[2] 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 that 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-B. Summary of VOC Groundwater Analytical Results (continued)

Station:		In-Stream	AF-34	AF-35	AF-36	AF-37	AF-38	AF-39
Sample ID:	Federal	Water	AF3412	AF3512	AF3612	AF3712	AF3812	AF3912
Screened Interval (ft BGS):	SWDA	Quality	1.4 - 10.9	1.2 - 10.7	1.4 - 10.9	4.4 - 14.3	4.1 - 14.1	4.4 - 14.3
Collection Date:	MCLs	Standards	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99	25-Sep-99
Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(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		1700	2 U	2 U	2 U	2 U	2 U	2 U
1,3-trans-Dichloropropene		1700	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	21000	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	1000	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:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

Analytical data for QA/QC samples AF0524 (duplicate), AF1326 (equipment rinsate), AF1524 (duplicate), AF1816 (equipment rinsate), AF2024 (duplicate), AF3024 (duplicate), AF3224 (duplicate), and AF3714 (duplicate) are contained within this appendix, but are not summarized in this table.

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

[2] 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 that 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-C. Summary of CAP-Part B Surface Water Analytical Results

Station: Sample ID: Collection Date: Units:	In-Stream Water Quality Standards[1] (µg/L)	AF-S1 AF0119 11-May-99 (µg/L)	AF-S2 AF0219 11-May-99 (µg/L)	AF-S3 AF0319 12-May-99 (µg/L)
VOLATILE ORGANIC COMPOUNDS				
Benzene	71.28	2 U	2 U	2 U
Toluene	200,000	2 U	2 U	2 U
Ethylbenzene	28,718	2 U	2 U	2 U
Xylenes, Total	NRC	3 U	3 U	3 U
POLYNUCLEAR AROMATIC HYDROCARBONS				
2-Chloronaphthalene	NRC	10.9 UJ	10 UJ	10 U
Acenaphthene	NRC	10.9 UJ	10 UJ	10 U
Acenaphthylene	NRC	10.9 UJ	10 UJ	10 U
Anthracene	110,000	10.9 UJ	10 UJ	10 U
Benzo(a)anthracene	0.0311	10.9 UJ	10 UJ	10 U
Benzo(a)pyrene	0.0311	10.9 UJ	10 UJ	10 U
Benzo(b)fluoranthene	NRC	10.9 UJ	10 UJ	10 U
Benzo(g,h,i)perylene	NRC	10.9 UJ	10 UJ	10 U
Benzo(k)fluoranthene	0.0311	10.9 UJ	10 UJ	10 U
Chrysene	0.0311	10.9 UJ	10 UJ	10 U
Dibenzo(a,h)anthracene	0.0311	10.9 UJ	10 UJ	10 U
Fluoranthene	370	10.9 UJ	10 UJ	10 U
Fluorene	14,000	10.9 UJ	10 UJ	10 U
Indeno(1,2,3-cd)pyrene	0.0311	10.9 UJ	10 UJ	10 U
Naphthalene	NRC	10.9 UJ	10 UJ	10 U
Phenanthrene	NRC	10.9 UJ	10 UJ	10 U
Pyrene	11,000	10.9 UJ	10 UJ	10 U

NOTES:

CAP-Part B field work performed in 1999 was conducted in accordance the CAP-A guidance published in May 1998, thus the new SW-846 analytical methods were used during the CAP-Part B investigation conducted in 1999.

[1] 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 that 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.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0112

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252603W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905125-04

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4S524

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/07/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/08/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

USQ

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

R GDY

DATA VALIDATION COPY

FORM I SV-1 OLM03.0

28

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252601W

Method Type: Total Metals

Sample ID: 9905122-06

Client ID: AF0112F

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/5/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	177000	µg/L		=	P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0212

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252604W

Matrix: (soil/water) WATER Lab Sample ID: 9905173-02

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2H507

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. _____ Date Analyzed: 05/07/99

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	
71-43-2	benzene	27.4		=
108-88-3	toluene	1.8	J	J
100-41-4	ethylbenzene	3.4		=
1330-20-7	xylenes (total)	1.1	J	J

FORM I VOA OLM03.0

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0212

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252605W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905211-06

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: 4T518

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/15/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.4	U
91-58-7	2-chloronaphthalene	10.4	U
208-96-8	acenaphthylene	10.4	U
83-32-9	acenaphthene	10.4	U
86-73-7	fluorene	10.4	U
85-01-8	phenanthrene	10.4	U
120-12-7	anthracene	10.4	U
206-44-0	fluoranthene	10.4	U
129-00-0	pyrene	10.4	U
56-55-3	benzo(a)anthracene	10.4	U
218-01-9	chrysene	10.4	U
205-99-2	benzo(b)fluoranthene	10.4	U
207-08-9	benzo(k)fluoranthene	10.4	U
50-32-8	benzo(a)pyrene	10.4	U
193-39-5	indeno(1,2,3-cd)pyrene	10.4	U
53-70-3	dibenz(a,h)anthracene	10.4	U
191-24-2	benzo(g,h,i)perylene	10.4	U

DATA VALIDATION COPY

Form 1: Inorganic Analyses Data Sheet

DATA VALIDATION COPY

SDG No.: H252604W

Method Type: Total Metals

Sample ID: 9905173-11

Client ID: AF0212

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/6/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	64800	µg/L	=		P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0312

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252604W

Matrix: (soil/water) WATER Lab Sample ID: 9905173-03

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2H515

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. _____ Date Analyzed: 05/07/99

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
71-43-2	benzene	51.8		
108-88-3	toluene	1.6	J	
100-41-4	ethylbenzene	112		
1330-20-7	xylenes (total)	2.6	J	

FORM I VOA OLM03.0

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0312RE

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252605W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905211-04

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4U217-SAIC

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/17/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/18/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

USL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	21.8	
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

J A01

U

Form 1: Inorganic Analyses Data Sheet

DATA VALIDATION COPY

SDG No.: H252604W

Method Type: Total Metals

Sample ID: 9905173-12

Client ID: AF0312

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/6/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	49700	µg/L	=		P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

RINSATE

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0316

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252604W

Matrix: (soil/water) WATER Lab Sample ID: 9905173-04

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2H509

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. _____ Date Analyzed: 05/07/99

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	
71-43-2	benzene	2.0	U	U
108-88-3	toluene	1.8	J	J
100-41-4	ethylbenzene	2.0	U	U
1330-20-7	xylenes (total)	5.0	U	U

RINSATE

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

AF0316

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252605W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905211-05

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: 4T517

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/15/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	23.5	
91-58-7	2-chloronaphthalene	10.4	U
208-96-8	acenaphthylene	10.4	U
83-32-9	acenaphthene	10.4	U
86-73-7	fluorene	10.4	U
85-01-8	phenanthrene	10.4	U
120-12-7	anthracene	10.4	U
206-44-0	fluoranthene	10.4	U
129-00-0	pyrene	10.4	U
56-55-3	benzo(a)anthracene	10.4	U
218-01-9	chrysene	10.4	U
205-99-2	benzo(b)fluoranthene	10.4	U
207-08-9	benzo(k)fluoranthene	10.4	U
50-32-8	benzo(a)pyrene	10.4	U
193-39-5	indeno(1,2,3-cd)pyrene	10.4	U
53-70-3	dibenz(a,h)anthracene	10.4	U
191-24-2	benzo(g,h,i)perylene	10.4	U

= U

RINSATE
DATA VALIDATION
COPY

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252604W Method Type: Total Metals

Sample ID: 9905173-13 Client ID: AF0316

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/6/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	14.7	µg/L	B	J	P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0412

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252604W

Matrix: (soil/water) WATER Lab Sample ID: 9905173-05

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2H510

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. _____ Date Analyzed: 05/07/99

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	
71-43-2	benzene	1.5	J	J
108-88-3	toluene	1.4	J	J
100-41-4	ethylbenzene	2.0	U	U
1330-20-7	xylenes (total)	5.0	U	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0412

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252605W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905211-03

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: 4T515

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/15/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	11.1	U
91-58-7	2-chloronaphthalene	11.1	U
208-96-8	acenaphthylene	11.1	U
83-32-9	acenaphthene	11.1	U
86-73-7	fluorene	11.1	U
85-01-8	phenanthrene	11.1	U
120-12-7	anthracene	11.1	U
206-44-0	fluoranthene	11.1	U
129-00-0	pyrene	11.1	U
56-55-3	benzo(a)anthracene	11.1	U
218-01-9	chrysene	11.1	U
205-99-2	benzo(b)fluoranthene	11.1	U
207-08-9	benzo(k)fluoranthene	11.1	U
50-32-8	benzo(a)pyrene	11.1	U
193-39-5	indeno(1,2,3-cd)pyrene	11.1	U
53-70-3	dibenz(a,h)anthracene	11.1	U
191-24-2	benzo(g,h,i)perylene	11.1	U

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VALIDATION COPY

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252604W

Method Type: Total Metals

Sample ID: 9905173-14

Client ID: AF0412

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/6/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	297000	µg/L	=		P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0512

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252604W

Matrix: (soil/water) WATER Lab Sample ID: 9905173-06

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2H511

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. _____ Date Analyzed: 05/07/99

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
71-43-2	benzene	8.2	
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	5.2	
1330-20-7	xylenes (total)	5.0	U

FORM I VOA OLM03.0

13

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0512

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252605W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905211-07

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: 4T519

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/15/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	0.81	J
91-58-7	2-chloronaphthalene	11.1	U
208-96-8	acenaphthylene	11.1	U
83-32-9	acenaphthene	11.1	U
86-73-7	fluorene	11.1	U
85-01-8	phenanthrene	11.1	U
120-12-7	anthracene	11.1	U
206-44-0	fluoranthene	11.1	U
129-00-0	pyrene	11.1	U
56-55-3	benzo(a)anthracene	11.1	U
218-01-9	chrysene	11.1	U
205-99-2	benzo(b)fluoranthene	11.1	U
207-08-9	benzo(k)fluoranthene	11.1	U
50-32-8	benzo(a)pyrene	11.1	U
193-39-5	indeno(1,2,3-cd)pyrene	11.1	U
53-70-3	dibenz(a,h)anthracene	11.1	U
191-24-2	benzo(g,h,i)perylene	11.1	U

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DATA VALIDATION COPY

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252604W

Method Type: Total Metals

Sample ID: 9905173-15

Client ID: AF0512

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/6/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	45000	µg/L	=		P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

DUPLICATE

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AFO514

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252604W

Matrix: (soil/water) WATER Lab Sample ID: 9905173-01

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2H506

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. _____ Date Analyzed: 05/07/99

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	
71-43-2	benzene	55.4		=
108-88-3	toluene	3.0		=
100-41-4	ethylbenzene	33.7		=
1330-20-7	xylenes (total)	2.6	J	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DUPLICATE
EPA SAMPLE NO.

AF0514

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252604W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905173-10

Sample wt/vol: 930.0 (g/mL) ML Lab File ID: 4T508

Level: (low/med) LOW DATA VALIDATION Date Received: 05/06/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	71.0	
91-58-7	2-chloronaphthalene	10.8	U
208-96-8	acenaphthylene	10.8	U
83-32-9	acenaphthene	10.8	U
86-73-7	fluorene	10.8	U
85-01-8	phenanthrene	10.8	U
120-12-7	anthracene	10.8	U
206-44-0	fluoranthene	10.8	U
129-00-0	pyrene	10.8	U
56-55-3	benzo(a)anthracene	10.8	U
218-01-9	chrysene	10.8	U
205-99-2	benzo(b)fluoranthene	10.8	U
207-08-9	benzo(k)fluoranthene	10.8	U
50-32-8	benzo(a)pyrene	10.8	U
193-39-5	indeno(1,2,3-cd)pyrene	10.8	U
53-70-3	dibenz(a,h)anthracene	10.8	U
191-24-2	benzo(g,h,i)perylene	10.8	U

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DATA VALIDATION COPY
DUPLICATE

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252604W

Method Type: Total Metals

Sample ID: ~~9905122-10~~ 9905173-10

Client ID: ~~AE0712~~ SHOULD BE AF0514

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: ~~5/5/99~~ 5/6/99 Level: LOW

% Solids: 0.00

MMP 6/9/99

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	46000	µg/L	=		P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0612

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252604W

Matrix: (soil/water) WATER Lab Sample ID: 9905173-07

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2H512

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. _____ Date Analyzed: 05/07/99

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
71-43-2	benzene	490	
108-88-3	toluene	20.0	
100-41-4	ethylbenzene	31.6	
1330-20-7	xylenes (total)	24.6	J

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0612

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252605W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905211-01

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: 4T513

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.4	U
91-58-7	2-chloronaphthalene	10.4	U
208-96-8	acenaphthylene	10.4	U
83-32-9	acenaphthene	10.4	U
86-73-7	fluorene	10.4	U
85-01-8	phenanthrene	10.4	U
120-12-7	anthracene	10.4	U
206-44-0	fluoranthene	10.4	U
129-00-0	pyrene	10.4	U
56-55-3	benzo(a)anthracene	10.4	U
218-01-9	chrysene	10.4	U
205-99-2	benzo(b)fluoranthene	10.4	U
207-08-9	benzo(k)fluoranthene	10.4	U
50-32-8	benzo(a)pyrene	10.4	U
193-39-5	indeno(1,2,3-cd)pyrene	10.4	U
53-70-3	dibenz(a,h)anthracene	10.4	U
191-24-2	benzo(g,h,i)perylene	10.4	U

DATA VALIDATION
COPY

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252604W

Method Type: Total Metals

Sample ID: 9905173-16

Client ID: AF0612

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/6/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	30000	µg/L	=		P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0712

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252601W

Matrix: (soil/water) WATER Lab Sample ID: 9905122-09

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5H320

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: not dec. _____ Date Analyzed: 05/05/99

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
71-43-2	benzene	9940 ~~15000~~	E D
108-88-3	toluene	200	U
100-41-4	ethylbenzene	952	
1330-20-7	xylenes (total)	792	

MMR 6/17/99

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FORM I VOA OLM03.0

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0712

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252603W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905125-01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4T205

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/07/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/11/99

Injection Volume: 1.0(uL) Dilution Factor: 40.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	511	
91-58-7	2-chloronaphthalene	400	U
208-96-8	acenaphthylene	400	U
83-32-9	acenaphthene	400	U
86-73-7	fluorene	400	U
85-01-8	phenanthrene	400	U
120-12-7	anthracene	400	U
206-44-0	fluoranthene	400	U
129-00-0	pyrene	400	U
56-55-3	benzo(a)anthracene	400	U
218-01-9	chrysene	400	U
205-99-2	benzo(b)fluoranthene	400	U
207-08-9	benzo(k)fluoranthene	400	U
50-32-8	benzo(a)pyrene	400	U
193-39-5	indeno(1,2,3-cd)pyrene	400	U
53-70-3	dibenz(a,h)anthracene	400	U
191-24-2	benzo(g,h,i)perylene	400	U

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252601W

Method Type: Total Metals

Sample ID: 9905122-10

Client ID: AF0712

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/5/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	73700	µg/L		=	P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0812

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252601W

Matrix: (soil/water) WATER Lab Sample ID: 9905122-07

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5H317

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: not dec. _____ Date Analyzed: 05/05/99

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
71-43-2	benzene	7.4	
108-88-3	toluene	0.56	J
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	3.0	U

FORM I VOA OLM03.0

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0812

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252603W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905125-02

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4S522

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/07/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/08/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	1.5	J
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	4.9	J
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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FORM I SV-1 OLM03.0

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252601W

Method Type: Total Metals

Sample ID: 9905122-08

Client ID: AF0812F

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/5/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	128000	µg/L		=	P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0912

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252601W

Matrix: (soil/water) WATER Lab Sample ID: 9905122-03

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5H407

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: not dec. _____ Date Analyzed: 05/06/99

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	
71-43-2	benzene	2.1		5
108-88-3	toluene	0.98	J	5
100-41-4	ethylbenzene	17.3		5
1330-20-7	xylenes (total)	0.68	J	5

FORM I VOA OLM03.0

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0912

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252601W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905122-04

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4S520

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/07/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/08/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

USD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	28.7	
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	2.4	J
86-73-7	fluorene	4.3	J
85-01-8	phenanthrene	1.9	J
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	0.59	J
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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Form 1: Inorganic Analyses Data Sheet

SDG No.: H252601W

Method Type: Total Metals

Sample ID: 9905122-04

Client ID: AF0912

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/5/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	56300	µg/L	=		P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

COPY

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1012

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252601W

Matrix: (soil/water) WATER Lab Sample ID: 9905122-01

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5H314

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: not dec. _____ Date Analyzed: 05/05/99

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
71-43-2	benzene	1.1	J
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	3.0	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1012

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252601W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905122-02

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4S519

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/07/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/08/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

USP

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	2.5	J
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

R GD4

J R

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252601W

Method Type: Total Metals

Sample ID: 9905122-02

Client ID: AF1012

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/5/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	78100	µg/L	=		P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

DATA VALIDATION COPY

DUPLICATE

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1014

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252601W

Matrix: (soil/water) WATER Lab Sample ID: 9905122-11

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5H315

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: not dec. _____ Date Analyzed: 05/05/99

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
71-43-2	benzene	1.0	J
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	3.0	U

J U

DUPLICATE

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1014

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252603W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905125-06

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4S526

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/07/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/08/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

USL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	1.8	J
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	0.61	J
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	1.4	J
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

SJ GD2

SJ

SJ

SJ

SJ

Form 1: Inorganic Analyses Data Sheet

DUPLICATE

SDG No.: H252601W

Method Type: Total Metals

Sample ID: 9905122-12

Client ID: AF1014

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/5/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	79300	µg/L		=	P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1112

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252604W

Matrix: (soil/water) WATER Lab Sample ID: 9905173-08

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2H513

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: not dec. _____ Date Analyzed: 05/07/99

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
71-43-2	benzene	2.0	U
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	5.0	U

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1112

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252605W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905211-02

Sample wt/vol: 930.0 (g/mL) ML Lab File ID: 4T514

Level: (low/med) LOW Date Received: 05/06/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	23.3	
91-58-7	2-chloronaphthalene	10.8	U
208-96-8	acenaphthylene	10.8	U
83-32-9	acenaphthene	10.8	U
86-73-7	fluorene	10.8	U
85-01-8	phenanthrene	10.8	U
120-12-7	anthracene	10.8	U
206-44-0	fluoranthene	10.8	U
129-00-0	pyrene	10.8	U
56-55-3	benzo(a)anthracene	10.8	U
218-01-9	chrysene	10.8	U
205-99-2	benzo(b)fluoranthene	10.8	U
207-08-9	benzo(k)fluoranthene	10.8	U
50-32-8	benzo(a)pyrene	10.8	U
193-39-5	indeno(1,2,3-cd)pyrene	10.8	U
53-70-3	dibenz(a,h)anthracene	10.8	U
191-24-2	benzo(g,h,i)perylene	10.8	U

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DATA VALIDATION COPY

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252604W

Method Type: Total Metals

Sample ID: 9905173-17

Client ID: AF1112

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/6/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	97800	µg/L	=		P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1212

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252601W

Matrix: (soil/water) WATER Lab Sample ID: 9905122-13

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5H319

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: not dec. _____ Date Analyzed: 05/05/99

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
71-43-2	benzene	79.3	
108-88-3	toluene	20.0	U
100-41-4	ethylbenzene	92.3	
1330-20-7	xylenes (total)	27.4	J

FORM I VOA OLM03.0

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1212

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252603W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905125-05

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4T206

Level: (low/med) LOW Date Received: 05/05/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/07/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/11/99

Injection Volume: 1.0(uL) Dilution Factor: 40.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	59.5	J
91-58-7	2-chloronaphthalene	400	U
208-96-8	acenaphthylene	400	U
83-32-9	acenaphthene	400	U
86-73-7	fluorene	400	U
85-01-8	phenanthrene	400	U
120-12-7	anthracene	400	U
206-44-0	fluoranthene	400	U
129-00-0	pyrene	400	U
56-55-3	benzo(a)anthracene	400	U
218-01-9	chrysene	400	U
205-99-2	benzo(b)fluoranthene	400	U
207-08-9	benzo(k)fluoranthene	400	U
50-32-8	benzo(a)pyrene	400	U
193-39-5	indeno(1,2,3-cd)pyrene	400	U
53-70-3	dibenz(a,h)anthracene	400	U
191-24-2	benzo(g,h,i)perylene	400	U

J U

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252601W

Method Type: Total Metals

Sample ID: 9905122-14

Client ID: AF1212

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/5/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	176000	µg/L		=	P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1312

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252608W

Matrix: (soil/water) WATER Lab Sample ID: 9905247-01

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8I112

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. _____ Date Analyzed: 05/10/99

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	
71-43-2	benzene	0.98	J	hshh
108-88-3	toluene	2.0	U	
100-41-4	ethylbenzene	0.57	J	
1330-20-7	xylenes (total)	0.93	J	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1312

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905246-15

Sample wt/vol: 1010 (g/mL) ML Lab File ID: 7T524

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: _____ decanted: (Y/N) ___ Date Extracted:05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/15/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	9.9	U
91-58-7	2-chloronaphthalene	9.9	U
208-96-8	acenaphthylene	9.9	U
83-32-9	acenaphthene	9.9	U
86-73-7	fluorene	9.9	U
85-01-8	phenanthrene	9.9	U
120-12-7	anthracene	9.9	U
206-44-0	fluoranthene	9.9	U
129-00-0	pyrene	9.9	U
56-55-3	benzo(a)anthracene	9.9	U
218-01-9	chrysene	9.9	U
205-99-2	benzo(b)fluoranthene	9.9	U
207-08-9	benzo(k)fluoranthene	9.9	U
50-32-8	benzo(a)pyrene	9.9	U
193-39-5	indeno(1,2,3-cd)pyrene	9.9	U
53-70-3	dibenz(a,h)anthracene	9.9	U
191-24-2	benzo(g,h,i)perylene	9.9	U

U

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252608W

Method Type: Total Metals

Sample ID: 9905247-02

Client ID: AF1312

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/8/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	160000	µg/L	=		P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

RINSATE

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1316

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252608W

Matrix: (soil/water) WATER Lab Sample ID: 9905247-11

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5J436

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. _____ Date Analyzed: 05/21/99

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
71-43-2	benzene	1.1	J
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	3.0	U

J U

13

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

RINSATE

EPA SAMPLE NO.

AF1316RE

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905246-12

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: 8V222

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/26/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

USR

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.5	U
91-58-7	2-chloronaphthalene	10.5	U
208-96-8	acenaphthylene	10.5	U
83-32-9	acenaphthene	10.5	U
86-73-7	fluorene	10.5	U
85-01-8	phenanthrene	10.5	U
120-12-7	anthracene	10.5	U
206-44-0	fluoranthene	10.5	U
129-00-0	pyrene	10.5	U
56-55-3	benzo(a)anthracene	10.5	U
218-01-9	chrysene	10.5	U
205-99-2	benzo(b)fluoranthene	10.5	U
207-08-9	benzo(k)fluoranthene	10.5	U
50-32-8	benzo(a)pyrene	10.5	U
193-39-5	indeno(1,2,3-cd)pyrene	10.5	U
53-70-3	dibenz(a,h)anthracene	10.5	U
191-24-2	benzo(g,h,i)perylene	10.5	U

US A01

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1412

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252608W

Matrix: (soil/water) WATER Lab Sample ID: 9905247-03

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8I113

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. _____ Date Analyzed: 05/10/99

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
71-43-2	benzene	2.0	U
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	3.0	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1412

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905246-06

Sample wt/vol: 940.0 (g/mL) ML Lab File ID: 8V218

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/25/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.6	U
91-58-7	2-chloronaphthalene	10.6	U
208-96-8	acenaphthylene	10.6	U
83-32-9	acenaphthene	10.6	U
86-73-7	fluorene	10.6	U
85-01-8	phenanthrene	10.6	U
120-12-7	anthracene	10.6	U
206-44-0	fluoranthene	10.6	U
129-00-0	pyrene	10.6	U
56-55-3	benzo(a)anthracene	10.6	U
218-01-9	chrysene	10.6	U
205-99-2	benzo(b)fluoranthene	10.6	U
207-08-9	benzo(k)fluoranthene	10.6	U
50-32-8	benzo(a)pyrene	10.6	U
193-39-5	indeno(1,2,3-cd)pyrene	10.6	U
53-70-3	dibenz(a,h)anthracene	10.6	U
191-24-2	benzo(g,h,i)perylene	10.6	U

USGDQ

RELEASED FOR PUBLICATION

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252608W

Method Type: Total Metals

Sample ID: 9905247-04

Client ID: AF1412 5

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/8/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	56100	µg/L	=		P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1512

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252608W

Matrix: (soil/water) WATER Lab Sample ID: 9905247-05

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8I114

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. _____ Date Analyzed: 05/10/99

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
71-43-2	benzene	2.0	U
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	3.0	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1512

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905246-11

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: 8V221

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/26/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.2	U
91-58-7	2-chloronaphthalene	10.2	U
208-96-8	acenaphthylene	10.2	U
83-32-9	acenaphthene	10.2	U
86-73-7	fluorene	10.2	U
85-01-8	phenanthrene	10.2	U
120-12-7	anthracene	10.2	U
206-44-0	fluoranthene	10.2	U
129-00-0	pyrene	10.2	U
56-55-3	benzo(a)anthracene	10.2	U
218-01-9	chrysene	10.2	U
205-99-2	benzo(b)fluoranthene	10.2	U
207-08-9	benzo(k)fluoranthene	10.2	U
50-32-8	benzo(a)pyrene	1.6	J
193-39-5	indeno(1,2,3-cd)pyrene	10.2	U
53-70-3	dibenz(a,h)anthracene	10.2	U
191-24-2	benzo(g,h,i)perylene	10.2	U

TISSUES

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252608W

Method Type: Total Metals

Sample ID: 9905247-06

Client ID: AF1512 f

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/8/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	101000	µg/L	=		P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

DUPLICATE

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1514

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252608W

Matrix: (soil/water) WATER Lab Sample ID: 9905247-07

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8I115

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. _____ Date Analyzed: 05/10/99

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
71-43-2	benzene	2.0	U
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	3.0	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DUPLICATE
EPA SAMPLE NO.

AF1514

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905246-10

Sample wt/vol: 940.0 (g/mL) ML Lab File ID: 8V217

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/25/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

USQ

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.6	U
91-58-7	2-chloronaphthalene	10.6	U
208-96-8	acenaphthylene	10.6	U
83-32-9	acenaphthene	10.6	U
86-73-7	fluorene	10.6	U
85-01-8	phenanthrene	10.6	U
120-12-7	anthracene	10.6	U
206-44-0	fluoranthene	10.6	U
129-00-0	pyrene	10.6	U
56-55-3	benzo(a)anthracene	10.6	U
218-01-9	chrysene	10.6	U
205-99-2	benzo(b)fluoranthene	10.6	U
207-08-9	benzo(k)fluoranthene	10.6	U
50-32-8	benzo(a)pyrene	1.3	J
193-39-5	indeno(1,2,3-cd)pyrene	10.6	U
53-70-3	dibenz(a,h)anthracene	10.6	U
191-24-2	benzo(g,h,i)perylene	10.6	U

US GD2

SUPERSET

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252608W

Method Type: Total Metals DUPLICATE

Sample ID: 9905247-08

Client ID: AF1514F

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/8/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	96200	µg/L		=	P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1612

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252608W

Matrix: (soil/water) WATER Lab Sample ID: 9905247-09

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8I116

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. _____ Date Analyzed: 05/10/99

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	
71-43-2	benzene	2.0	U	U
108-88-3	toluene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
1330-20-7	xylenes (total)	3.0	U	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1612

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905246-09

Sample wt/vol: 910.0 (g/mL) ML Lab File ID: 8V216

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/25/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

USD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	11.0	U
91-58-7	2-chloronaphthalene	11.0	U
208-96-8	acenaphthylene	11.0	U
83-32-9	acenaphthene	11.0	U
86-73-7	fluorene	11.0	U
85-01-8	phenanthrene	11.0	U
120-12-7	anthracene	11.0	U
206-44-0	fluoranthene	11.0	U
129-00-0	pyrene	11.0	U
56-55-3	benzo(a)anthracene	11.0	U
218-01-9	chrysene	11.0	U
205-99-2	benzo(b)fluoranthene	11.0	U
207-08-9	benzo(k)fluoranthene	11.0	U
50-32-8	benzo(a)pyrene	11.0	U
193-39-5	indeno(1,2,3-cd)pyrene	11.0	U
53-70-3	dibenz(a,h)anthracene	11.0	U
191-24-2	benzo(g,h,i)perylene	11.0	U

US GD2

DATA VALIDATION COPY

FORM I SV-1 OLM03.

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252608W

Method Type: Total Metals

Sample ID: 9905247-10

Client ID: AF1612 F

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/8/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	104000	µg/L	=		P	8.4	TJA61 Trace2 ICPAES	990517-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1712

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252611W

Matrix: (soil/water) WATER Lab Sample ID: 9905251-03

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2I408

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. _____ Date Analyzed: 05/13/99

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	
71-43-2	benzene		24.5		=
108-88-3	toluene		2 ~~0.57~~	JB	U F01, F06
100-41-4	ethylbenzene		2.0	U	U
1330-20-7	xylenes (total)		3.0	U	U

FORM I VOA OLM03.0

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1712

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252610W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905250-13

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5T521

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/12/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

DATA VALIDATION COPY

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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FORM I SV-1 OLM03.0

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252611W

Method Type: Total Metals

Sample ID: 9905251-04

Client ID: AF1712

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/9/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	155000	µg/L	=		P	8.4	TJA61 Trace2 ICPAES	990524-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

DATA VALIDATION COPY

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1812

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252611W

Matrix: (soil/water) WATER Lab Sample ID: 9905251-05

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2I409

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. _____ Date Analyzed: 05/13/99

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
71-43-2	benzene		9.6	
108-88-3	toluene		2 ~~0.67~~	JB
100-41-4	ethylbenzene		2.0	U
1330-20-7	xylenes (total)		3.0	U

= U F01, F06

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FORM I VOA OLM03.0

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1812

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H2S2610W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905250-12

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5T520

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/12/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252611W

Method Type: Total Metals

Sample ID: 9905251-06

Client ID: AF1812

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/9/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	59900	µg/L	=		P	8.4	TJA61 Trace2 ICPAES	990524-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

RINSATE

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1816

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252612W

Matrix: (soil/water) WATER Lab Sample ID: 9905253-01

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8J518

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. _____ Date Analyzed: 05/21/99

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	
71-43-2	benzene	2.0	U	U
108-88-3	toluene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
1330-20-7	xylenes (total)	3.0	U	

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

RINSATE

EPA SAMPLE NO.

AF1816

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252610W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905250-06

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5T514

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/12/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1912

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252611W

Matrix: (soil/water) WATER Lab Sample ID: 9905251-07

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2I410

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. _____ Date Analyzed: 05/13/99

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	
71-43-2	benzene	3.5		=
108-88-3	toluene	2 ~~0.59~~	JB	U FO1, FO6
100-41-4	ethylbenzene	2.0	U	U
1330-20-7	xylenes (total)	3.0	U	U

FORM I VOA OLM03.0

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1912

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252610W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905250-11

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5T519

Level: (low/med) LOW DATA VALIDATION COPY Date Received: 05/09/99

% Moisture: _____ decanted: (Y/N) Y Date Extracted: 05/12/99

Concentrated Extract Volume: 1.00 (mL) Date Analyzed: 05/14/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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Form 1: Inorganic Analyses Data Sheet

SDG No.: H252611W

Method Type: Total Metals

Sample ID: 9905251-08

Client ID: AF1912

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/9/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	23400	µg/L	=		P	8.4	TJA61 Trace2 ICPAES	990524-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2012

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252611W

Matrix: (soil/water) WATER Lab Sample ID: 9905251-01

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2I407

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. _____ Date Analyzed: 05/13/99

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
71-43-2	benzene	1.6	J	J
108-88-3	toluene	2.8	B	U F01,F07
100-41-4	ethylbenzene	2.0	U	U
1330-20-7	xylenes (total)	2.0	J	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2012

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252611W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905251-02

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5T525

Level: (low/med) LOW

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/09/99

Concentrated Extract Volume: 1.00 (mL) Date Extracted: 05/12/99

Injection Volume: 1.0 (uL) Date Analyzed: 05/14/99

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

DATA VALIDATION COPY

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

FORM I SV-1

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Form 1: Inorganic Analyses Data Sheet

SDG No.: H252611W

Method Type: Total Metals (ZN)

Sample ID: 9905251-02

Client ID: AF2012 0

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/9/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	28900	µg/L		=	P	8.4	TJA61 Trace2 ICPAES	990524-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

DATA VALIDATION COPY

DUPLICATE

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2014

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252611W

Matrix: (soil/water) WATER Lab Sample ID: 9905251-09

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2I411

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. _____ Date Analyzed: 05/13/99

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	
71-43-2	benzene	MAD 6/17/99	1.4	J	J
108-88-3	toluene	2	~~1.3~~	JB	U F01, F06
100-41-4	ethylbenzene		2.0	U	U
1330-20-7	xylenes (total)		3.0	U	U

DUPLICATE

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2014

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252610W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905250-14

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5T605

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/12/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/15/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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Form 1: Inorganic Analyses Data Sheet

DUPLICATE

SDG No.: H252611W

Method Type: Total Metals

Sample ID: 9905251-10

Client ID: AF2014 D

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/9/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	27600	µg/L	=		P	8.4	TJA61 Trace2 ICPAES	990524-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2112

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) WATER Lab Sample ID: 9905246-17

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5J432

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. _____ Date Analyzed: 05/21/99

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

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

DATA VALIDATION COPY

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	benzene	6520	~~1010~~	~~E~~ D	=
108-88-3	toluene		17.9		=
100-41-4	ethylbenzene	144	~~141~~	~~E~~ J	J N03
1330-20-7	xylenes (total)		18.5		=

MMP 6/10/99

USP

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2112RE

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905246-08

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: 8V220

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/26/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

USR

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	5.2	J
91-58-7	2-chloronaphthalene	10.3	U
208-96-8	acenaphthylene	10.3	U
83-32-9	acenaphthene	10.3	U
86-73-7	fluorene	10.3	U
85-01-8	phenanthrene	10.3	U
120-12-7	anthracene	10.3	U
206-44-0	fluoranthene	10.3	U
129-00-0	pyrene	10.3	U
56-55-3	benzo(a)anthracene	10.3	U
218-01-9	chrysene	10.3	U
205-99-2	benzo(b)fluoranthene	10.3	U
207-08-9	benzo(k)fluoranthene	10.3	U
50-32-8	benzo(a)pyrene	10.3	U
193-39-5	indeno(1,2,3-cd)pyrene	10.3	U
53-70-3	dibenz(a,h)anthracene	10.3	U
191-24-2	benzo(g,h,i)perylene	10.3	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2122

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252608W

Matrix: (soil/water) WATER Lab Sample ID: 9905247-17

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5J442

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. _____ Date Analyzed: 05/21/99

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	
71-43-2	benzene	233 ~~252~~	~~E~~ D	J
108-88-3	toluene	0.92	J	
100-41-4	ethylbenzene	21.3		J
1330-20-7	xylenes (total)	2.9	J	

6/17/99

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2122

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905246-04

Sample wt/vol: 890.0 (g/mL) ML Lab File ID: 7T510

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	1.0	J
91-58-7	2-chloronaphthalene	11.2	U
208-96-8	acenaphthylene	11.2	U
83-32-9	acenaphthene	11.2	U
86-73-7	fluorene	11.2	U
85-01-8	phenanthrene	11.2	U
120-12-7	anthracene	11.2	U
206-44-0	fluoranthene	11.2	U
129-00-0	pyrene	11.2	U
56-55-3	benzo(a)anthracene	11.2	U
218-01-9	chrysene	11.2	U
205-99-2	benzo(b)fluoranthene	11.2	U
207-08-9	benzo(k)fluoranthene	11.2	U
50-32-8	benzo(a)pyrene	11.2	U
193-39-5	indeno(1,2,3-cd)pyrene	11.2	U
53-70-3	dibenz(a,h)anthracene	11.2	U
191-24-2	benzo(g,h,i)perylene	11.2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2124

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) WATER Lab Sample ID: 9905246-18

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5J447

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. _____ Date Analyzed: 05/21/99

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	
71-43-2	benzene	195 ~~266~~	~~E~~ D	J
108-88-3	toluene	0.98	J	
100-41-4	ethylbenzene	17.5		J
1330-20-7	xylenes (total)	2.4	J	

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DUPLICATE

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2124

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905246-07

Sample wt/vol: 910.0 (g/mL) ML Lab File ID: 7T516

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

USE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	1.5	J
91-58-7	2-chloronaphthalene	11.0	U
208-96-8	acenaphthylene	11.0	U
83-32-9	acenaphthene	11.0	U
86-73-7	fluorene	11.0	U
85-01-8	phenanthrene	0.56	J
120-12-7	anthracene	11.0	U
206-44-0	fluoranthene	11.0	U
129-00-0	pyrene	11.0	U
56-55-3	benzo(a)anthracene	11.0	U
218-01-9	chrysene	11.0	U
205-99-2	benzo(b)fluoranthene	11.0	U
207-08-9	benzo(k)fluoranthene	11.0	U
50-32-8	benzo(a)pyrene	11.0	U
193-39-5	indeno(1,2,3-cd)pyrene	11.0	U
53-70-3	dibenz(a,h)anthracene	11.0	U
191-24-2	benzo(g,h,i)perylene	11.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2132

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252608W

Matrix: (soil/water) WATER Lab Sample ID: 9905247-16

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5J441

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. _____ Date Analyzed: 05/21/99

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
71-43-2	benzene	32.7	
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	3.0	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2132RE

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905246-03

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: 8V214

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/19/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/25/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

USL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.4	U
91-58-7	2-chloronaphthalene	10.4	U
208-96-8	acenaphthylene	10.4	U
83-32-9	acenaphthene	10.4	U
86-73-7	fluorene	10.4	U
85-01-8	phenanthrene	10.4	U
120-12-7	anthracene	10.4	U
206-44-0	fluoranthene	10.4	U
129-00-0	pyrene	10.4	U
56-55-3	benzo(a)anthracene	10.4	U
218-01-9	chrysene	10.4	U
205-99-2	benzo(b)fluoranthene	10.4	U
207-08-9	benzo(k)fluoranthene	10.4	U
50-32-8	benzo(a)pyrene	10.4	U
193-39-5	indeno(1,2,3-cd)pyrene	10.4	U
53-70-3	dibenz(a,h)anthracene	10.4	U
191-24-2	benzo(g,h,i)perylene	10.4	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2142

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252608W

Matrix: (soil/water) WATER Lab Sample ID: 9905247-15

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5J440

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. _____ Date Analyzed: 05/21/99

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
71-43-2	benzene	15.6	
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	3.0	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2142

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905246-05

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: 7T514

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.3	U
91-58-7	2-chloronaphthalene	10.3	U
208-96-8	acenaphthylene	10.3	U
83-32-9	acenaphthene	10.3	U
86-73-7	fluorene	10.3	U
85-01-8	phenanthrene	10.3	U
120-12-7	anthracene	10.3	U
206-44-0	fluoranthene	10.3	U
129-00-0	pyrene	10.3	U
56-55-3	benzo(a)anthracene	10.3	U
218-01-9	chrysene	10.3	U
205-99-2	benzo(b)fluoranthene	10.3	U
207-08-9	benzo(k)fluoranthene	10.3	U
50-32-8	benzo(a)pyrene	10.3	U
193-39-5	indeno(1,2,3-cd)pyrene	10.3	U
53-70-3	dibenz(a,h)anthracene	10.3	U
191-24-2	benzo(g,h,i)perylene	10.3	U

05 GPC

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2152

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252608W

Matrix: (soil/water) WATER Lab Sample ID: 9905247-14

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5J439

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. _____ Date Analyzed: 05/21/99

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
71-43-2	benzene	10.6	
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	3.0	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2152

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905246-14

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: 7TS23

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/15/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.2	U
91-58-7	2-chloronaphthalene	10.2	U
208-96-8	acenaphthylene	10.2	U
83-32-9	acenaphthene	10.2	U
86-73-7	fluorene	10.2	U
85-01-8	phenanthrene	10.2	U
120-12-7	anthracene	10.2	U
206-44-0	fluoranthene	10.2	U
129-00-0	pyrene	10.2	U
56-55-3	benzo(a)anthracene	10.2	U
218-01-9	chrysene	10.2	U
205-99-2	benzo(b)fluoranthene	10.2	U
207-08-9	benzo(k)fluoranthene	10.2	U
50-32-8	benzo(a)pyrene	10.2	U
193-39-5	indeno(1,2,3-cd)pyrene	10.2	U
53-70-3	dibenz(a,h)anthracene	10.2	U
191-24-2	benzo(g,h,i)perylene	10.2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2162

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252608W

Matrix: (soil/water) WATER Lab Sample ID: 9905247-13

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5J449

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. _____ Date Analyzed: 05/21/99

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
71-43-2	benzene	22.1	
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	3.0	
1330-20-7	xylenes (total)	1.8	J

FORM I VOA OLM03.0

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2162

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905246-02

Sample wt/vol: 940.0 (g/mL) ML Lab File ID: 7T512

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	2.8	J
91-58-7	2-chloronaphthalene	10.6	U
208-96-8	acenaphthylene	10.6	U
83-32-9	acenaphthene	10.6	U
86-73-7	fluorene	10.6	U
85-01-8	phenanthrene	1.9	J
120-12-7	anthracene	10.6	U
206-44-0	fluoranthene	10.6	U
129-00-0	pyrene	10.6	U
56-55-3	benzo(a)anthracene	10.6	U
218-01-9	chrysene	10.6	U
205-99-2	benzo(b)fluoranthene	10.6	U
207-08-9	benzo(k)fluoranthene	10.6	U
50-32-8	benzo(a)pyrene	10.6	U
193-39-5	indeno(1,2,3-cd)pyrene	10.6	U
53-70-3	dibenz(a,h)anthracene	10.6	U
191-24-2	benzo(g,h,i)perylene	10.6	U

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FORM I SV-1 OLM03.0

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2172

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252608W

Matrix: (soil/water) WATER Lab Sample ID: 9905247-12

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5J448

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. _____ Date Analyzed: 05/21/99

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	
71-43-2	benzene	7.0		
108-88-3	toluene	2.0	U	
100-41-4	ethylbenzene	7.1		
1330-20-7	xylenes (total)	6.2		

FORM I VOA OLM03.0

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2172

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905246-01

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: 7T511

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.2	U
91-58-7	2-chloronaphthalene	10.2	U
208-96-8	acenaphthylene	10.2	U
83-32-9	acenaphthene	10.2	U
86-73-7	fluorene	10.2	U
85-01-8	phenanthrene	10.2	U
120-12-7	anthracene	10.2	U
206-44-0	fluoranthene	10.2	U
129-00-0	pyrene	10.2	U
56-55-3	benzo(a)anthracene	10.2	U
218-01-9	chrysene	10.2	U
205-99-2	benzo(b)fluoranthene	10.2	U
207-08-9	benzo(k)fluoranthene	10.2	U
50-32-8	benzo(a)pyrene	10.2	U
193-39-5	indeno(1,2,3-cd)pyrene	10.2	U
53-70-3	dibenz(a,h)anthracene	10.2	U
191-24-2	benzo(g,h,i)perylene	10.2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2182

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) WATER Lab Sample ID: 9905246-16

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5J431

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: not dec. _____ Date Analyzed: 05/21/99

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
71-43-2	benzene	0.86	J
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	3.0	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2182

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905246-16

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 7T525

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/15/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2192

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) WATER Lab Sample ID: 9905246-19

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5J434

Level: (low/med) LOW DATA VALIDATION COPY Date Received: 05/08/99

% Moisture: not dec. _____ Date Analyzed: 05/21/99

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	
71-43-2	benzene	1.9	J	J
108-88-3	toluene	2.0	U	U
100-41-4	ethylbenzene	1.2	J	J
1330-20-7	xylenes (total)	1.2	J	J

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2192

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252607W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905246-13

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: 7T522

Level: (low/med) LOW Date Received: 05/08/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/10/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/15/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	0.68	J
91-58-7	2-chloronaphthalene	10.4	U
208-96-8	acenaphthylene	10.4	U
83-32-9	acenaphthene	10.4	U
86-73-7	fluorene	10.4	U
85-01-8	phenanthrene	10.4	U
120-12-7	anthracene	10.4	U
206-44-0	fluoranthene	10.4	U
129-00-0	pyrene	10.4	U
56-55-3	benzo(a)anthracene	10.4	U
218-01-9	chrysene	10.4	U
205-99-2	benzo(b)fluoranthene	10.4	U
207-08-9	benzo(k)fluoranthene	10.4	U
50-32-8	benzo(a)pyrene	10.4	U
193-39-5	indeno(1,2,3-cd)pyrene	10.4	U
53-70-3	dibenz(a,h)anthracene	10.4	U
191-24-2	benzo(g,h,i)perylene	10.4	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2212

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252612W

Matrix: (soil/water) WATER Lab Sample ID: 9905253-02

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8J528

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. _____ Date Analyzed: 05/21/99

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	
71-43-2	benzene	57.2		=
108-88-3	toluene	2.4		=
100-41-4	ethylbenzene	3.4		=
1330-20-7	xylenes (total)	2.4	J	=

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2212

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252610W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905250-02

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5T510

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/12/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	13.0	
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2222

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252612W

Matrix: (soil/water) WATER Lab Sample ID: 9905253-03

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8J529

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. _____ Date Analyzed: 05/22/99

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
71-43-2	benzene	5.0	
108-88-3	toluene	1.3	J
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	0.65	J

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2222

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252610W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905250-03

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5T511

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/12/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2226

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252612W

Matrix: (soil/water) WATER Lab Sample ID: 9905253-10

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8J536

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. _____ Date Analyzed: 05/22/99

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
71-43-2	benzene	0.83	J
108-88-3	toluene	1.1	J
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	3.0	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2226

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252610W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905250-04

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5T512

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/12/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ADF2232

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252612W

Matrix: (soil/water) WATER Lab Sample ID: 9905253-04

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8J530

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. _____ Date Analyzed: 05/22/99

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
71-43-2	benzene	0.83	J
108-88-3	toluene	0.88	J
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	3.0	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2232

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252610W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905250-01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5T509

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/12/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	0.74	J
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AD2242

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252612W

Matrix: (soil/water) WATER Lab Sample ID: 9905253-05

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8J531

Level: (low/med) LOW DATA VALIDATION COPY Date Received: 05/09/99

% Moisture: not dec. _____ Date Analyzed: 05/22/99

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	
71-43-2	benzene	2.0	U	U
108-88-3	toluene	0.76	J	J
100-41-4	ethylbenzene	2.0	U	U
1330-20-7	xylenes (total)	3.0	U	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2242

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252610W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905250-08

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5T516

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/12/99

Concentrated Extract Volume: 1.00 (mL) Date Analyzed: 05/14/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2252

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252612W

Matrix: (soil/water) WATER Lab Sample ID: 9905253-06

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8J532

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. _____ Date Analyzed: 05/22/99

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	
71-43-2	benzene	2.0	U	U
108-88-3	toluene	0.68	J	J
100-41-4	ethylbenzene	2.0	U	U
1330-20-7	xylenes (total)	3.0	U	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2252

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252610W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905250-07

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5T515

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/12/99

Concentrated Extract Volume: 1.00 (mL) Date Analyzed: 05/14/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2262

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252612W

Matrix: (soil/water) WATER Lab Sample ID: 9905253-07

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8J533

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. _____ Date Analyzed: 05/22/99

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	
71-43-2	benzene	2.0	U	U
108-88-3	toluene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
1330-20-7	xylenes (total)	3.0	U	

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2262

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252610W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905250-09

Sample wt/vol: 860.0 (g/mL) ML Lab File ID: 5T517

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/12/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	11.6	U
91-58-7	2-chloronaphthalene	11.6	U
208-96-8	acenaphthylene	11.6	U
83-32-9	acenaphthene	11.6	U
86-73-7	fluorene	11.6	U
85-01-8	phenanthrene	11.6	U
120-12-7	anthracene	11.6	U
206-44-0	fluoranthene	11.6	U
129-00-0	pyrene	11.6	U
56-55-3	benzo(a)anthracene	11.6	U
218-01-9	chrysene	11.6	U
205-99-2	benzo(b)fluoranthene	11.6	U
207-08-9	benzo(k)fluoranthene	11.6	U
50-32-8	benzo(a)pyrene	11.6	U
193-39-5	indeno(1,2,3-cd)pyrene	11.6	U
53-70-3	dibenz(a,h)anthracene	11.6	U
191-24-2	benzo(g,h,i)perylene	11.6	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2272

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252612W

Matrix: (soil/water) WATER Lab Sample ID: 9905253-08

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8J534

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. _____ Date Analyzed: 05/22/99

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
71-43-2	benzene	8.2	
108-88-3	toluene	0.83	J
100-41-4	ethylbenzene	0.33	J
1330-20-7	xylenes (total)	0.76	J

4911

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2272

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252610W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905250-10

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: 5T606

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/12/99

Concentrated Extract Volume: 0.50(mL) Date Analyzed: 05/15/99

Injection Volume: 1.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) N pH: 7.0

USQ

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	4.5	J
91-58-7	2-chloronaphthalene	40.0	U
208-96-8	acenaphthylene	40.0	U
83-32-9	acenaphthene	40.0	U
86-73-7	fluorene	40.0	U
85-01-8	phenanthrene	40.0	U
120-12-7	anthracene	40.0	U
206-44-0	fluoranthene	40.0	U
129-00-0	pyrene	40.0	U
56-55-3	benzo(a)anthracene	40.0	U
218-01-9	chrysene	40.0	U
205-99-2	benzo(b)fluoranthene	40.0	U
207-08-9	benzo(k)fluoranthene	40.0	U
50-32-8	benzo(a)pyrene	40.0	U
193-39-5	indeno(1,2,3-cd)pyrene	40.0	U
53-70-3	dibenz(a,h)anthracene	40.0	U
191-24-2	benzo(g,h,i)perylene	40.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2282

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252612W

Matrix: (soil/water) WATER Lab Sample ID: 9905253-09

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8J535

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. _____ Date Analyzed: 05/22/99

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
71-43-2	benzene	2.0	U
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	3.0	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2282

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252610W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905250-05

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5T513

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/12/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2312

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252611W

Matrix: (soil/water) WATER Lab Sample ID: 9905251-11

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2I412

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. _____ Date Analyzed: 05/13/99

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	
71-43-2	benzene			0.64	J
108-88-3	toluene		2	~~0.81~~	JB
100-41-4	ethylbenzene			2.0	U
1330-20-7	xylenes (total)			3.0	U

6/17/99

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2312

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252610W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905250-15

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5T523

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/12/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	18.6	
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

UJ GDL

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252611W

Method Type: Total Metals

Sample ID: 9905251-12

Client ID: AF2312

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/9/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	95500	µg/L		=	P	8.4	TJA61 Trace2 ICPAES	990524-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2412

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252611W

Matrix: (soil/water) WATER Lab Sample ID: 9905251-13

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2I413

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: not dec. _____ Date Analyzed: 05/13/99

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	
71-43-2	benzene		2.0	U	U
108-88-3	toluene		2 ~~0.59~~	JB	U FB1, FB2
100-41-4	ethylbenzene		2.0	U	U
1330-20-7	xylenes (total)		3.0	U	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2412

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252610W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905250-16

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5T524

Level: (low/med) LOW Date Received: 05/09/99

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/12/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/14/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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Form 1: Inorganic Analyses Data Sheet

SDG No.: H252611W

Method Type: Total Metals

Sample ID: 9905251-14

Client ID: AF2412

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/9/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	270	µg/L		=	P	8.4	TJA61 Trace2 ICPAES	990524-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2512

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252613W

Matrix: (soil/water) WATER Lab Sample ID: 9905397-09

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5J533

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. _____ Date Analyzed: 05/22/99

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
71-43-2	benzene	2.0	U
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	0.58	J

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2512

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252613W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905397-01

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: 5U413

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/20/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

USE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.5	U
91-58-7	2-chloronaphthalene	10.5	U
208-96-8	acenaphthylene	10.5	U
83-32-9	acenaphthene	10.5	U
86-73-7	fluorene	10.5	U
85-01-8	phenanthrene	10.5	U
120-12-7	anthracene	10.5	U
206-44-0	fluoranthene	10.5	U
129-00-0	pyrene	10.5	U
56-55-3	benzo(a)anthracene	10.5	U
218-01-9	chrysene	10.5	U
205-99-2	benzo(b)fluoranthene	10.5	U
207-08-9	benzo(k)fluoranthene	10.5	U
50-32-8	benzo(a)pyrene	10.5	U
193-39-5	indeno(1,2,3-cd)pyrene	10.5	U
53-70-3	dibenz(a,h)anthracene	10.5	U
191-24-2	benzo(g,h,i)perylene	10.5	U

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Form 1: Inorganic Analyses Data Sheet

SDG No.: H252613W

Method Type: Total Metals

Sample ID: 9905397-09

Client ID: AF2512

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/12/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	59300	µg/L			P	8.4	TJA61 Trace2 ICPAES	990526-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

DATA VALIDATION COPY

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2612

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252613W

Matrix: (soil/water) WATER Lab Sample ID: 9905397-10

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5J534

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. _____ Date Analyzed: 05/22/99

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
71-43-2	benzene	15.3	
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	3.0	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2612

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252613W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905397-02

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5U414

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/13/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/20/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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Form 1: Inorganic Analyses Data Sheet

SDG No.: H252613W

Method Type: Total Metals

Sample ID: 9905397-10

Client ID: AF2612

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/12/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	79700	µg/L	=		P	8.4	TJA61 Trace2 ICPAES	990526-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

DATA VALIDATION COPY

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2712

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252613W

Matrix: (soil/water) WATER Lab Sample ID: 9905397-11

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5J535

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. _____ Date Analyzed: 05/22/99

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
71-43-2	benzene	2.4	
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	3.0	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2712

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252613W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905397-03

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: 5U415

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/20/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.5	U
91-58-7	2-chloronaphthalene	10.5	U
208-96-8	acenaphthylene	10.5	U
83-32-9	acenaphthene	10.5	U
86-73-7	fluorene	10.5	U
85-01-8	phenanthrene	10.5	U
120-12-7	anthracene	10.5	U
206-44-0	fluoranthene	10.5	U
129-00-0	pyrene	10.5	U
56-55-3	benzo(a)anthracene	10.5	U
218-01-9	chrysene	10.5	U
205-99-2	benzo(b)fluoranthene	10.5	U
207-08-9	benzo(k)fluoranthene	10.5	U
50-32-8	benzo(a)pyrene	10.5	U
193-39-5	indeno(1,2,3-cd)pyrene	10.5	U
53-70-3	dibenz(a,h)anthracene	10.5	U
191-24-2	benzo(g,h,i)perylene	10.5	U

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Form 1: Inorganic Analyses Data Sheet

SDG No.: H252613W

Method Type: Total Metals

Sample ID: 9905397-11

Client ID: AF2712

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/12/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	72100	µg/L		=	P	8.4	TJA61 Trace2 ICPAES	990526-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

DATA VALIDATION COPY

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2812

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252613W

Matrix: (soil/water) WATER Lab Sample ID: 9905397-12

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5J536

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. _____ Date Analyzed: 05/22/99

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	
71-43-2	benzene	32.4		
108-88-3	toluene	2.0	U	U
100-41-4	ethylbenzene	2.4		
1330-20-7	xylenes (total)	3.0	U	U

13

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2812

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252613W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905397-04

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5U417

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/13/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/20/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	1.4	J
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	0.79	J
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

J U U J U

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252613W Method Type: Total Metals

Sample ID: 9905397-12 Client ID: AF2812

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/12/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	56000	µg/L	=		P	8.4	TJA61 Trace2 ICPAES	990526-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2912

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252613W

Matrix: (soil/water) WATER Lab Sample ID: 9905397-13

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5J537

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. _____ Date Analyzed: 05/22/99

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
71-43-2	benzene	11.3	
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	3.0	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2912

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252613W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905397-05

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5U418

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/13/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/20/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

Form 1: Inorganic Analyses Data Sheet

SDG No.: H252613W

Method Type: Total Metals

Sample ID: 9905397-13

Client ID: AF2912

Contract: SAIC01099 Lab Code: GEL Case No.: SAS No.:

Matrix: WATER Date Received: 5/12/99 Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-89-6	Iron	25800	µg/L		=	P	8.4	TJA61 Trace2 ICPAES	990526-1

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

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9905155

CHAIN OF CUSTODY RECORD

COC NO.: HPØØ1

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1958-200

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	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	TPH	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1- AFØ712	5/4/99	1140	water		2								~~24HR TURN~~ 5/5
2 AFØ812	5/4/99	1600			2								
3 AFØ815	5/4/99	1525			2					2			
4 AFØ112	5/4/99	1500			2								
5 AF1212	5/4/99	1340			2								
6 AF1Ø14	5/4/99	1755			2								

4pt 2.6 .1 .2 .1

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS: 12	Cooler Temperature: 3°c
Laura Lumley	5/5/99 11:10	P. Dover	5/5/99 14:10	Cooler ID: #814	FEDEX NUMBER:
COMPANY NAME: SAIC		COMPANY NAME: GEL			
RECEIVED BY: Raymi Reed GEL	Date/Time 5/5/99 1110	RELINQUISHED BY:	Date/Time		
COMPANY NAME: G.E.L.		COMPANY NAME:			
RELINQUISHED BY: Raymi Reed	Date/Time 5/5/99 14:00	RECEIVED BY:	Date/Time		
COMPANY NAME: G.E.L.		COMPANY NAME:			

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1 of 2 9905229

CHAIN OF CUSTODY RECORD

COC NO.: HP0002

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1956-200

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

	Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	Iron not filtered	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1/2	AF1012	5/4/99	1755	water	2	2					1	5		24 HR TURN BTEX
3/4	AF0912	5/4/99	1650		2	2				1		5		
5/6	AF0112	5/4/99	1500		2					1		3		
7/8	AF0612	5/4/99	1600		2					1		3		
9/10	AF0712	5/4/99	1140		2						1	3		
11/12	AF1014	5/4/99	1755		2						1	3		
13/14	AF1212	5/4/99	1340		2						1	3		
15	HP0001	5/4/99	0830		2							2		
16	AF0615	5/4/99	1525		2							2		
1	AF0611	5/4/99	1530	soil	1		1	1				3		
2	AF0711	5/4/99	1030		1		1	1				3		
3	AF0911	5/4/99	1635		1		1	1				3		
4	AF1011	5/4/99	1730		1		1	1				3		

4 deg C

.4 .0 .1 .1 .6 4 bottles

RELINQUISHED BY: Laura Lumley	Date/Time 5/5/99 11:10	RECEIVED BY: P. Power	Date/Time 5/5/99 14:10	TOTAL NUMBER OF CONTAINERS:
COMPANY NAME: SAIC		COMPANY NAME: GEL		Cooler ID: # 804
RECEIVED BY: Raymd Reed	Date/Time 5/5/99 11:10	RELINQUISHED BY:	Date/Time	BTEX water 24 HR. TURN
COMPANY NAME: GEL		COMPANY NAME:		
RELINQUISHED BY: Raymd Reed	Date/Time 5/5/99 14:00	RECEIVED BY:	Date/Time	
COMPANY NAME: GEL		COMPANY NAME:		

Cooler Temperature: 3°C

FEDEX NUMBER:

VIII-174

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CHAIN OF CUSTODY RECORD

COC NO.: HPØØ3

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1958-200

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

Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AFØ61Z	5/5/99	1555	water		Z					2		19558/11-01
AF111Z	5/5/99	1211			Z					2		02
AFØ41Z	5/5/99	1700			Z					2		03
AFØ31Z	5/5/99	1005			Z					2		04
AFØ316	5/5/99	1446			Z					2		05
AFØ21Z	5/5/99	1110			Z					2		06
AFØ51Z	5/5/99	1550			Z					2		07

400s

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS: 14	Cooler Temperature: 3°C
COMPANY NAME: SAIC	5/6/99 1145	COMPANY NAME: GEL	5/6/99 15:35	Cooler ID: #462	FEDEX NUMBER:
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time		
COMPANY NAME: GEL	5/6/99 1145	COMPANY NAME:			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time		
COMPANY NAME: GEL	5/6/99 1535	COMPANY NAME:			

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9905173/5 1 of 2

CHAIN OF CUSTODY RECORD

COC NO.: HP0004

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1958-200

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

	Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	Iron Not Filtered	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1	AF0514	5/5/99	1550	water	Z	Z					1	5		BTEX - 24 HR TURN
2	AF0212	5/5/99	1110		Z						1	3		
3	AF0312	5/5/99	1005		Z						1	3		
4	AF0316	5/5/99	1445		Z						1	3		
5	AF0412	5/5/99	1700		Z						1	3		
6	AF0512	5/5/99	1550		Z						1	3		
7	AF0612	5/5/99	1555		Z						1	3		
8	AF1112	5/5/99	1211		Z						1	3		
9	AP0002	5/5/99	745		Z							2		
	AF0613	5/5/99	1420	Soil	1		1					2		(9905217-01
	AF0611	5/5/99	1420		1		1	1				3		-02
	AF0211	5/5/99	1100		1		1	1				3		-03
	AF0311	5/5/99	951		1		1	1				3		-04

RELINQUISHED BY: Laura Lumley	Date/Time 5/6/99 1145	RECEIVED BY: P. Mowell	Date/Time 5/6/99 15:35	TOTAL NUMBER OF CONTAINERS:	Cooler Temperature: 3°C
COMPANY NAME: SAIC		COMPANY NAME: GEL		Cooler ID: #833	FEDEX NUMBER:
RELINQUISHED BY: [illegible]	Date/Time 5/6/99 1145	RELINQUISHED BY:	Date/Time	BTEX Water 24 HR TURN	
COMPANY NAME: GEL		COMPANY NAME:			
RELINQUISHED BY: [illegible]	Date/Time 5/6/99 1535	RECEIVED BY:	Date/Time		
COMPANY NAME: GEL		COMPANY NAME:			

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9052469.

CHAIN OF CUSTODY RECORD

COC NO.: HP007

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04 - 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

	Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1	AF2172	5/7/99	1230	water		1					1		
2	AF2162	5/7/99	1115			1					1		
3	AF2132	5/7/99	945			2					2		
4	AF2122	5/7/99	920			2					2		
5	AF2142	5/7/99	1009			2					2		
6	AF1412	5/7/99	1708			2					2		
7	AF2124	5/7/99	920			2					2		
8	AF2112	5/7/99	844			2					2		

461 = 1

5/7/99

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	5/8/99 1040	P. Power	5/8/99 15:00
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL	5/8/99 1040	COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME: GEL	5/8/99 1502	COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 14

Cooler ID: #4606

Cooler Temperature: 3°C

FEDEX NUMBER:

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CHAIN OF CUSTODY RECORD

COC NO.: HP008

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1956-200

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

	Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
	REQUESTED PARAMETERS												
9	AF16I2	5/7/99	1424	water		2					2		
10	AF15I4	5/7/99	1544			2					2		
11	AF15I2	5/7/99	1544			2					2		
12	AF13I6	5/7/99	1525			2					2		
13	AF21I2	5/7/99	1410			2					2		
14	AF21S2	5/7/99	1035			2					2		
15	AF13I2	5/7/99	1549	↓		2					2		

4011

5/8/99

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	5/8/99	P. Lauer	5/8/99
COMPANY NAME: SAIC	1040	COMPANY NAME: GG	15:00
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time
	5/8/99		
COMPANY NAME: GG	1040	COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
	5/8/99		
COMPANY NAME: GG	1549	COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 14

Cooler ID: #715

Cooler Temperature: 3°C.

FEDEX NUMBER:

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9905241 1of2

CHAIN OF CUSTODY RECORD

COC NO.: HP011

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1958-200

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

Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AF2162	5/7/99	1325	water	2	2						4		
AF1312	5/7/99	1549		2						1	3		BTEX - 24 HR T
AF1412	5/7/99	1706		2					1		3		
AF1512	5/7/99	1544		2					1		3		
AF1514	5/7/99	1544		2					1		3		
AF1612	5/7/99	1424		2					1		3		
AF1316	5/7/99	1525		2							2		
AF2172	5/7/99	1230		2							2		
AF2162	5/7/99	1115		2							2		
AF2152	5/7/99	1035		2							2		
AF2142	5/7/99	1009		2							2		
AF2132	5/7/99	945		2							2		
AF2122	5/7/99	920	↓	2							2		

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	5/8/99 1040	P. Never	5/8/99 15:00
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RECEIVED BY: P. Lockhart	5/8/99 1040	RELINQUISHED BY:	
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY: P. Lockhart	5/8/99 1500	RECEIVED BY:	
COMPANY NAME: GEL		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS:

Cooler ID: #612

Cooler Temperature: 3°C

FEDEX NUMBER:

Samples AF1312, AF1412, AF1512, AF1514, AF1612 → BTEX water 24 HR. TURN

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2012

CHAIN OF CUSTODY RECORD

COC NO.: HP011

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1958-200

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

	Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
17	AF2112	5/7/99	844	water	2						2		
18	AF2124	5/7/99	920		2						2		
19	AF2192	5/7/99	1410		2						2		
20	HP0002	5/7/99	745		2						2		
1	AF1311	5/7/99	1505	Soil	1		1	1			3		990
	AF1411	5/7/99	1642		1		1	1			3		
	AF1511	5/7/99	1546		1		1	1			3		
	AF1611	5/7/99	1341		1		1	1			3		

HP011 :3

HP11

RELINQUISHED BY: Laura Lumley	Date/Time 5/8/99 1040	RECEIVED BY: P. Nomer	Date/Time 5/8/99 15:50	TOTAL NUMBER OF CONTAINERS: 53	Cooler Temperature: 3° C
COMPANY NAME: SAIC		COMPANY NAME: Gel		Cooler ID: #612	FEDEX NUMBER:
RECEIVED BY: [illegible]	Date/Time 5/8/99 1040	RELINQUISHED BY:	Date/Time		
COMPANY NAME: GEL		COMPANY NAME:			
RELINQUISHED BY: [illegible]	Date/Time 5/8/99 1502	RECEIVED BY:	Date/Time		
COMPANY NAME: GEL		COMPANY NAME:			

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490520.0

CHAIN OF CUSTODY RECORD

COC NO.: HP013

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1956-200

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	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1	AF2232	5/6/99	940	water		2					2		
2	AF2212	5/6/99	850			2					2		
3	AF2222	5/6/99	920			2					2		
4	AF2226	5/6/99	906			2					2		
5	AF2242	5/6/99	1410			2					2		
6	AF1816	5/6/99	856			2					2		
7	AF2252	5/6/99	1035	↓		2					2		

4012

5/9/99

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	5/9/99 1030	P. Power	5/9/99 13:30
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL	5/9/99 1030	COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME: GEL	5/9/99 1330	COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 14

Cooler ID: #633

Cooler Temperature: 3° C

FEDEX NUMBER:

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9905250?

CHAIN OF CUSTODY RECORD

COC NO.: HP014

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1956-200

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

	Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
8	AFZZ42	5/6/99	1005	water		2					2		
9	AF2262	5/6/99	1110			1					1		
10	AF2272	5/6/99	1315			1					1		
11	AF1912	5/6/99	1100			2					2		
12	AF1812	5/6/99	946			2					2		
13	AF1712	5/6/99	1405			2					2		
14	AF2014	5/6/99	900			2					2		
15	AF2312	5/6/99	1130			2					2		

4 of 1

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	5/9/99	P. Power	5/9/99
COMPANY NAME: SAIC	1050	COMPANY NAME: GEL	13:30
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL	5/9/99 1030	COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME: GEL	5/9/99 1330	COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 14

Cooler ID: # 832

Cooler Temperature: 3°C

FEDEX NUMBER:

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Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

9905251 1 of 2

CHAIN OF CUSTODY RECORD

COC NO.: HP015

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1958-200

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	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1/2	AF2012	5/6/99	900	water	2	2				1		5		BTEX - 24 HR TURN
16	AF2412	5/6/99	1330			2						2		9905260-16
3/4	AF1712	5/6/99	1405		2						1	3		BTEX - 24 HR TURN
5/6	AF1812	5/6/99	946		2						1	3		
7/8	AF1912	5/6/99	1100		2						1	3		
9/10	AF2014	5/6/99	900		2					1		3		
11/12	AF2312	5/6/99	1130		2						1	3		
13/14	AF2412	5/6/99	1330		2					1		3		
15	AF1616	5/6/99	656		2							2		9905253 70
2	AF2212	5/6/99	850		2							2		
3	AF2222	5/6/99	920		2							2		
4	AF2232	5/6/99	940		2							2		
5	AF2242	5/6/99	1005		2							2		

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	5/9/99 1030	T. Power	5/9/99 13:30
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RECEIVED BY: T. Lockhart	5/9/99 1030	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY: T. Lockhart	5/9/99 1330	RECEIVED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS:

Cooler ID: #799

Cooler Temperature: 3°C

FEDEX NUMBER:

Samples AF1712, AF1812, AF1912, AF2012, AF2014, AF2412, AF2312 — BTEX - 24 HR TURN

SAIC An Employee-Owned Company
Science Applications International Corporation
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99052537 2012

CHAIN OF CUSTODY RECORD

COC NO.: AF0015

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1958-200

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

	Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
6	AF2252	5/4/99	1035	water	2						2		99052532
7	AF2262	5/4/99	1110		2						2		
8	AF2272	5/4/99	1315		2						2		
9	AF2282	5/4/99	1410		2						2		
10	AF2226	5/4/99	906		2						2		
11	HP0006	5/4/99	745		2						2		
05248-05	AF1711	5/4/99	1350	Soil	1		1	1			3		
-06	AF1811	5/4/99	932		1		1	1			3		
-07	AF1911	5/4/99	1036		1		1	1			3		
-08	AF2011	5/4/99	900		1		1	1			3		
-09	AF2311	5/4/99	1030		1		1	1			3		
-10	AF2411	5/4/99	1145		1		1	1			3		

4617 :1
4611 :1

+BS 5/6/99

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	5/9/99 1035	P. Mauer	5/9/99 13:30
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time
COMPANY NAME:	5/9/99 1050	COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME:	5/9/99 1350	COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 65

Cooler Temperature: 3°c

Cooler ID: #799

FEDEX NUMBER:

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9905397/0

CHAIN OF CUSTODY RECORD

COC NO.: HPØZ2

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04 - 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

	Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1	AF2512	5/11/99	Ø933	water		2					2		
2	AF2612	5/11/99	1119			2					2		
3	AF2712	5/11/99	10:30			2					2		
4	AF2812	5/11/99	1215			2					2		
5	AF2912	5/11/99	1446			1					1		
6	AFØ119	5/11/99	1540			2					2		
7	AFØ219	5/11/99	1550	↓		2					2		

-40208

5/12/99

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	5/12/99	D. Power	5/12/99
COMPANY NAME: SAIC	11:45	COMPANY NAME: GEL	15:30
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL	5/12/99 11:45	COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME: GEL	5/12/99 15:30	COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 13

Cooler ID: ~~X~~ 6468

Cooler Temperature: 3°c

FEDEX NUMBER:

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Science Applications International Corporation
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1 of 2

9905397

CHAIN OF CUSTODY RECORD

COC NO.: HP023

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1958-200

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	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
8	AF0319	5/12/99	0900	water	2	2						4		
9	AF2512	5/11/99	0933		2						1	3		
10	AF2612	5/11/99	1119		2						1	3		
11	AF2712	5/11/99	1030		2						1	3		
12	AF2812	5/11/99	1215		2						1	3		
13	AF2912	5/11/99	1448		2						1	3		
14	AF0119	5/11/99	1540		2							2		
15	AF0219	5/11/99	1550		2							2		
16	HP0009	5/11/99	745		2							2		
01	AF2511	5/11/99	0910	Soil	1		1	1				3		99053989
02	AF2611	5/11/99	1100		1		1	1				3		
03	AF2711	5/11/99	1009		1		1	1				3		
04	AF2811	5/11/99	1201		1		1	1				3		

4 0 2 8 9 .2 .3 .4 4 9 2 0 :1

RELINQUISHED BY: Laura Lumley	Date/Time 5/12/99 1145	RECEIVED BY: P. Nolen	Date/Time 5/12/99 15:30
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RECEIVED BY: [signature]	Date/Time 5/12/99 1145	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY: [signature]	Date/Time 5/12/99 1530	RECEIVED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 49

Cooler Temperature: 3°c

Cooler ID: # 795

FEDEX NUMBER:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0122

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST04W

Matrix: (soil/water) WATER Lab Sample ID: 9909781-17

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D522

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	1.2	J	J
67-64-1	acetone	5.0	U	U
75-15-0	carbon disulfide	5.0	U	
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R C01
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0222

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST05W

Matrix: (soil/water) WATER Lab Sample ID: 9909783-15

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D515

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	0.54	J	J
67-64-1	acetone	11.1		J CO4, CO5
75-15-0	carbon disulfide	5 ~~1.1~~	JB	U FO1, FO4
75-35-4	1,1-dichloroethene	2.0	U	U
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R CO1, CO4
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	8.4		U
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	UJ CO5
127-18-4	tetrachloroethene	2.0	U	U
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	U
108-88-3	toluene	0.65	J	J
108-90-7	chlorobenzene	2.0	U	U
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

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SLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0322

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST06W

Matrix: (soil/water) WATER Lab Sample ID: 9909786-08

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D434

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

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		2.0	U
74-83-9	bromomethane		2.0	U
75-01-4	vinyl chloride		2.0	U
75-00-3	chloroethane		2.0	U
75-09-2	methylene chloride		2.0	U
67-64-1	acetone	5	~~4.8~~	JB
75-15-0	carbon disulfide		5.0	U
75-35-4	1,1-dichloroethene		2.0	U
75-34-3	1,1-dichloroethane		2.0	U
67-66-3	chloroform		2.0	U
107-06-2	1,2-dichloroethane		2.0	U
78-93-3	2-butanone		5.0	U
71-55-6	1,1,1-trichloroethane		2.0	U
56-23-5	carbon tetrachloride		2.0	U
75-27-4	bromodichloromethane		5.0	U
78-87-5	1,2-dichloropropane		2.0	U
10061-01-5	cis-1,3-dichloropropene		2.0	U
79-01-6	trichloroethene		2.0	U
124-48-1	dibromochloromethane		2.0	U
79-00-5	1,1,2-trichloroethane		2.0	U
71-43-2	benzene		2.2	
10061-02-6	trans-1,3-dichloropropene		2.0	U
75-25-2	bromoform		2.0	U
108-10-1	4-methyl-2-pentanone		5.0	U
591-78-6	2-hexanone		5.0	U
127-18-4	tetrachloroethene		2.0	U
79-34-5	1,1,2,2-tetrachloroethane		2.0	U
108-88-3	toluene		2.0	U
108-90-7	chlorobenzene		2.0	U
100-41-4	ethylbenzene		1.6	J
100-42-5	styrene		2.0	U
1330-20-7	xylenes (total)		0.96	J
540-59-0	1,2-dichloroethylene (total)		2.0	U

NTHP 11/11/99

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U FD1, FD6 U CDS U

U U U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0422

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST06W

Matrix: (soil/water) WATER Lab Sample ID: 9909786-03

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D429

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/07/99

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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.0	U	
67-64-1	acetone	8.9	B	U F01,F07
75-15-0	carbon disulfide	5.0	U	UJ CDS
75-35-4	1,1-dichloroethene	2.0	U	U
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	
71-55-6	1,1,1-trichloroethane	2.0	U	
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

FORM I VOA OLM03.0

COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0522

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST06W

Matrix: (soil/water) WATER Lab Sample ID: 9909786-17

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D518

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.0	U	
67-64-1	acetone	10.6	B	U F01,F07
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	
71-55-6	1,1,1-trichloroethane	2.0	U	
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	11.8		
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	3.0		
108-90-7	chlorobenzene	2.0	U	U
100-41-4	ethylbenzene	9.5		
100-42-5	styrene	2.0	U	U
1330-20-7	xylenes (total)	46.5		
540-59-0	1,2-dichloroethylene (total)	2.0	U	U

FORM I VOA OLM03.0

DUPLICATE

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0524

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST06W

Matrix: (soil/water) WATER Lab Sample ID: 9909786-13

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

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

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	2.0	U
74-83-9	bromomethane	2.0	U
75-01-4	vinyl chloride	2.0	U
75-00-3	chloroethane	2.0	U
75-09-2	methylene chloride	2.0	U
67-64-1	acetone	10.8	B
75-15-0	carbon disulfide	5.0	U
75-35-4	1,1-dichloroethene	2.0	U
75-34-3	1,1-dichloroethane	2.0	U
67-66-3	chloroform	2.0	U
107-06-2	1,2-dichloroethane	2.0	U
78-93-3	2-butanone	5.0	U
71-55-6	1,1,1-trichloroethane	2.0	U
56-23-5	carbon tetrachloride	2.0	U
75-27-4	bromodichloromethane	5.0	U
78-87-5	1,2-dichloropropane	2.0	U
10061-01-5	cis-1,3-dichloropropene	2.0	U
79-01-6	trichloroethene	2.0	U
124-48-1	dibromochloromethane	2.0	U
79-00-5	1,1,2-trichloroethane	2.0	U
71-43-2	benzene	14.1	
10061-02-6	trans-1,3-dichloropropene	2.0	U
75-25-2	bromoform	2.0	U
108-10-1	4-methyl-2-pentanone	5.0	U
591-78-6	2-hexanone	5.0	U
127-18-4	tetrachloroethene	2.0	U
79-34-5	1,1,2,2-tetrachloroethane	2.0	U
108-88-3	toluene	3.2	
108-90-7	chlorobenzene	2.0	U
100-41-4	ethylbenzene	8.6	
100-42-5	styrene	2.0	U
1330-20-7	xylenes (total)	43.1	
540-59-0	1,2-dichloroethylene (total)	2.0	U

U F01, F07
UJ CO5

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0722

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST06W

Matrix: (soil/water) WATER Lab Sample ID: 9909786-05

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D431

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/07/99

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		10.0	U	U
74-83-9	bromomethane		10.0	U	↓
75-01-4	vinyl chloride		10.0	U	↓
75-00-3	chloroethane		10.0	U	↓
75-09-2	methylene chloride		13.1	B	U FD1, FD7
67-64-1	acetone	25	~~21.5~~	JB	U FD1, FD6
75-15-0	carbon disulfide		25.0	U	U CD5
75-35-4	1,1-dichloroethene		10.0	U	U
75-34-3	1,1-dichloroethane		10.0	U	↓
67-66-3	chloroform		10.0	U	↓
107-06-2	1,2-dichloroethane		10.0	U	↓
78-93-3	2-butanone		25.0	U	↓
71-55-6	1,1,1-trichloroethane		10.0	U	↓
56-23-5	carbon tetrachloride		10.0	U	↓
75-27-4	bromodichloromethane		25.0	U	↓
78-87-5	1,2-dichloropropane		10.0	U	↓
10061-01-5	cis-1,3-dichloropropene		10.0	U	↓
79-01-6	trichloroethene		10.0	U	↓
124-48-1	dibromochloromethane		10.0	U	↓
79-00-5	1,1,2-trichloroethane		10.0	U	↓
71-43-2	benzene	9/30	~~3420~~	~~E~~ D	=
10061-02-6	trans-1,3-dichloropropene		10.0	U	U
75-25-2	bromoform		10.0	U	↓
108-10-1	4-methyl-2-pentanone		25.0	U	↓
591-78-6	2-hexanone		40.2		=
127-18-4	tetrachloroethene		10.0	U	U
79-34-5	1,1,2,2-tetrachloroethane		10.0	U	U
108-88-3	toluene		24.8		=
108-90-7	chlorobenzene		10.0	U	U
100-41-4	ethylbenzene		493		=
100-42-5	styrene		10.0	U	U
1330-20-7	xylenes (total)		246		=
540-59-0	1,2-dichloroethylene (total)		10.0	U	U

MAF 11/11/99

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0822

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST06W

Matrix: (soil/water) WATER Lab Sample ID: 9909786-18

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D519

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.0	U	
67-64-1	acetone	5 3.5	JB	U FO1, FD6
75-15-0	carbon disulfide	1.1	J	J CO5
75-35-4	1,1-dichloroethene	2.0	U	U
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	
71-55-6	1,1,1-trichloroethane	2.0	U	
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

1MA 11/11/99

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0922

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HUST05W

Matrix: (soil/water) WATER Lab Sample ID: 9909783-18

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D420

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/07/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	3.9	B	U F01, F07
67-64-1	acetone	5.0	U	R C04
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R C01, C04
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	11.8		C11
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	27.7		C11
100-42-5	styrene	2.0	U	U
1330-20-7	xylenes (total)	1.4	J	J
540-59-0	1,2-dichloroethylene (total)	3.9		

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1122

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST04W

Matrix: (soil/water) WATER Lab Sample ID: 9909781-14

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D519

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.0	U	
67-64-1	acetone	5.0	U	
75-15-0	carbon disulfide	5.0	U	
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R COI
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

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35

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1222

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HUST05W

Matrix: (soil/water) WATER Lab Sample ID: 9909783-05

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D508

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

GC Column: DB-624 ID: 0.53 (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	4.0	U	U
74-83-9	bromomethane	4.0	U	U
75-01-4	vinyl chloride	4.0	U	U
75-00-3	chloroethane	4.0	U	U
75-09-2	methylene chloride	2.0	J	J
67-64-1	acetone	10.0	U	R COR,CDS
75-15-0	carbon disulfide	10.0	U	U
75-35-4	1,1-dichloroethene	4.0	U	U
75-34-3	1,1-dichloroethane	4.0	U	U
67-66-3	chloroform	4.0	U	U
107-06-2	1,2-dichloroethane	4.0	U	U
78-93-3	2-butanone	10.0	U	R COI,CDS
71-55-6	1,1,1-trichloroethane	4.0	U	U
56-23-5	carbon tetrachloride	4.0	U	U
75-27-4	bromodichloromethane	10.0	U	U
78-87-5	1,2-dichloropropane	4.0	U	U
10061-01-5	cis-1,3-dichloropropene	4.0	U	U
79-01-6	trichloroethene	4.0	U	U
124-48-1	dibromochloromethane	4.0	U	U
79-00-5	1,1,2-trichloroethane	4.0	U	U
71-43-2	benzene	23.4		C
10061-02-6	trans-1,3-dichloropropene	4.0	U	U
75-25-2	bromoform	4.0	U	U
108-10-1	4-methyl-2-pentanone	10.0	U	U
591-78-6	2-hexanone	10.0	U	U5 CDS
127-18-4	tetrachloroethene	4.0	U	U
79-34-5	1,1,2,2-tetrachloroethane	4.0	U	U
108-88-3	toluene	4.0	U	U
108-90-7	chlorobenzene	4.0	U	U
100-41-4	ethylbenzene	54.8		C
100-42-5	styrene	4.0	U	U
1330-20-7	xylenes (total)	8.5	J	J
540-59-0	1,2-dichloroethylene (total)	4.0	U	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1322

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST06W

Matrix: (soil/water) WATER Lab Sample ID: 9909786-15

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D516

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

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		2.0	U
74-83-9	bromomethane		2.0	U
75-01-4	vinyl chloride		2.0	U
75-00-3	chloroethane		2.0	U
75-09-2	methylene chloride		2.0	U
67-64-1	acetone	5	~~3.4~~	JB
75-15-0	carbon disulfide		5.0	U
75-35-4	1,1-dichloroethene		2.0	U
75-34-3	1,1-dichloroethane		2.0	U
67-66-3	chloroform		2.0	U
107-06-2	1,2-dichloroethane		2.0	U
78-93-3	2-butanone		5.0	U
71-55-6	1,1,1-trichloroethane		2.0	U
56-23-5	carbon tetrachloride		2.0	U
75-27-4	bromodichloromethane		5.0	U
78-87-5	1,2-dichloropropane		2.0	U
10061-01-5	cis-1,3-dichloropropene		2.0	U
79-01-6	trichloroethene		2.0	U
124-48-1	dibromochloromethane		2.0	U
79-00-5	1,1,2-trichloroethane		2.0	U
71-43-2	benzene		2.0	U
10061-02-6	trans-1,3-dichloropropene		2.0	U
75-25-2	bromoform		2.0	U
108-10-1	4-methyl-2-pentanone		5.0	U
591-78-6	2-hexanone		5.0	U
127-18-4	tetrachloroethene		2.0	U
79-34-5	1,1,2,2-tetrachloroethane		2.0	U
108-88-3	toluene		2.0	U
108-90-7	chlorobenzene		2.0	U
100-41-4	ethylbenzene		2.0	U
100-42-5	styrene		2.0	U
1330-20-7	xylenes (total)		6.0	U
540-59-0	1,2-dichloroethylene (total)		1.5	J

NMP 11/11/99

U U FD1, FD6 U J

FORM I VOA OLM03.0

RINSATE

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
AF1326

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST07W

Matrix: (soil/water) WATER Lab Sample ID: 9909787-03

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D217

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/05/99

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	2.0 ~~0.81~~	J	U FD4, FD6
74-83-9	bromomethane	2.0	U	U
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.9	B	U FD1, FD7
67-64-1	acetone	5.0	U	U
75-15-0	carbon disulfide	5.0	U	
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0 ~~1.4~~	J	R FD4, FD6, CO1
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

MMP 11/9/99

DATA VALIDATION COPY

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1422

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST06W

Matrix: (soil/water) WATER Lab Sample ID: 9909786-01

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D427

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/07/99

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	2.0	U
74-83-9	bromomethane	2.0	U
75-01-4	vinyl chloride	2.0	U
75-00-3	chloroethane	2.0	U
75-09-2	methylene chloride	2.0	U
67-64-1	acetone	7.8	B
75-15-0	carbon disulfide	2.0	J
75-35-4	1,1-dichloroethene	2.0	U
75-34-3	1,1-dichloroethane	2.0	U
67-66-3	chloroform	2.0	U
107-06-2	1,2-dichloroethane	2.0	U
78-93-3	2-butanone	5.0	U
71-55-6	1,1,1-trichloroethane	2.0	U
56-23-5	carbon tetrachloride	2.0	U
75-27-4	bromodichloromethane	5.0	U
78-87-5	1,2-dichloropropane	2.0	U
10061-01-5	cis-1,3-dichloropropene	2.0	U
79-01-6	trichloroethene	2.0	U
124-48-1	dibromochloromethane	2.0	U
79-00-5	1,1,2-trichloroethane	2.0	U
71-43-2	benzene	2.0	U
10061-02-6	trans-1,3-dichloropropene	2.0	U
75-25-2	bromoform	2.0	U
108-10-1	4-methyl-2-pentanone	5.0	U
591-78-6	2-hexanone	5.0	U
127-18-4	tetrachloroethene	2.0	U
79-34-5	1,1,2,2-tetrachloroethane	2.0	U
108-88-3	toluene	2.0	U
108-90-7	chlorobenzene	2.0	U
100-41-4	ethylbenzene	2.0	U
100-42-5	styrene	2.0	U
1330-20-7	xylenes (total)	6.0	U
540-59-0	1,2-dichloroethylene (total)	2.0	U

U
U FD1, FD7
J CO5
U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1522

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HUST05W

Matrix: (soil/water) WATER Lab Sample ID: 9909783-02

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D318

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/06/99

GC Column: DB-624 ID: 0.53 (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		2.0	U	U
74-83-9	bromomethane		2.0	U	
75-01-4	vinyl chloride		2.0	U	
75-00-3	chloroethane		2.0	U	
75-09-2	methylene chloride	2	~~1.6~~	JB	U F01,F06
67-64-1	acetone		5.0	U	R C04
75-15-0	carbon disulfide		5.0	U	U
75-35-4	1,1-dichloroethene		2.0	U	
75-34-3	1,1-dichloroethane		2.0	U	
67-66-3	chloroform		2.0	U	
107-06-2	1,2-dichloroethane		2.0	U	
78-93-3	2-butanone		5.0	U	R C01,C04
71-55-6	1,1,1-trichloroethane		2.0	U	U
56-23-5	carbon tetrachloride		2.0	U	
75-27-4	bromodichloromethane		5.0	U	
78-87-5	1,2-dichloropropane		2.0	U	
10061-01-5	cis-1,3-dichloropropene		2.0	U	
79-01-6	trichloroethene		2.0	U	
124-48-1	dibromochloromethane		2.0	U	
79-00-5	1,1,2-trichloroethane		2.0	U	
71-43-2	benzene		2.0	U	
10061-02-6	trans-1,3-dichloropropene		2.0	U	
75-25-2	bromoform		2.0	U	
108-10-1	4-methyl-2-pentanone		5.0	U	
591-78-6	2-hexanone		5.0	U	
127-18-4	tetrachloroethene		2.0	U	
79-34-5	1,1,2,2-tetrachloroethane		2.0	U	
108-88-3	toluene		2.0	U	
108-90-7	chlorobenzene		2.0	U	
100-41-4	ethylbenzene		2.0	U	
100-42-5	styrene		2.0	U	
1330-20-7	xylenes (total)		6.0	U	
540-59-0	1,2-dichloroethylene (total)		2.0	U	

DUPLICATE

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1524

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HUST05W

Matrix: (soil/water) WATER Lab Sample ID: 9909783-16

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D418

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/07/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.9	B	U F01, F07
67-64-1	acetone	5.0	U	R C04
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R C01, C04
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	1.0	J	J
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1622

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST06W

Matrix: (soil/water) WATER Lab Sample ID: 9909786-09

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D435

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.0	U	
67-64-1	acetone	5.2	B	U F01, F07
75-15-0	carbon disulfide	5.0	U	U C05
75-35-4	1,1-dichloroethene	2.0	U	U
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	
71-55-6	1,1,1-trichloroethane	2.0	U	
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1722

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST06W

Matrix: (soil/water) WATER Lab Sample ID: 9909786-06

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D432

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/07/99

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

Soil Extract Volume: _____(uL) Soil Aliquot Volume: 5.0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		
74-87-3	chloromethane	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.0	U	
67-64-1	acetone	5 2.6	JB	UFB1, FBC
75-15-0	carbon disulfide	5.0	U	UJ C05
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	U
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	2.0	U	
71-55-6	1,1,1-trichloroethane	5.0	U	
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	2.0	U	
78-87-5	1,2-dichloropropane	5.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	112 ~~107~~	E D	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	14.0		
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	2.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	5.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	2.0	U	
540-59-0	1,2-dichloroethylene (total)	6.0	U	
		19.9		

NAF 11/11/99

FORM I VOA OLM03.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1822

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HUST05W

Matrix: (soil/water) WATER Lab Sample ID: 9909783-13

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D415

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/07/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	4.2	B	U FØ1, FØ7
67-64-1	acetone	5.0	U	R CØ4
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R CØ1, CØ4
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	1.6	J	J
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	U
71-43-2	benzene	10.3		=
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	13.2		=

RINSATE

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
AF1826

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST05W

Matrix: (soil/water) WATER Lab Sample ID: 9909783-20

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D517

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	0.68	J	
67-64-1	acetone	5.0	U	R COL,COS
75-15-0	carbon disulfide	5.0	U	
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R COL,COS
71-55-6	1,1,1-trichloroethane	2.0	U	
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	0.50	J	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	UJ COS
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF1922

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HUST05W

Matrix: (soil/water) WATER Lab Sample ID: 9909783-03

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D319

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/06/99

GC Column: DB-624 ID: 0.53 (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		
74-87-3	chloromethane	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.3	B	U FB1, FB7
67-64-1	acetone	5.0	U	R CB4
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R CB1, CB4
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.6		
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	3.5		
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	8.3		

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2022

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HUST05W

Matrix: (soil/water) WATER Lab Sample ID: 9909783-17

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D419

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/07/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	4.5	B	U FD1,FD7
67-64-1	acetone	5.0	U	R CD4
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R CD1,CD4
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.1		U
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	1.7	J	J

DUPLICATE

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2024

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST06W

Matrix: (soil/water) WATER Lab Sample ID: 9909786-10

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D436

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.0	U	
67-64-1	acetone	7.4	B	U F01, F07
75-15-0	carbon disulfide	5.0	U	05 CDS
75-35-4	1,1-dichloroethene	2.0	U	U
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	
71-55-6	1,1,1-trichloroethane	2.0	U	
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	1.6	J	J
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.2		=

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2322

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST04W

Matrix: (soil/water) WATER Lab Sample ID: 9909781-13

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D518

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

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	2.0	U
74-83-9	bromomethane	2.0	U
75-01-4	vinyl chloride	2.0	U
75-00-3	chloroethane	2.0	U
75-09-2	methylene chloride	2.0	U
67-64-1	acetone	5.0	U
75-15-0	carbon disulfide	5.0	U
75-35-4	1,1-dichloroethene	2.0	U
75-34-3	1,1-dichloroethane	2.0	U
67-66-3	chloroform	2.0	U
107-06-2	1,2-dichloroethane	2.0	U
78-93-3	2-butanone	5.9	
71-55-6	1,1,1-trichloroethane	2.0	U
56-23-5	carbon tetrachloride	2.0	U
75-27-4	bromodichloromethane	5.0	U
78-87-5	1,2-dichloropropane	2.0	U
10061-01-5	cis-1,3-dichloropropene	2.0	U
79-01-6	trichloroethene	1.6	J
124-48-1	dibromochloromethane	2.0	U
79-00-5	1,1,2-trichloroethane	2.0	U
71-43-2	benzene	1.1	J
10061-02-6	trans-1,3-dichloropropene	2.0	U
75-25-2	bromoform	2.0	U
108-10-1	4-methyl-2-pentanone	5.0	U
591-78-6	2-hexanone	5.0	U
127-18-4	tetrachloroethene	2.0	U
79-34-5	1,1,2,2-tetrachloroethane	2.0	U
108-88-3	toluene	2.0	U
108-90-7	chlorobenzene	2.0	U
100-41-4	ethylbenzene	2.0	U
100-42-5	styrene	2.0	U
1330-20-7	xylenes (total)	6.0	U
540-59-0	1,2-dichloroethylene (total)	5.3	

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2422

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST06W

Matrix: (soil/water) WATER Lab Sample ID: 9909786-02

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D428

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/07/99

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		2.0	U
74-83-9	bromomethane		2.0	U
75-01-4	vinyl chloride		2.0	U
75-00-3	chloroethane		2.0	U
75-09-2	methylene chloride		2.0	U
67-64-1	acetone	5	~~3.9~~	JB
75-15-0	carbon disulfide		5.0	U
75-35-4	1,1-dichloroethene		2.0	U
75-34-3	1,1-dichloroethane		2.0	U
67-66-3	chloroform		2.0	U
107-06-2	1,2-dichloroethane		2.0	U
78-93-3	2-butanone		5.0	U
71-55-6	1,1,1-trichloroethane		2.0	U
56-23-5	carbon tetrachloride		2.0	U
75-27-4	bromodichloromethane		5.0	U
78-87-5	1,2-dichloropropane		2.0	U
10061-01-5	cis-1,3-dichloropropene		2.0	U
79-01-6	trichloroethene		2.0	U
124-48-1	dibromochloromethane		2.0	U
79-00-5	1,1,2-trichloroethane		2.0	U
71-43-2	benzene		2.0	U
10061-02-6	trans-1,3-dichloropropene		2.0	U
75-25-2	bromoform		2.0	U
108-10-1	4-methyl-2-pentanone		5.0	U
591-78-6	2-hexanone		5.0	U
127-18-4	tetrachloroethene		2.0	U
79-34-5	1,1,2,2-tetrachloroethane		2.0	U
108-88-3	toluene		2.0	U
108-90-7	chlorobenzene		2.0	U
100-41-4	ethylbenzene		2.0	U
100-42-5	styrene		2.0	U
1330-20-7	xylenes (total)		6.0	U
540-59-0	1,2-dichloroethylene (total)		2.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2522

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST06W

Matrix: (soil/water) WATER Lab Sample ID: 9909786-20

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D521

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

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

Soil Extract Volume: _____(uL) Soil Aliquot Volume: 5 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	chloromethane	2.0	U
74-83-9	bromomethane	2.0	U
75-01-4	vinyl chloride	0.60	J
75-00-3	chloroethane	2.0	U
75-09-2	methylene chloride	2.0	U
67-64-1	acetone	~~4.1~~ 5	JB
75-15-0	carbon disulfide	5.0	U
75-35-4	1,1-dichloroethene	0.66	J
75-34-3	1,1-dichloroethane	2.0	U
67-66-3	chloroform	2.0	U
107-06-2	1,2-dichloroethane	2.0	U
78-93-3	2-butanone	5.0	U
71-55-6	1,1,1-trichloroethane	2.0	U
56-23-5	carbon tetrachloride	2.0	U
75-27-4	bromodichloromethane	5.0	U
78-87-5	1,2-dichloropropane	2.0	U
10061-01-5	cis-1,3-dichloropropene	2.0	U
79-01-6	trichloroethene	~~286~~ 243	E D
124-48-1	dibromochloromethane	2.0	U
79-00-5	1,1,2-trichloroethane	2.0	U
71-43-2	benzene	4.8	
10061-02-6	trans-1,3-dichloropropene	2.0	U
75-25-2	bromoform	2.0	U
108-10-1	4-methyl-2-pentanone	5.0	U
591-78-6	2-hexanone	5.0	U
127-18-4	tetrachloroethene	2.0	U
79-34-5	1,1,2,2-tetrachloroethane	2.0	U
108-88-3	toluene	2.0	U
108-90-7	chlorobenzene	2.0	U
100-41-4	ethylbenzene	0.59	J
100-42-5	styrene	2.0	U
1330-20-7	xylenes (total)	6.0	U
540-59-0	1,2-dichloroethylene (total)	40.2	

MMP 11/11/99

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2622

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST04W

Matrix: (soil/water) WATER Lab Sample ID: 9909781-12

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D517

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

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	4.0	U
74-83-9	bromomethane	4.0	U
75-01-4	vinyl chloride	4.0	U
75-00-3	chloroethane	4.0	U
75-09-2	methylene chloride	1.5	J
67-64-1	acetone	10.0	U
75-15-0	carbon disulfide	10.0	U
75-35-4	1,1-dichloroethene	4.0	U
75-34-3	1,1-dichloroethane	4.0	U
67-66-3	chloroform	4.0	U
107-06-2	1,2-dichloroethane	4.0	U
78-93-3	2-butanone	10.0	U
71-55-6	1,1,1-trichloroethane	4.0	U
56-23-5	carbon tetrachloride	4.0	U
75-27-4	bromodichloromethane	10.0	U
78-87-5	1,2-dichloropropane	4.0	U
10061-01-5	cis-1,3-dichloropropene	4.0	U
79-01-6	trichloroethene	116	
124-48-1	dibromochloromethane	4.0	U
79-00-5	1,1,2-trichloroethane	4.0	U
71-43-2	benzene	16.6	
10061-02-6	trans-1,3-dichloropropene	4.0	U
75-25-2	bromoform	4.0	U
108-10-1	4-methyl-2-pentanone	10.0	U
591-78-6	2-hexanone	10.0	U
127-18-4	tetrachloroethene	4.0	U
79-34-5	1,1,2,2-tetrachloroethane	4.0	U
108-88-3	toluene	4.0	U
108-90-7	chlorobenzene	4.0	U
100-41-4	ethylbenzene	4.0	U
100-42-5	styrene	4.0	U
1330-20-7	xylenes (total)	12.0	U
540-59-0	1,2-dichloroethylene (total)	27.9	

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
AF2722

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST04W

Matrix: (soil/water) WATER Lab Sample ID: 9909781-15

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D520

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

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	20.0	U	U
74-83-9	bromomethane	20.0	U	
75-01-4	vinyl chloride	20.0	U	
75-00-3	chloroethane	20.0	U	
75-09-2	methylene chloride	12.8	J	J
67-64-1	acetone	50.0	U	U
75-15-0	carbon disulfide	50.0	U	
75-35-4	1,1-dichloroethene	20.0	U	
75-34-3	1,1-dichloroethane	20.0	U	
67-66-3	chloroform	20.0	U	
107-06-2	1,2-dichloroethane	20.0	U	
78-93-3	2-butanone	50.0	U	R C01
71-55-6	1,1,1-trichloroethane	20.0	U	U
56-23-5	carbon tetrachloride	20.0	U	
75-27-4	bromodichloromethane	50.0	U	
78-87-5	1,2-dichloropropane	20.0	U	
10061-01-5	cis-1,3-dichloropropene	20.0	U	
79-01-6	trichloroethene	596		U
124-48-1	dibromochloromethane	20.0	U	U
79-00-5	1,1,2-trichloroethane	20.0	U	U
71-43-2	benzene	5.1	J	J
10061-02-6	trans-1,3-dichloropropene	20.0	U	U
75-25-2	bromoform	20.0	U	
108-10-1	4-methyl-2-pentanone	50.0	U	
591-78-6	2-hexanone	50.0	U	
127-18-4	tetrachloroethene	20.0	U	
79-34-5	1,1,2,2-tetrachloroethane	20.0	U	
108-88-3	toluene	20.0	U	
108-90-7	chlorobenzene	20.0	U	
100-41-4	ethylbenzene	20.0	U	
100-42-5	styrene	20.0	U	
1330-20-7	xylenes (total)	60.0	U	
540-59-0	1,2-dichloroethylene (total)	49.3		U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2822

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST06W

Matrix: (soil/water) WATER Lab Sample ID: 9909786-12

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

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.0	U	
67-64-1	acetone	5 ~~4.2~~	JB	U FD1, FD6
75-15-0	carbon disulfide	5.0	U	UJ CDS
75-35-4	1,1-dichloroethene	0.67	J	J
75-34-3	1,1-dichloroethane	2.0	U	U
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	
71-55-6	1,1,1-trichloroethane	2.0	U	
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	60.9		
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	3.9		
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	41.9		

KMP 11/11/99

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF2922

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST04W

Matrix: (soil/water) WATER Lab Sample ID: 9909781-16

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D521

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

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	2.0	U	U
74-83-9	bromomethane	2.0	U	U
75-01-4	vinyl chloride	1.8	J	J
75-00-3	chloroethane	2.0	U	U
75-09-2	methylene chloride	1.2	J	J
67-64-1	acetone	5.0	U	U
75-15-0	carbon disulfide	5.0	U	|
75-35-4	1,1-dichloroethene	2.0	U	|
75-34-3	1,1-dichloroethane	2.0	U	|
67-66-3	chloroform	2.0	U	|
107-06-2	1,2-dichloroethane	2.0	U	|
78-93-3	2-butanone	5.0	U	R C01
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	|
75-27-4	bromodichloromethane	5.0	U	|
78-87-5	1,2-dichloropropane	2.0	U	|
10061-01-5	cis-1,3-dichloropropene	2.0	U	|
79-01-6	trichloroethene	11.0		=
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	U
71-43-2	benzene	53.6		=
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	|
108-10-1	4-methyl-2-pentanone	5.0	U	|
591-78-6	2-hexanone	5.0	U	|
127-18-4	tetrachloroethene	2.0	U	|
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	|
108-88-3	toluene	2.0	U	|
108-90-7	chlorobenzene	2.0	U	|
100-41-4	ethylbenzene	2.0	U	|
100-42-5	styrene	2.0	U	|
1330-20-7	xylenes (total)	6.0	U	|
540-59-0	1,2-dichloroethylene (total)	9.5		=

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3012

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST06W

Matrix: (soil/water) WATER Lab Sample ID: 9909786-19

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D520

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

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

Soil Extract Volume: _____(uL) Soil Aliquot Volume: 5.0 (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	chloromethane	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.2		=
67-64-1	acetone	8.4	B	U F01,F07
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	
71-55-6	1,1,1-trichloroethane	2.0	U	
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	1.7	J	J
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	7670 ~~905~~	E D	E AD3
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	14.2		=
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	19.0		=
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	500 ~~374~~	E D	E AD3
100-42-5	styrene	0.52	J	J
1330-20-7	xylenes (total)	72.7		=
540-59-0	1,2-dichloroethylene (total)	3.3		=

MAP 11/11/99

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3022

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST06W

Matrix: (soil/water) WATER Lab Sample ID: 9909786-07

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D433

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

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		2.0	U
74-83-9	bromomethane		2.0	U
75-01-4	vinyl chloride		0.88	J
75-00-3	chloroethane		2.0	U
75-09-2	methylene chloride	2.0	~~0.58~~	JB
67-64-1	acetone		10.8	B
75-15-0	carbon disulfide		5.0	U
75-35-4	1,1-dichloroethene		2.0	U
75-34-3	1,1-dichloroethane		2.0	U
67-66-3	chloroform		2.0	U
107-06-2	1,2-dichloroethane		2.0	U
78-93-3	2-butanone		5.0	U
71-55-6	1,1,1-trichloroethane		2.0	U
56-23-5	carbon tetrachloride		2.0	U
75-27-4	bromodichloromethane		5.0	U
78-87-5	1,2-dichloropropane		2.0	U
10061-01-5	cis-1,3-dichloropropene		2.0	U
79-01-6	trichloroethene		21.3	
124-48-1	dibromochloromethane		2.0	U
79-00-5	1,1,2-trichloroethane		2.0	U
71-43-2	benzene	2290	~~662~~	~~E~~ D
10061-02-6	trans-1,3-dichloropropene		2.0	U
75-25-2	bromoform		2.0	U
108-10-1	4-methyl-2-pentanone		5.0	U
591-78-6	2-hexanone		15.5	
127-18-4	tetrachloroethene		2.0	U
79-34-5	1,1,2,2-tetrachloroethane		2.0	U
108-88-3	toluene		5.5	
108-90-7	chlorobenzene		2.0	U
100-41-4	ethylbenzene	168	~~138~~	~~E~~ D
100-42-5	styrene		2.0	U
1330-20-7	xylenes (total)		9.6	
540-59-0	1,2-dichloroethylene (total)		24.0	

MMP 11/11/99

DUPLICATE

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3024

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HUST05W

Matrix: (soil/water) WATER Lab Sample ID: 9909783-14

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D416

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/07/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0 U/2

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	U
74-83-9	bromomethane	2.0	U	U
75-01-4	vinyl chloride	1.2	J	J
75-00-3	chloroethane	2.0	U	U
75-09-2	methylene chloride	4.4	B	U F01, F07
67-64-1	acetone	9.8		J C04
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R C01, C04
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	9.9		=
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	U
71-43-2	benzene	3060 ~~920~~	E D	=
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	8.8		=
108-90-7	chlorobenzene	2.0	U	U
100-41-4	ethylbenzene	251 ~~241~~	E D	=
100-42-5	styrene	2.0	U	U
1330-20-7	xylenes (total)	18.3		=
540-59-0	1,2-dichloroethylene (total)	11.9		=

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3032

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST05W

Matrix: (soil/water) WATER Lab Sample ID: 9909783-19

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D516

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	0.95	J	J
67-64-1	acetone	5.0	U	R CO4, CO5
75-15-0	carbon disulfide	5 ~~1.3~~	JB	FB1, FB6
75-35-4	1,1-dichloroethene	0.74	J	J
75-34-3	1,1-dichloroethane	2.0	U	U
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R CO1, CO4
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	75.9		
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	37.9		
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	U CO5
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	0.55	J	J
108-90-7	chlorobenzene	2.0	U	U
100-41-4	ethylbenzene	2.7		J
100-42-5	styrene	2.0	U	U
1330-20-7	xylenes (total)	1.8	J	J
540-59-0	1,2-dichloroethylene (total)	33.0		

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3042

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: HUST06W

Matrix: (soil/water) WATER Lab Sample ID: 9909786-16

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D517

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/08/99

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

Soil Extract Volume: _____(uL) Soil Aliquot Volume: 5 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	chloromethane	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.0	U	
67-64-1	acetone	5 ~~3.2~~	JB	U F01, F06
75-15-0	carbon disulfide	1.1	J	J CD5
75-35-4	1,1-dichloroethene	2.2		
75-34-3	1,1-dichloroethane	2.0	U	U
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	
71-55-6	1,1,1-trichloroethane	2.0	U	
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	262 ~~326~~	~~E~~ D	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	16.2		
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	1.3	J	J
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	90.3		

MMP 11/1/99

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3052

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HUST05W

Matrix: (soil/water) WATER Lab Sample ID: 9909783-06

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D408

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/07/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	U
75-01-4	vinyl chloride	2.0	U	U
75-00-3	chloroethane	2.0	U	U
75-09-2	methylene chloride	4.0	B	U FD1,FD7
67-64-1	acetone	5.0	U	R CO4
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	0.62	J	J
75-34-3	1,1-dichloroethane	2.0	U	U
67-66-3	chloroform	2.0	U	U
107-06-2	1,2-dichloroethane	2.0	U	U
78-93-3	2-butanone	5.0	U	R CO1,CO4
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	U
75-27-4	bromodichloromethane	5.0	U	U
78-87-5	1,2-dichloropropane	2.0	U	U
10061-01-5	cis-1,3-dichloropropene	2.0	U	U
79-01-6	trichloroethene	116 ~~126~~	E D	=
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	U
71-43-2	benzene	11.0		=
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	U
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	0.53	J	J
100-42-5	styrene	2.0	U	U
1330-20-7	xylenes (total)	0.51	J	J
540-59-0	1,2-dichloroethylene (total)	24.3		=

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3062

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST07W

Matrix: (soil/water) WATER Lab Sample ID: 9909787-02

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D216

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/05/99

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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	3.4	B	U F01, F07
67-64-1	acetone	5.0	U	U
75-15-0	carbon disulfide	5.0	U	
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R C01
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	U
79-01-6	trichloroethene	66.5		=
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	6.4		=
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	0.67	J	J
100-42-5	styrene	2.0	U	U
1330-20-7	xylenes (total)	0.67	J	J
540-59-0	1,2-dichloroethylene (total)	11.3		=

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3072

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HUST05W

Matrix: (soil/water) WATER Lab Sample ID: 9909783-04

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D320

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/06/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2 ~~1.3~~	JB	U FD1, FD6
67-64-1	acetone	5.0	U	R CD4
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R CD1, CD4
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	66.2		
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	5.5		
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	0.78	J	J
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	5.5		
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	9.3		
540-59-0	1,2-dichloroethylene (total)	8.7		

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
AF3082

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HUST05W

Matrix: (soil/water) WATER Lab Sample ID: 9909783-07

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D409

Level: (low/med) LOW Date Received: 09/27/99

% Moisture: not dec. _____ Date Analyzed: 10/07/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.9	B	U FD1, FD7
67-64-1	acetone	5.0	U	R CD4
75-15-0	carbon disulfide	1.3	J	J
75-35-4	1,1-dichloroethene	2.0	U	U
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R CD1, CD4
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	0.91	J	J
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	U
71-43-2	benzene	6.8		=
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127 18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	0.50	J	J
108-90-7	chlorobenzene	2.0	U	U
100-41-4	ethylbenzene	1.8	J	J
100-42-5	styrene	2.0	U	U
1330-20-7	xylenes (total)	2.9	J	J
540-59-0	1,2-dichloroethylene (total)	2.0	U	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3112

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST02W

Matrix: (soil/water) WATER Lab Sample ID: 9909766-06

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D305

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/06/99

GC Column: DB-624 ID: 0.53 (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	10.0	U	U
74-83-9	bromomethane	10.0	U	
75-01-4	vinyl chloride	10.0	U	
75-00-3	chloroethane	10.0	U	
75-09-2	methylene chloride	14.4	B	U F01,F07
67-64-1	acetone	25.0	U	R C04
75-15-0	carbon disulfide	25.0	U	U
75-35-4	1,1-dichloroethene	10.0	U	
75-34-3	1,1-dichloroethane	10.0	U	
67-66-3	chloroform	10.0	U	
107-06-2	1,2-dichloroethane	10.0	U	
78-93-3	2-butanone	25.0	U	R C01,C04
71-55-6	1,1,1-trichloroethane	10.0	U	U
56-23-5	carbon tetrachloride	10.0	U	
75-27-4	bromodichloromethane	25.0	U	
78-87-5	1,2-dichloropropane	10.0	U	
10061-01-5	cis-1,3-dichloropropene	10.0	U	
79-01-6	trichloroethene	168		=
124-48-1	dibromochloromethane	10.0	U	U
79-00-5	1,1,2-trichloroethane	10.0	U	U
71-43-2	benzene	11.1		=
10061-02-6	trans-1,3-dichloropropene	10.0	U	U
75-25-2	bromoform	10.0	U	
108-10-1	4-methyl-2-pentanone	25.0	U	
591-78-6	2-hexanone	25.0	U	
127-18-4	tetrachloroethene	10.0	U	
79-34-5	1,1,2,2-tetrachloroethane	10.0	U	
108-88-3	toluene	10.0	U	
108-90-7	chlorobenzene	10.0	U	
100-41-4	ethylbenzene	10.0	U	
100-42-5	styrene	10.0	U	
1330-20-7	xylenes (total)	30.0	U	
540-59-0	1,2-dichloroethylene (total)	17.9		=

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3122

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) WATER Lab Sample ID: 9909765-19

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D147

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/05/99

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

Soil Extract Volume: _____(uL) Soil Aliquot Volume: 5.0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	chloromethane	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.4	B	U FD1, FD7
67-64-1	acetone	5.0	U	U
75-15-0	carbon disulfide	5.0	U	
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R CB1
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	110 118	E D	=
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	U
71-43-2	benzene	0.99	J	J
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	10.7		=

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3132

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST02W

Matrix: (soil/water) WATER Lab Sample ID: 9909766-07

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D306

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/06/99

GC Column: DB-624 ID: 0.53 (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	0.68	J	J C05
74-83-9	bromomethane	2.0	U	U
75-01-4	vinyl chloride	2.0	U	↓
75-00-3	chloroethane	2.0	U	↓
75-09-2	methylene chloride	2.3	B	U F01, F07
67-64-1	acetone	5.0	U	R C04
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	↓
75-34-3	1,1-dichloroethane	2.0	U	↓
67-66-3	chloroform	2.0	U	↓
107-06-2	1,2-dichloroethane	2.0	U	↓
78-93-3	2-butanone	5.0	U	R C01, C04
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	↓
75-27-4	bromodichloromethane	5.0	U	↓
78-87-5	1,2-dichloropropane	2.0	U	↓
10061-01-5	cis-1,3-dichloropropene	2.0	U	↓
79-01-6	trichloroethene	2.6		=
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	↓
71-43-2	benzene	2.0	U	↓
10061-02-6	trans-1,3-dichloropropene	2.0	U	↓
75-25-2	bromoform	2.0	U	↓
108-10-1	4-methyl-2-pentanone	5.0	U	↓
591-78-6	2-hexanone	5.0	U	↓
127-18-4	tetrachloroethene	2.0	U	↓
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	↓
108-88-3	toluene	2.0	U	↓
108-90-7	chlorobenzene	2.0	U	↓
100-41-4	ethylbenzene	2.0	U	↓
100-42-5	styrene	2.0	U	↓
1330-20-7	xylenes (total)	6.0	U	↓
540-59-0	1,2-dichloroethylene (total)	2.0	U	↓

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3142

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST02W

Matrix: (soil/water) WATER Lab Sample ID: 9909766-01

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D215

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/05/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	3.0		=
67-64-1	acetone	5.0	U	R CO4
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R CO1, CO4
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	43.7		=
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	16.4		=

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3152

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) WATER Lab Sample ID: 9909765-12

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D140

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/05/99

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	0.73	J	J
74-83-9	bromomethane	2.0	U	U
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	~~1.8~~ 2.0	JB	U F01, F06
67-64-1	acetone	5.0	U	U
75-15-0	carbon disulfide	5.0	U	
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R C01
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	1.3	J	J
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

DATA VALIDATION COPY

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3162

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) WATER Lab Sample ID: 9909765-10

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D138

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/05/99

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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.0	B	U F01, F07
67-64-1	acetone	5.0	U	U
75-15-0	carbon disulfide	5.0	U	
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	1.9	J	J C01
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	1.0	J	J
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3172

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) WATER Lab Sample ID: 9909765-16

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D144

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/05/99

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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.6	B	U FQ1, FQ7
67-64-1	acetone	5.0	U	U
75-15-0	carbon disulfide	5.0	U	
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	1.3	J	J CQ1
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	0.76	J	J
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3182

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) WATER Lab Sample ID: 9909765-15

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D143

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/05/99

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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.0 ~~1.8~~	JB	U F01,F07
67-64-1	acetone	5.0	U	U
75-15-0	carbon disulfide	5.0	U	
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R C01
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3192

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST02W

Matrix: (soil/water) WATER Lab Sample ID: 9909766-14

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D312

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/06/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.9	B	U F01, F07
67-64-1	acetone	5.0	U	R C04
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R C01, C04
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	0.56	J	J
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3212

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST02W

Matrix: (soil/water) WATER Lab Sample ID: 9909766-13

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D311

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/06/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	3.4	B	U FD1,FD7
67-64-1	acetone	5.0	U	R CD4
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R CD1,CD4
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	26.3		=
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	U
71-43-2	benzene	2.1		=
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	6.4		=

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3222

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) WATER Lab Sample ID: 9909765-11

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D139

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/05/99

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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.1	B	U F01,F07
67-64-1	acetone	5.0	U	U
75-15-0	carbon disulfide	5.0	U	
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	0.93	J	J C01
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	5.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	2.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	0.52	J	J
108-88-3	toluene	2.0	U	U
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	6.0	U	
1330-20-7	xylenes (total)	2.0	U	
540-59-0	1,2-dichloroethylene (total)			

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DUPLICATE

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3224

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST02W

Matrix: (soil/water) WATER Lab Sample ID: 9909766-11

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D309

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/06/99

GC Column: DB-624 ID: 0.53 (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	0.92	J	J C05
74-83-9	bromomethane	2.0	U	U
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.3	B	U F01, F07
67-64-1	acetone	5.0	U	R C04
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R C01, C04
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	0.70	J	J
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3232

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST02W

Matrix: (soil/water) WATER Lab Sample ID: 9909766-02

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D216

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/05/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.9		=
67-64-1	acetone	5.0	U	R CO4
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R CO1, CO4
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3242

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST02W

Matrix: (soil/water) WATER Lab Sample ID: 9909766-09

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D307

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/06/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.8	B	U F01,F07
67-64-1	acetone	5.0	U	R C04
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R C01,C04
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3252

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST02W

Matrix: (soil/water) WATER Lab Sample ID: 9909766-10

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D308

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/06/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.6	B	U FD1, FD7
67-64-1	acetone	5.0	U	R C04
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R C01, C04
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3262

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST02W

Matrix: (soil/water) WATER Lab Sample ID: 9909766-08

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D406

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/07/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	5.4	B	U FD1, FD7
67-64-1	acetone	5.0	U	R CD4
75-15-0	carbon disulfide	0.56	J	J
75-35-4	1,1-dichloroethene	2.0	U	U
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R CD1, CD4
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3272

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) WATER Lab Sample ID: 9909765-17

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D145

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/05/99

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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.7	B	U F01, F07
67-64-1	acetone	5.0	U	U
75-15-0	carbon disulfide	5.0	U	
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R C01
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3282

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST02W

Matrix: (soil/water) WATER Lab Sample ID: 9909766-12

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D310

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/06/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	3.0	B	U F01,F07
67-64-1	acetone	5.0	U	R C04
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R C01,C04
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	2.0	U	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3312

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST02W

Matrix: (soil/water) WATER Lab Sample ID: 9909766-04

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D218

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/05/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.1		=
67-64-1	acetone	5.0	U	R C04
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R C01,C04
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	45.8		=
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	6.4		=

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3312

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9909765-05

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: 70613

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/28/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.2	U
91-58-7	2-chloronaphthalene	10.2	U
208-96-8	acenaphthylene	10.2	U
83-32-9	acenaphthene	10.2	U
86-73-7	fluorene	10.2	U
85-01-8	phenanthrene	10.2	U
120-12-7	anthracene	10.2	U
206-44-0	fluoranthene	10.2	U
129-00-0	pyrene	10.2	U
56-55-3	benzo(a)anthracene	10.2	U
218-01-9	chrysene	10.2	U
205-99-2	benzo(b)fluoranthene	10.2	U
207-08-9	benzo(k)fluoranthene	10.2	U
50-32-8	benzo(a)pyrene	10.2	U
193-39-5	indeno(1,2,3-cd)pyrene	10.2	U
53-70-3	dibenz(a,h)anthracene	10.2	U
191-24-2	benzo(g,h,i)perylene	10.2	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3412

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST02W

Matrix: (soil/water) WATER Lab Sample ID: 9909766-03

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D217

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/05/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	3.6		
67-64-1	acetone	5.0	U	R C04
75-15-0	carbon disulfide	5.0	U	
75-35-4	1,1-dichloroethene	4.8		
75-34-3	1,1-dichloroethane	3.4		
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R C01,C04
71-55-6	1,1,1-trichloroethane	2.0	U	
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	95.5		
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	2.0	U	
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	10.8		

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3412

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9909765-01

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: 70608

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/28/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.2	U
91-58-7	2-chloronaphthalene	10.2	U
208-96-8	acenaphthylene	10.2	U
83-32-9	acenaphthene	10.2	U
86-73-7	fluorene	10.2	U
85-01-8	phenanthrene	10.2	U
120-12-7	anthracene	10.2	U
206-44-0	fluoranthene	10.2	U
129-00-0	pyrene	10.2	U
56-55-3	benzo(a)anthracene	10.2	U
218-01-9	chrysene	10.2	U
205-99-2	benzo(b)fluoranthene	10.2	U
207-08-9	benzo(k)fluoranthene	10.2	U
50-32-8	benzo(a)pyrene	10.2	U
193-39-5	indeno(1,2,3-cd)pyrene	10.2	U
53-70-3	dibenz(a,h)anthracene	10.2	U
191-24-2	benzo(g,h,i)perylene	10.2	U

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3512

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) WATER Lab Sample ID: 9909765-14

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D142

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/05/99

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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.4	B	U FB1, FB7
67-64-1	acetone	5.0	U	U
75-15-0	carbon disulfide	5.0	U	
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R C01
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	23.0		=
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	U
71-43-2	benzene	2.1		=
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	8.8		=

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3512

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9909765-03

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 70610

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/28/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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FORM I SV-1 OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3612

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST02W

Matrix: (soil/water) WATER Lab Sample ID: 9909766-05

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1D219

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/05/99

GC Column: DB-624 ID: 0.53 (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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.6		=
67-64-1	acetone	5.0	U	R C04
75-15-0	carbon disulfide	5.0	U	U
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R C01, C04
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	38.0		=
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	U
71-43-2	benzene	2.4		=
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	
540-59-0	1,2-dichloroethylene (total)	17.3		=

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3612

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9909765-02

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: 70609

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/28/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.4	U
91-58-7	2-chloronaphthalene	10.4	U
208-96-8	acenaphthylene	10.4	U
83-32-9	acenaphthene	10.4	U
86-73-7	fluorene	10.4	U
85-01-8	phenanthrene	10.4	U
120-12-7	anthracene	10.4	U
206-44-0	fluoranthene	10.4	U
129-00-0	pyrene	10.4	U
56-55-3	benzo(a)anthracene	10.4	U
218-01-9	chrysene	10.4	U
205-99-2	benzo(b)fluoranthene	10.4	U
207-08-9	benzo(k)fluoranthene	10.4	U
50-32-8	benzo(a)pyrene	10.4	U
193-39-5	indeno(1,2,3-cd)pyrene	10.4	U
53-70-3	dibenz(a,h)anthracene	10.4	U
191-24-2	benzo(g,h,i)perylene	10.4	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3712

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) WATER Lab Sample ID: 9909765-07

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D135

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/05/99

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

Soil Extract Volume: _____(uL) Soil Aliquot Volume: 5.2 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	chloromethane	2.0	U	C
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.7	B	C FD1,FD7
67-64-1	acetone	5.0	U	C
75-15-0	carbon disulfide	5.0	U	C
75-35-4	1,1-dichloroethene	0.60	J	C
75-34-3	1,1-dichloroethane	2.0	U	C
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R C01
71-55-6	1,1,1-trichloroethane	2.0	U	C
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	346 ~~294~~	~~E~~ D	C
124-48-1	dibromochloromethane	2.0	U	C
79-00-5	1,1,2-trichloroethane	2.0	U	C
71-43-2	benzene	4.2		C
10061-02-6	trans-1,3-dichloropropene	2.0	U	
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	0.69	J	C
108-90-7	chlorobenzene	2.0	U	C
100-41-4	ethylbenzene	0.63	J	C
100-42-5	styrene	2.0	U	C
1330-20-7	xylenes (total)	3.4	J	C
540-59-0	1,2-dichloroethylene (total)	26.4		C

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3712

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9909765-07

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 70615

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/28/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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FORM I SV-1 OLM03.0

DUPLICATE

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3714

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) WATER Lab Sample ID: 9909765-13

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D141

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/05/99

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

Soil Extract Volume: _____(uL) Soil Aliquot Volume: 5.0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	chloromethane	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.6	B	U FQ1, FQ7
67-64-1	acetone	5.0	U	U
75-15-0	carbon disulfide	5.0	U	
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R CQ1
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	301 ~~259~~	E D	=
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	U
71-43-2	benzene	4.7		=
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	1.4	J	J
108-90-7	chlorobenzene	2.0	U	U
100-41-4	ethylbenzene	1.4	J	J
100-42-5	styrene	2.0	U	U
1330-20-7	xylenes (total)	7.6		=
540-59-0	1,2-dichloroethylene (total)	24.4		=

DUPLICATE

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3714

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9909765-06

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 70614

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/28/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3812

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) WATER Lab Sample ID: 9909765-18

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D146

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/05/99

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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.0	B	U F01, F07
67-64-1	acetone	5.0	U	U
75-15-0	carbon disulfide	5.0	U	
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	R C01
71-55-6	1,1,1-trichloroethane	2.0	U	U
56-23-5	carbon tetrachloride	2.0	U	
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	6.8		=
124-48-1	dibromochloromethane	2.0	U	U
79-00-5	1,1,2-trichloroethane	2.0	U	U
71-43-2	benzene	2.0		=
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0		=
108-90-7	chlorobenzene	2.0	U	U
100-41-4	ethylbenzene	1.6	J	J
100-42-5	styrene	2.0	U	U
1330-20-7	xylenes (total)	9.4		=
540-59-0	1,2-dichloroethylene (total)	3.8		=

FORM I VOA OLM03.0

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3812

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9909765-04

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 70611

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/28/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3912

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) WATER Lab Sample ID: 9909765-08

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5D136

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: not dec. _____ Date Analyzed: 10/05/99

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	2.0	U	U
74-83-9	bromomethane	2.0	U	
75-01-4	vinyl chloride	2.0	U	
75-00-3	chloroethane	2.0	U	
75-09-2	methylene chloride	2.4	B	U F01,F07
67-64-1	acetone	5.0	U	U
75-15-0	carbon disulfide	5.0	U	
75-35-4	1,1-dichloroethene	2.0	U	
75-34-3	1,1-dichloroethane	2.0	U	
67-66-3	chloroform	2.0	U	
107-06-2	1,2-dichloroethane	2.0	U	
78-93-3	2-butanone	5.0	U	
71-55-6	1,1,1-trichloroethane	2.0	U	R CD1
56-23-5	carbon tetrachloride	2.0	U	U
75-27-4	bromodichloromethane	5.0	U	
78-87-5	1,2-dichloropropane	2.0	U	
10061-01-5	cis-1,3-dichloropropene	2.0	U	
79-01-6	trichloroethene	2.0	U	
124-48-1	dibromochloromethane	2.0	U	
79-00-5	1,1,2-trichloroethane	2.0	U	
71-43-2	benzene	0.92	J	J
10061-02-6	trans-1,3-dichloropropene	2.0	U	U
75-25-2	bromoform	2.0	U	
108-10-1	4-methyl-2-pentanone	5.0	U	
591-78-6	2-hexanone	5.0	U	
127-18-4	tetrachloroethene	2.0	U	
79-34-5	1,1,2,2-tetrachloroethane	2.0	U	
108-88-3	toluene	2.0	U	
108-90-7	chlorobenzene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
100-42-5	styrene	2.0	U	
1330-20-7	xylenes (total)	6.0	U	U
540-59-0	1,2-dichloroethylene (total)	4.3		

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF3912

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HUST01W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9909765-08

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 70616

Level: (low/med) LOW Date Received: 09/26/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/28/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

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CHAIN OF CUSTODY RECORD

COC NO.: GH0001

PROJECT NAME: HAAF-USTs 25 & 26

PROJECT NUMBER: 01-0331-04-1958-210

PROJECT MANAGER: Patty Stoll

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

REQUESTED PARAMETERS

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29407

PHONE NO: (843) 556-8171

	Sample ID	Date Collected	Time Collected	Matrix	VOC	PAH	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1	AF3412	9/25/99	1435	water		2	2		
2	AF3612	9/25/99	1710			2	2		
3	AF3512	9/25/99	1545			2	2		
4	AF3812	9/25/99	1500			2	2		
5	AF3312	9/25/99	1145			2	2		
6	AF3714	9/25/99	1543	↓		2	2		

VIII-260

4/28/11

RELINQUISHED BY: Laura Lumley	Date/Time 9/26/99	RECEIVED BY: P. Power	Date/Time 9/26/99 15:00	TOTAL NUMBER OF CONTAINERS: 12	Cooler Temperature: 4°c
COMPANY NAME: SAIC		COMPANY NAME: GEL		Cooler ID: # 559	FEDEX NUMBER:
RECEIVED BY:	Date/Time 9/26/99 1120	RELINQUISHED BY:	Date/Time		
COMPANY NAME: SAIC-GEL		COMPANY NAME:			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time		
COMPANY NAME:		COMPANY NAME:			

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CHAIN OF CUSTODY RECORD

COC NO.: GH0002

PROJECT NAME: HAAF-USTs 25 & 26

PROJECT NUMBER: 01-0331-04-1958-210

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

	Sample ID	Date Collected	Time Collected	Matrix	VOC	PAH	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
7	AF3712	9/25/99	1543	water	2	2	4		
8	AF3912	9/25/99	1415		2	2	4		
9	HJ9200	9/25/99	1600		2	2	4		
10	AF3162	9/25/99	1315		2		2		
11	AF3222	9/25/99	1550		2		2		
12	AF3152	9/25/99	1250		2		2		
13	AF3714	9/25/99	1543		2		2		
14	AF3512	9/25/99	1546		2		2		
15	AF3162	9/25/99	1430		2		2		
16	AF3172	9/25/99	1400		2		2		
17	AF3272	9/25/99	1710		2		2		
18	AF3812	9/25/99	1500		2		2		
19	AF3122	9/25/99	1150		2		2		

4/25/11 i.2

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RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:	Cooler Temperature:
Laura Lumley	9/26/99 1120	T. Power	9/26/99 15:00	Cooler ID: #786	4°c
COMPANY NAME: SAIC		COMPANY NAME: GEL			FEDEX NUMBER:
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time		
COMPANY NAME: GEL	9/26/99 11:20	COMPANY NAME:			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time		
COMPANY NAME:		COMPANY NAME:			

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990976600 2 of 3

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CHAIN OF CUSTODY RECORD

COC NO.: GH0007

PROJECT NAME: HAAF-USTs 25 & 26

PROJECT NUMBER: 01-0331-04-1958-210

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

Sample ID	Date Collected	Time Collected	Matrix	REQUESTED PARAMETERS: VOC	PAH	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AF314Z	9/25/99	1225	water	Z		2		
AF3232	9/25/99	1605		Z		2		
AF3412	9/25/99	1435		Z		2		
AF3312	9/25/99	1145		Z		2		
AF3612	9/25/99	1710		Z		2		
AF3112	9/25/99	1115		Z		2		
AF3132	9/25/99	1210		Z		2		
AF3262	9/25/99	1450		Z		2		
AF3242	9/25/99	1420		Z		2		
AF3252	9/25/99	1445		Z		2		
AF3224	9/25/99	1605		Z		2		
AF3282	9/25/99	1730		Z		2		
AF3212	9/25/99	1540	✓	Z		2		

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:	Cooler Temperature:
Laura Lumley	9/26/99 1120	P. Power	9/24/99 15:00	Cooler ID: #2488	FEDEX NUMBER:
COMPANY NAME: SAIC		COMPANY NAME: GEL			
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time		
COMPANY NAME: GEL	9/24/99 11:20	COMPANY NAME:			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time		
COMPANY NAME:		COMPANY NAME:			

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CHAIN OF CUSTODY RECORD

COC NO. GH0004Z

PROJECT NAME: HAAF-USTs 25 & 26

PROJECT NUMBER: 01-0331-04-1958-210

PROJECT MANAGER: Patty Stoll

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

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOC	PAH	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AF319Z	9/25/99	1500	water	2		2		
HP0013	9/25/99	0815	water	2		2		

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road Charleston, SC 29407

PHONE NO: (843) 556-8171

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS: 6Z	Cooler Temperature: 4°c
Laura Lumley	9/26/99	P. Powell	9/26/99	Cooler ID: 2466	FEDEX NUMBER:
COMPANY NAME: SAIC		COMPANY NAME: GEL	15:00		
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time		
COMPANY NAME: GEL	9/26/99 1120	COMPANY NAME:			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time		
COMPANY NAME:		COMPANY NAME:			

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2086

CHAIN OF CUSTODY RECORD

COC NO.: GH0005

PROJECT NAME: HAAF-USTs 25 & 26

PROJECT NUMBER: 01-0331-04-1958-210

PROJECT MANAGER: Patty Stoll

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

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOC	PAH	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AF2622	9/26/99	1612	water	2		2		990978 1
AF2322	9/26/99	1330		2		2		
AF1122	9/26/99	1545		2		2		
AF2722	9/26/99	1625		2		2		
AF2922	9/26/99	1710		2		2		
AF0122	9/26/99	1217		2		2		
XX0232	9/26/99	1055		2		2		
XX0332	9/26/99	1340		2		2		
XX0252	9/26/99	1145		2		2		
XX0382	9/26/99	1515		2		2		990978 2
AF1522	9/26/99	1315		2		2		
AF1922	9/26/99	1720		2		2		
AF3072	9/26/99	1120	↓	2		2		

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29407

PHONE NO: (843) 556 8171

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	9/27/99	Latrina Power	9/27/99
COMPANY NAME: SAIC	1215	COMPANY NAME: GG	16:15
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time
	9/27/99		
COMPANY NAME:	1745	COMPANY NAME	
RELINQUISHED BY:	Date/Time	RECEIVED BY	Date/Time
	9/27/99		
COMPANY NAME:	1615	COMPANY NAME	

TOTAL NUMBER OF CONTAINERS:

Cooler ID: # 747

Cooler Temperature: 4 °C

FEDEX NUMBER

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9 of 6

CHAIN OF CUSTODY RECORD

COC NO.: GH0003

PROJECT NAME: HAAF-USTs 25 & 26

PROJECT NUMBER: 01-0331-04-1958-210

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

Sample ID	Date Collected	Time Collected	Matrix	REQUESTED PARAMETERS: VOC	PAH	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AF122Z	9/26/99	1054	water	Z		Z		990917838
AF305Z	9/26/99	1045		Z		Z		
AF304Z	9/26/99	1145		Z		Z		
XX013Z	9/26/99	1624		Z		Z		
XX035Z	9/26/99	1440		Z		Z		
XX034Z	9/26/99	1355		Z		Z		
XX032Z	9/26/99	1325		Z		Z		
XX011Z	9/26/99	1530		Z		Z		
AF182Z	9/26/99	1650		Z		Z		
AF302Y	9/26/99	1010		Z		Z		
AF022Z	9/26/99	1610		Z		Z		
AF152Y	9/26/99	1315		Z		Z		
AF202Z	9/26/99	1300	↓	Z		Z		

RELINQUISHED BY: Laura Lumley	Date/Time 9/27/99	RECEIVED BY: Patricia Kibuka	Date/Time 9/27/99	TOTAL NUMBER OF CONTAINERS:	Cooler Temperature 4 °c
COMPANY NAME: SAIC	1245	COMPANY NAME: GEL	1615	Cooler ID: #787	FEDEX NUMBER:
RECEIVED BY:	Date/Time 9/27/99	RELINQUISHED BY:	Date/Time		
COMPANY NAME: GEL	1245	COMPANY NAME:			
RELINQUISHED BY:	Date/Time 9/27/99	RECEIVED BY:	Date/Time		
COMPANY NAME: GEL	1615	COMPANY NAME:			

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4 of 6

CHAIN OF CUSTODY RECORD

COC NO.: GH0003

PROJECT NAME: HAAF-USTs 25 & 26

PROJECT NUMBER: 01-0331-04-1958-210

PROJECT MANAGER: Patty Stoll

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

REQUESTED PARAMETERS

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29407

PHONE NO: (843) 556 8171

Sample ID	Date Collected	Time Collected	Matrix	VOC	PAH	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
AF0922	9/26/99	1435	water	Z		2		99097783
AF3032	9/26/99	1020		Z		2		
AF1626	9/26/99	1705		Z		2		
AF1422	9/26/99	1350		Z		2		99097786
AF2422	9/26/99	1415		Z		2		
AF0422	9/26/99	1115		Z		2		
XX0362	9/26/99	1425		Z		2		
AF0722	9/26/99	1130		Z		2		
AF1722	9/26/99	1645		Z		2		
AF3022	9/26/99	1010		Z		2		
AF0322	9/26/99	1635		Z		2		
AF1622	9/26/99	1241		Z		2		
AF2024	9/26/99	1300		Z		2		

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS:	Cooler Temperature: 4 °C
Laura Lumley	9/27/99	Patricia Young	9/27/99		
COMPANY NAME: SAIC	1215	COMPANY NAME: EGL	16:15	Cooler ID: #787	FEDEX NUMBER:
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time		
COMPANY NAME:	9/27/99 1245	COMPANY NAME:			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time		
COMPANY NAME:	9/27/99 1715	COMPANY NAME:			

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2 of 6

CHAIN OF CUSTODY RECORD

COC NO.: GH00003

PROJECT NAME: HAAF-USTs 25 & 26

PROJECT NUMBER: 01-0331-04-1958-210

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	PAH	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
11	XX0372	9/26/99	1455	water	2		2		9909786/8
12	AF2822	9/24/99	1744		2		2		
13	AF0524	9/26/99	1000		2		2		
4	XX0142	9/26/99	1624		2		2		
5	AF1322	9/26/99	1430		2		2		
6	AF3042	9/26/99	1035		2		2		
7	AF0522	9/26/99	1000		2		2		
8	AF0822	9/26/99	1410		2		2		
9	AF3012	9/26/99	0941		2		2		
10	AF2522	9/26/99	1543		2		2		9909787/8
1	XX0312	9/26/99	1310		2		2		
2	AF3062	9/26/99	1100		2		2		
3	AF1326	9/26/99	1425	↓	2		2		

VIII-267

4283

4283

RELINQUISHED BY: Laura Lumley	Date/Time 9/27/99 1215	RECEIVED BY: Patricia Powers	Date/Time 9/27/99 1615	TOTAL NUMBER OF CONTAINERS:
COMPANY NAME: SAIC		COMPANY NAME: GET		Cooler ID: # 787
RECEIVED BY:	Date/Time 9/27/99 1215	RELINQUISHED BY:	Date/Time	
COMPANY NAME: GEC		COMPANY NAME:		
RELINQUISHED BY	Date/Time 9/27/99 1615	RECEIVED BY	Date/Time	
COMPANY NAME: GEC		COMPANY NAME:		

Cooler Temperature: 4 °C

FEDEX NUMBER:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0119

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252613W

Matrix: (soil/water) WATER Lab Sample ID: 9905397-14

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5J538

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. _____ Date Analyzed: 05/22/99

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		
71-43-2	benzene	2.0	U	U
108-88-3	toluene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
1330-20-7	xylenes (total)	3.0	U	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0119

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252613W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905397-06

Sample wt/vol: 920.0 (g/mL) ML Lab File ID: 5U419

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/13/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/20/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.9	U
91-58-7	2-chloronaphthalene	10.9	U
208-96-8	acenaphthylene	10.9	U
83-32-9	acenaphthene	10.9	U
86-73-7	fluorene	10.9	U
85-01-8	phenanthrene	10.9	U
120-12-7	anthracene	10.9	U
206-44-0	fluoranthene	10.9	U
129-00-0	pyrene	10.9	U
56-55-3	benzo(a)anthracene	10.9	U
218-01-9	chrysene	10.9	U
205-99-2	benzo(b)fluoranthene	10.9	U
207-08-9	benzo(k)fluoranthene	10.9	U
50-32-8	benzo(a)pyrene	10.9	U
193-39-5	indeno(1,2,3-cd)pyrene	10.9	U
53-70-3	dibenz(a,h)anthracene	10.9	U
191-24-2	benzo(g,h,i)perylene	10.9	U

UJ GPC

FORM I SV-1 OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0219

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252613W

Matrix: (soil/water) WATER Lab Sample ID: 9905397-15

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5J539

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. _____ Date Analyzed: 05/22/99

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	
71-43-2	benzene	2.0	U	U
108-88-3	toluene	2.0	U	
100-41-4	ethylbenzene	2.0	U	
1330-20-7	xylenes (total)	3.0	U	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0219

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252613W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905397-07

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5U420

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/13/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/20/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

US G02

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0319

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252613W

Matrix: (soil/water) WATER Lab Sample ID: 9905397-08

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5J532

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: not dec. _____ Date Analyzed: 05/22/99

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
71-43-2	benzene	2.0	U
108-88-3	toluene	2.0	U
100-41-4	ethylbenzene	2.0	U
1330-20-7	xylenes (total)	3.0	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF0319

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: H252613W

Matrix: (soil/water) GROUNDH2O Lab Sample ID: 9905397-08

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 5U421

Level: (low/med) LOW Date Received: 05/12/99

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/13/99

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/20/99

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	naphthalene	10.0	U
91-58-7	2-chloronaphthalene	10.0	U
208-96-8	acenaphthylene	10.0	U
83-32-9	acenaphthene	10.0	U
86-73-7	fluorene	10.0	U
85-01-8	phenanthrene	10.0	U
120-12-7	anthracene	10.0	U
206-44-0	fluoranthene	10.0	U
129-00-0	pyrene	10.0	U
56-55-3	benzo(a)anthracene	10.0	U
218-01-9	chrysene	10.0	U
205-99-2	benzo(b)fluoranthene	10.0	U
207-08-9	benzo(k)fluoranthene	10.0	U
50-32-8	benzo(a)pyrene	10.0	U
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	dibenz(a,h)anthracene	10.0	U
191-24-2	benzo(g,h,i)perylene	10.0	U

9905397%

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CHAIN OF CUSTODY RECORD

COC NO.: HPØZZ

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04 - 1956-200

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

	Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1	AF2512	5/11/99	Ø933	water		Z					Z		
2	AF2612	5/11/99	1119			Z					Z		
3	AF2712	5/11/99	10:30			Z					Z		
4	AF2812	5/11/99	1215			Z					Z		
5	AF2912	5/11/99	1446			1					1		
6	AFØ119	5/11/99	1540			Z					Z		
7	AFØ219	5/11/99	1550	↓		Z					Z		

REQUESTED PARAMETERS

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	5/12/99	D. Power	5/12/99
COMPANY NAME: SAIC	1145	COMPANY NAME: GEL	15:30
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL	5/12/99 1145	COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME: GEL	5/12/99 1530	COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 13

Cooler ID: ~~X~~ 6468

Cooler Temperature: 3°c

FEDEX NUMBER:

4Ø2Ø8

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9905397

CHAIN OF CUSTODY RECORD

COC NO.: HPØ23

PROJECT NAME: HAAF-USTs 25&26

PROJECT NUMBER: 01-0331-04-1958-200

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

	Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	TPH-GRO	PAH, TPH-DRO	PAH, TPH-DRO, TOC	Dissolved Iron	Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
8	AFØ319	5/12/99	ØØØØ	water	2	2						4		
9	AFZ512	5/11/99	Ø933		2						1	3		
10	AFZ612	5/11/99	1119		2						1	3		
11	AFZ712	5/11/99	1030		2						1	3		
12	AFZ812	5/11/99	1215		2						1	3		
13	AFZ912	5/11/99	1448		2						1	3		
14	AFØ119	5/11/99	1540		2							2		
15	AFØ219	5/11/99	1550		2							2		
16	HPØØØ9	5/11/99	745		2							2		
01	AFZ511	5/11/99	Ø91Ø	Soil	1		1	1				3		99053989
02	AFZ611	5/11/99	1100		1		1	1				3		
03	AFZ711	5/11/99	1009		1		1	1				3		
04	AFZ811	5/11/99	1201		1		1	1				3		

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Laura Lumley	5/12/99	P. Mower	5/12/99
COMPANY NAME: SAIC	1145	COMPANY NAME: GEL	15:30
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL	5/12/99 1145	COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME: GEL	5/12/99 1530	COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 49

Cooler ID: # 795

Cooler Temperature: 3°C

FEDEX NUMBER:

40268 .2 .3 .4 40270 .1

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APPENDIX IX

CONTAMINATED SOIL DISPOSAL

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USTs 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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SITE RANKING FORM

Facility Name: USTs 25 & 26 **Ranked by:** S. Stoller

County: Chatham **Facility ID #:** 9-025008 **Date Ranked:** 1/14/00

SOIL CONTAMINATION (CAP A/B soil data)

A. Total PAHs –
Maximum Concentration found on the site
(Assume <0.660 mg/kg if only gasoline was stored on site)

- ☐ ≤0.660 mg/kg = 0
- ☐ >0.66 - 1 mg/kg = 10
- ☐ >1 - 10 mg/kg = 25
- ☒ >10 mg/kg = 50

Sample HAAF-260-PIPE-D-2-S

B. Total Benzene -
Maximum Concentration found on the site

- ☐ ≤0.005 mg/kg = 0
- ☐ >0.005 - .05 mg/kg = 1
- ☐ >0.05 - 1 mg/kg = 10
- ☒ >1 - 10 mg/kg = 25
- ☐ >10 - 50 mg/kg = 40
- ☐ >50 mg/kg = 50

Sample HAAF-260-PIPE-D-2-S

C. Depth to Groundwater
(bls = below land surface)

- ☐ >50' bls = 1
- ☐ >25' - 50' bls = 2
- ☐ >10' - 25' bls = 5
- ☒ ≤10' bls = 10

Fill in the blanks: **(A. 50) + (B. 25) = (75) x (C. 10) = (D. 750)**

GROUNDWATER CONTAMINATION (CAP B groundwater data)

E. Free Product (Nonaqueous-phase liquid hydrocarbons; See Guidelines For definition of "sheen").

- ☒ No free product = 0
- ☐ Sheen - 1/8" = 250
- ☐ >1/8" - 6" = 500
- ☐ >6" - 1ft. = 1,000
- ☐ For every additional inch, add another 100 points = 1,000 +

F. Dissolved Benzene -
Maximum Concentration at the site
(One well must be located at the source of the release.)

- ☐ ≤5 µg/L = 0
- ☐ >5 - 100 µg/L = 5
- ☐ >100 - 1,000 µg/L = 50
- ☒ >1,000 - 10,000 µg/L = 100
- ☐ >10,000 µg/L = 250

Sample AF0722

Fill in the blanks: **(E. 0) + (F. 100) = (G. 100)**

POTENTIAL RECEPTORS (MUST BE FIELD-VERIFIED)

Distance from nearest contaminant plume boundary to the nearest downgradient and hydraulically connected Point of Withdrawal for water supply. **If the point of withdrawal is not hydraulically connected, evidence as outlined in the CAP-A guidance document MUST be presented to substantiate this claim.**

H. Public Water Supply

☐	Impacted	= 2000
☐	≤500'	= 500
☐	>500' - ¼ mi	= 25
☐	¼ mi - 1 mi	= 10
☐	>1 mi - 2 mi	= 2
✳ ☒	> 2 mi	= 0

For lower susceptibility areas only:

☐	>1 mi	= 0

Note: If site is in lower susceptibility area, do not use the shaded areas.

✳ For justification that withdrawal point is not hydraulically connected, see page X-5.

I. Non-Public Water Supply

☐	Impacted	= 1000
☐	≤100'	= 500
☐	>100' - 500'	= 25
☐	>500' - ¼ mi	= 5
☐	>¼ - ½ mi	= 2
☒	>½ mi	= 0

For lower susceptibility areas only:

☐	>¼ mi	= 0

J. Distance from nearest Contaminant Plume boundary to downgradient Surface Waters **OR UTILITY TRENCHES & VAULTS** (a utility trench may be omitted from ranking if its invert elevation is more than 5 feet above the water table)

☐	Impacted	= 500
☒	≤500'	= 50
☐	>500' - 1,000'	= 5
☐	>1,000'	= 1

K. Distance from any Free Product to basements and crawl spaces

☐	Impacted	= 500
☐	<500'	= 50
☐	>500' - 1,000'	= 5
☒	>1,000' or no free product.	= 0

Fill in the blanks: (H. 0) + (I. 0) + (J. 50) + (K. 0) = L. 50

(G. 100) x (L. 50) = M. 5000

(M. 5000) + (D. 750) = N. 5750

P. **SUSCEPTIBILITY AREA MULTIPLIER**

☐ If site is located in a Low Ground-Water Pollution Susceptibility Area = 0.5

☒ All other sites = 1

Q. **EXPLOSION HAZARD**

Have any explosive petroleum vapors, possibly originating from this release, been detected in any subsurface structure (e.g., utility trenches, basements, vaults, crawl spaces, etc.)?

☐ Yes = 200,000

☒ No = 0

Fill in the blanks: (N. 5750) x (P. 1) = (5750) + (Q. 0)

= 5750 (based on CAP A/B soil data and CAP B groundwater data)

ENVIRONMENTAL SENSITIVITY SCORE

OTHER GEOLOGIC AND HYDROLOGIC DATA

The following information is presented to provide supplemental information to Item H of the Site Ranking Form and provides detailed information relating to the geologic and hydrogeologic conditions at Fort Stewart, which supports Fort Stewart's determination that the water withdrawal point(s) located at Fort Stewart is (are) not hydraulically connected to the surficial aquifer.

1.0 REGIONAL AND LOCAL GEOLOGY

Southeast Georgia is located within the Coastal Plain Physiographic Province of the Southeast United States (Clark and Zisa 1976). In this region, the thickness of southeastward dipping, subsurface strata ranges from 0 feet at the fall line, located approximately 150 miles inland from the Atlantic coast, to approximately 4200 feet BGS at the coast. Herrick (1961) provides detailed lithologic descriptions of the stratigraphic units encountered during the installation of water and petroleum exploration wells in Chatham County. The well log of GGS Well 125, located on White Bluff Road, 700 feet west and 0.3 miles north of Buckhalter Road, Savannah, provides one of the more complete lithologic descriptions of upper Eocene, Miocene, and Pliocene to Recent sedimentary strata in Chatham County.

The upper Eocene (Ocala Limestone) section of GGS Well 125 is approximately 225 feet thick and dominated by light-gray to white, fossiliferous limestone. The Miocene section is approximately 250 feet thick and consists of limestone with a 160-feet-thick cap of dark green phosphatic clay. This clay is regionally extensive and is known to occupy the Coosawatchie Formation of the Hawthorn Group (Furlow 1969; Arora 1984). The interval from approximately 80 feet to the surface is Pliocene to Recent in age and composed primarily of sand interbedded with clay and silt. This section is occupied by the Satilla and Cypresshead Formations.

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 in offshore and 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 northwest 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.

Based on the coring and sampling of unconsolidated strata at HAAF during the CAP-Part A investigations, it is concluded that all former USTs were buried within the Satilla Formation, which is overlain by various soil types. Soil groups at HAAF include the Chipley, Leon, Ellabelle, Kershaw, Pelham, Albany, Wahee, and Ogeechee (Wilkes et al. 1974).

2.0 REGIONAL AND LOCAL HYDROGEOLOGY

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 through 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 Upper Floridan Aquifer exists directly beneath Savannah, Georgia. Net water-level decline in the Floridan system, between the predevelopment period and 1980, exceeded 80 feet beneath Savannah. In addition, according to 1980 estimates, more than 500 million gallons of water per day were withdrawn from the Floridan for public and industrial use in southeast Georgia, more than any other region.

The confining layer for the Principal (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 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 to 10 feet below ground level (Miller 1990). Groundwater in the Surficial Aquifer system is under unconfined, or water table, conditions. However, locally, thin clay beds create confined or semiconfined conditions, as is the case at HAAF where thin, surficial clay beds are present in the west quadrant (GA EPD 1976).

Groundwater encountered at all the 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 Principal (Floridan) Aquifer, and that the Hawthorn confining unit separates the Principal Aquifer from the Surficial Aquifer, it is concluded that there is no hydraulic interconnection between the Surficial Aquifer (and associated groundwater plumes, if applicable) located beneath former UST sites and identified water supply withdrawal points at Fort Stewart.

APPENDIX XI

PUBLIC NOTIFICATION

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STATE OF GEORGIA
CHATHAM COUNTY

Affidavit of Publication
___Savannah Morning News
___Savannah Evening Press

Personnally appeared before me, Lynnette Tuck, to me known, who being sworn, deposes and says:

That he is the Class. Inside Sales Mgr. of Southeastern Newspapers Corporation, a Georgia corporation, doing business in Chatham County, Georgia, under the trade name of Savannah Morning News/Savannah Evening Press, a daily newspaper published in said county;

That 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 he has reviewed the regular editions of the Savannah Morning News/Savannah Evening Press, published on 9-26, 1999, 10-3, 1999, _____, 1999, _____, 1999, and finds that the following Advertisement, to-wit:

****PUBLIC NOTICE****
Notification of Corrective Action Plan Underground Storage Tank Releases, Hunter Army Airfield, Savannah, Ga.
The Georgia EPD (GEPD) has required Fort Stewart Directorate of Public Works to prepare Corrective Action Plans Part-B to investigate and/or clean up contamination at the underground storage tank sites listed at the end of this notification. These plans will be submitted to the GEPD on or before December 31, 1999. If you want to examine a copy of one or more of the plans, please contact Commander, 3rd Infantry Division (Mechanized) and Fort Stewart, attn: DPW ENRD ENV.Br. (T. Rutland), 1557 Frank Cochran, Fort Stewart, Ga. 31314-4928.
A copy will be mailed at a nominal fee.
Comments to the plan will be accepted until January 31, 2000, 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 CAP Part B Underground Storage Tank Sites
UST; Building; Facility ID#
21 & 22; 1327; 9-025053
25 & 26; 1336/33; 9-025008
108; 1346; 9-025104

appeared in each of said editions.

Lynnette Tuck
(Deponent)

Sworn to and subscribed before me this 4 day of Oct, 1999.

Lillie D. Lang
Notary Public, Chatham County, Georgia

LILLIE D. LANG
Notary Public, Chatham County, Ga.
My Commission Expires Apr. 8, 2001

Form 121 rev.

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ATTACHMENT A

SOIL GEOTECHNICAL DATA

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Summary T... Of Results FOR HAAF Pilot-Study

SAMPLE NO.	MOISTURE CONTENT (%)	ATTERBERG LIMITS CLASSIFICATION				SIEVE ANALYSIS (% PASSING)											
		LL	PL	PI	Class	3"	2"	1 1/2"	3/4"	3/8"	#4	#10	#20	#40	#60	#140	#200
AF0331	23.4		NONPLASTIC			100	100	100	100	100	100.0	99.96	99	98.3	96.5	28.2	14.5
AF0531	19.2	23	18.2	4.8	CL-ML	100	100	100	100	100	100.0	100.0	99.5	98.3	95.8	45.4	38.9
AF1131	13.1		NONPLASTIC			100	100	100	100	100	100	100	98.0	94.4	89.5	29.6	22.4
AF1231	16.5		NONPLASTIC			100	100	100	100	100	99.73	98	92.0	79.5	68.3	22.1	15.0
AF1631	19.9		NONPLASTIC			100	100	100	100	100	99.8	99.0	96.3	91.5	85.7	22.9	14.3
AF1831	23.8	22.5	20.0	2.5	ML	100	100	100	100	100	100	100.0	99.3	98.3	96.5	36.4	24.3
AF1931	24.4		NONPLASTIC			100	100	100	100	100	100	100.0	99.4	97.8	94.6	34.9	22.4
AF2031	17.8		NONPLASTIC			100	100	100	100	99	98	97.8	96.5	94.0	90.5	30.7	23.2
AF2331	16.7		NONPLASTIC			100	100	100	100	100	99.3	98.0	95.3	90.6	85.6	22.1	12.4
AF2431	15.1		NONPLASTIC			100	100	100	100	100	99.45	98.2	94.4	85.9	76.7	22.9	16.5
AEJ531	15.5	19	18.7	0.3	ML	100	100	100	100	100	100.0	100.0	100.0	99.7	96.7	31.7	28.5
AEJC31	18.5	25.8	13.4	12.4	CL	100	100	100	100	100	100.0	100.0	100.0	99.4	96.6	40.9	38.2
AEVW31	12.0		NONPLASTIC			100	100	100	100	100	99.9	98.9	94.8	81.0	53.5	8.1	6.0
AEJD31	22.0		NONPLASTIC			100	100	100	100	100	100.0	100.0	100.0	99.8	97.4	9.5	7.7
AF0131	18.3		NONPLASTIC			100	100	100	100	100	100.0	100.0	99.6	98.6	95.7	25.0	15.5
AEJ331	19.0	37	26	11	ML	100	100	100	100	100	100.0	99.9	99.9	99.8	99.4	29.5	25.5

Sample #	Permeability k (cm/sec)	Specific Gravity	Porosity	Bulk Density (pcf)
AEJ531	2.00E-04	2.65	0.36	106.38
AEVW31	2.61E-05	2.65	0.33	111.57
AF0131	1.41E-04	2.65	0.47	88.25
AEJ331	5.54E-07	2.65	0.34	109.32
AEJD31	1.16E-05	2.65	0.38	120.54
AEJC31	1.77E-05	2.65	0.36	105.59

John Jones, P.E.
Laboratory Manager

CATLIN Engineers and Scientists
Geotechnical Laboratories

PERMEABILITY TEST ANALYSIS (ASTM D5084)

Project : SAIC

Location of Project : HAAF

Description of Soil : Gray Sand

Job # : 99095Y
Date of Testing: 5/22-5/28
Tested by: FB/CA
Boring # :
Sample # : AF0131
Sample Depth : 7'-9'

Sample Type (**Undisturbed** or Remolded)
Standard Proctor:
Maximim Dry Density: _____ *pcf*
Optimum Moisture Content: _____ *%*

% Sample Compaction: _____ *%*
Sample Dry Density: _____ *pcf*
Sample Moisture Content: _____ *%*
Sample Wet Density: _____ *pcf*

Sample Permeation:

De-Aired Water
% Saturation: 100 *%*
Cell Pressure: 46.5 *psi*
Lower Pressure: 41.5 *psi*
Upper Pressure: 40 *psi*
Gradient: 13.19

Sample Dimensions		
	Before	After
Length (cm)	8.00	7.50
Diameter (cm)	4.80	4.60
Water Content (%)	15.6	20.5
Weight (g)	277.3	293.8

Constant Head Calculation:

$$K = [V(t_1,t_2)\ LR_T]/[P_BAt]\ (cm/sec)$$

$V(t_1,t_2)$ = Volume of flow from t_1 to t_2 (cm^2)
L = Length of Sample = 8.00 cm
A = Area of Sample = 18.1 cm^2
t = $t_2 - t_1$ (sec)
P_B = Bias Pressure = 1.5 psi x 70.37 cm/psi $_{(cm - H2O)}$ 105.56 cm
R_T = Temperature correction = 0.931

t_2 (sec)	t_1 (sec)	$(t_2 - t_1)$ (sec)	V (cm^3)	$[LR_T]/[P_BA]$ (cm^3)	K (cm/sec)
130	120	10	0.3	3.90E-03	1.17E-04
150	130	20	0.7	3.90E-03	1.36E-04
160	150	10	0.4	3.90E-03	1.56E-04
170	160	10	0.4	3.90E-03	1.56E-04

K_{avg} = 1.41E-04 cm/sec

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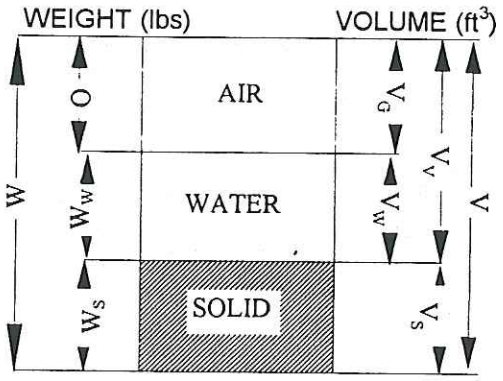
BULK DENSITY, SPECIFIC GRAVITY AND POROSITY

PROJECT: SAIC
LOCATION OF PROJECT: HAAF
DESCRIPTION OF SOIL: Gray Sand
TESTED BY: AJ/CA

JOB NO.: 99095Y
SAMPLE NO.: AF0131
DEPTH OF SAMPLE:7'-9'
DATE OF TESTING: 5/19/99



W = 0.48011
W_W = W - W_S = 0.07399
W_S = Y_d*V = 0.4061

V = 0.00460
V_W = W_W/Y_W = 0.0012
V_S = W_S/G_S*Y_W = 0.0025
V_G = V - (V_S + V_W) = 0.00096
V_V = V_G + V_W = 0.0021

MEASUREMENTS OF TUBE/CAN

HEIGHT=	7.2	cm
DIAMETER=	4.8	cm

CALCULATED VOLUME OF TUBE/CAN

V= 130.29 cm^3
0.00460 ft^3

WT. OF TUBE/CAN + WET SOIL=	319.21	g
WEIGHT OF TUBE/CAN=	101.43	g
WEIGHT OF WET SOIL=	217.78	g
W =	0.48011	lb

MOISTURE CONTENT

M_{CWS} =	41.11	g	M_C =	11.13	g
M_{CDS} =	36.49	g	M_S =	25.36	g
M_W =	4.62	g	w =	18.2	%

Wet Density, $Y_m = W / V$

Dry Density, $Y_d = W_s / V$ or $Y_d = Y_m / (1+ w)$

double check	$Y_d = Y_m / (1+ w)$
$Y_d = W_s / V$	Y_m= 104.33 lbs/ft^3
Y_d= 88.25 lbs/ft^3	Y_d= 88.25 lbs/ft^3

Void Ratio, $e = V_V/V_S$
e = 0.8746

Porosity, $n = V_V /V$
n = 0.47

Specific Gravity = 2.65

Degree of Saturation, $S = V_W/V_V$
S = 0.5520

GRAIN SIZE ANALYSIS-SIEVE (ASTM D422)

Project: SAIC	Job No.:99095Y
Project Location: Hunter AAF	Sample No.: AF0131
Sample Description: Gray Sand	Sample Depth: 7-9'
	Boring No.:
Tested By: FB/AJ	Date of Testing: 5/21/99

Mcws	Mcds	Mc : A21	Mw	Ms	w%	Mws	Ms
17.22	17.20	15.36	0.02	1.84	1.1	200.28	198.13

Sieve No.	Diam. (mm)	Wt. retained	% retained	E % retained	% passing
3	76.2	0	0.00	0.00	100.00
2	50.8	0	0.00	0.00	100.00
1 1/2	25.4	0	0.00	0.00	100.00
3/4	19.05	0	0.00	0.00	100.00
3/8	9.51	0	0.00	0.00	100.00
4	4.76	0	0.00	0.00	100.00
10	2.00	0	0.00	0.00	100.00
20	0.841	0.76	0.38	0.38	99.62
40	0.42	2.06	1.04	1.42	98.58
60	0.25	5.74	2.90	4.32	95.68
140	0.106	139.99	70.66	74.98	25.02
200	0.074	18.97	9.57	84.55	15.45
pan	—	0	0.00	84.55	15.45
total		167.52			

GRAIN SIZE ANALYSIS-SIEVE (ASTM D422)

Project: SAIC	Job No.: 99095Y
Project Location: HAAF	Sample No.: AF0331
Sample Description: White Yellowish Gray Clayey Sand	Sample Depth: 7.9-10'
	Boring No.:
Tested By:FB/CA	Date of Testing: 5/17/99

Mcws	Mcds	Mc : A35	Mw	Ms	w%	Mws	Ms
19.73	19.44	11.27	0.29	8.17	3.5	201.99	195.07

Sieve No.	Diam. (mm)	Wt. retained	% retained	E % retained	% passing
3	76.2	0	0.00	0.00	100.00
2	50.8	0	0.00	0.00	100.00
1 1/2	25.4	0	0.00	0.00	100.00
3/4	19.05	0	0.00	0.00	100.00
3/8	9.51	0	0.00	0.00	100.00
4	4.76	0	0.00	0.00	100.00
10	2.00	0.08	0.04	0.04	99.96
20	0.841	1.22	0.63	0.67	99.33
40	0.42	2.12	1.09	1.75	98.25
60	0.25	3.49	1.79	3.54	96.46
140	0.106	133.08	68.22	71.77	28.23
200	0.074	26.86	13.77	85.54	14.46
pan	---	1.52	0.78	86.31	13.69
total		168.37			

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ATTERBERG LIMITS DETEMINATION (ASTM D4318-93)

Project: SAIC
Location of project: HAAF
Description Of Soil: Dark Gray Sand
Tested By: FB

Job No.: 99095Y
Sample No.: AF0531
Depth of Sample: 4'- 7'
Date of Testing: 6/16/99

Liquid Limit Dermination

Can No.	A12	A11	A46	A55	A28	
Wt of Soil + can, Mcws	19.43	14.29	20.22	15.89	14.77	
Wt. of dry soil + can,Mcds	18.52	13.66	19.35	14.94	14.14	
Wt. of can, Mc	15.25	10.90	15.37	10.91	11.26	
Wt. of dry soil, Ms	3.27	2.76	3.98	4.03	2.88	0.00
Wt. of moisture	0.91	0.63	0.87	0.95	0.63	0.00
Water content, w%	27.83	22.83	21.86	23.57	21.88	#DIV/0!
No. of blows, N	15	31	26	9	39	

Plastic Limit Determination

Can no.	C12	C13	C20			
Wt. of wet soil + can, Mcws	5.13	7.02	3.80			
Wt. of dry soil +can, Mcds	4.72	6.59	3.50			
Wt. of can, Mc	2.37	4.24	1.91			
Wt. of dry soil, Ms	2.35	2.35	1.59	0	0	0
Wt. of moisture, Mw	0.41	0.43	0.30	0	0	0
Water content, W% = Wp	17.45	18.30	18.87	#DIV/0!	#DIV/0!	#DIV/0!

LIQUID LIMIT =	23
PLASTIC LIMIT =	18.20
PLASTICITY INDEX =	4.80
CLASSIFICATION	CL-ML

GRAIN SIZE ANALYSIS-SIEVE (ASTM D422)

Project: SAIC	Job No.: 99095Y
Project Location: HAAF	Sample No.: AF0531
Sample Description: Dark Gray Sand	Sample Depth: 4-7'
	Boring No.:
Tested By:FB/CA	Date of Testing: 5/17/99

Mcws	Mcds	Mc : A8	Mw	Ms	w%	Mws	Ms
24.68	24.17	11.30	0.51	12.87	4.0	200.08	192.45

Sieve No.	Diam. (mm)	Wt. retained	% retained	E % retained	% passing
3	76.2	0	0.00	0.00	100.00
2	50.8	0	0.00	0.00	100.00
1 1/2	25.4	0	0.00	0.00	100.00
3/4	19.05	0	0.00	0.00	100.00
3/8	9.51	2.29	1.19	1.19	98.81
4	4.76	0	0.00	1.19	98.81
10	2.00	0.02	0.01	1.20	98.80
20	0.841	0.99	0.51	1.71	98.29
40	0.42	2.25	1.17	2.88	97.12
60	0.25	4.87	2.53	5.41	94.59
140	0.106	97.05	50.43	55.84	44.16
200	0.074	12.47	6.48	62.32	37.68
pan	---	0.17	0.09	62.41	37.59
total		117.82			

GRAIN SIZE ANALYSIS-SIEVE (ASTM D422)

Project: SAIC	Job No.: 99095Y
Project Location: HAAF	Sample No.: AF1131
Sample Description: Gray Sand Silty Sand	Sample Depth: 4-7'
	Boring No.:
Tested By:FB/CA	Date of Testing: 5/17/99

Mcws	Mcds	Mc : A52	Mw	Ms	w%	Mws	Ms
19.30	18.91	10.94	0.39	7.97	4.9	201.80	192.39

Sieve No.	Diam. (mm)	Wt. retained	% retained	E % retained	% passing
3	76.2	0	0.00	0.00	100.00
2	50.8	0	0.00	0.00	100.00
1 1/2	25.4	0	0.00	0.00	100.00
3/4	19.05	0	0.00	0.00	100.00
3/8	9.51	0	0.00	0.00	100.00
4	4.76	0	0.00	0.00	100.00
10	2.00	0.63	0.33	0.33	99.67
20	0.841	3.31	1.72	2.05	97.95
40	0.42	6.93	3.60	5.65	94.35
60	0.25	9.29	4.83	10.48	89.52
140	0.106	115.36	59.96	70.44	29.56
200	0.074	13.72	7.13	77.57	22.43
pan	---	0.42	0.22	77.79	22.21
total		149.66			

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GRAIN SIZE ANALYSIS-SIEVE (ASTM D422)

Project: SAIC	Job No.: 99095Y
Project Location: HAAF	Sample No.: AF1231
Sample Description:Black Sand With Organics	Sample Depth: 4-6'
	Boring No.:
Tested By:FB/CA	Date of Testing: 5/17/99

Mcws	Mcds	McA12	Mw	Ms	w%	Mws	Ms
20.84	20.39	11.18	0.45	9.21	4.9	200.01	190.69

Sieve No.	Diam. (mm)	Wt. retained	% retained	E % retained	% passing
3	76.2	0	0.00	0.00	100.00
2	50.8	0	0.00	0.00	100.00
1 1/2	25.4	0	0.00	0.00	100.00
3/4	19.05	0	0.00	0.00	100.00
3/8	9.51	0	0.00	0.00	100.00
4	4.76	0.52	0.27	0.27	99.73
10	2.00	3.12	1.64	1.91	98.09
20	0.841	11.62	6.09	8.00	92.00
40	0.42	23.84	12.50	20.50	79.50
60	0.25	21.28	11.16	31.66	68.34
140	0.106	88.21	46.26	77.92	22.08
200	0.074	13.5	7.08	85.00	15.00
pan	---	0.18	0.09	85.09	14.91
total		162.27			

CATLIN Engineers and Scientists
Geotechnical Laboratories

GRAIN SIZE ANALYSIS-SIEVE (ASTM D422)

Project: SAIC	Job No.: 99095Y
Project Location: HAAF	Sample No.: AF1631
Sample Description:lLight Gray Clayey Sand	Sample Depth: 1-7.7'
	Boring No.:
Tested By:FB/CA	Date of Testing: 5/17/99

Mcws	Mcds	Mc : A31	Mw	Ms	w%	Mws	Ms
14.19	14.17	11.14	0.02	3.03	0.7	200.10	198.79

Sieve No.	Diam. (mm)	Wt. retained	% retained	E % retained	% passing
3	76.2	0	0.00	0.00	100.00
2	50.8	0	0.00	0.00	100.00
1 1/2	25.4	0	0.00	0.00	100.00
3/4	19.05	0	0.00	0.00	100.00
3/8	9.51	0	0.00	0.00	100.00
4	4.76	0.31	0.16	0.16	99.84
10	2.00	1.6	0.80	0.96	99.04
20	0.841	5.39	2.71	3.67	96.33
40	0.42	9.52	4.79	8.46	91.54
60	0.25	11.63	5.85	14.31	85.69
140	0.106	124.85	62.81	77.12	22.88
200	0.074	17.01	8.56	85.67	14.33
pan	---	0.85	0.43	86.10	13.90
total		171.16			

ATTERBERG LIMITS DETEMINATION (ASTM D4318-93)

Project: SAIC
Location of project: HAAF
Description Of Soil: Dark Gray Tan Clay With Sand
Tested By: FB

Job No.: 99095Y
Sample No.: AF1831
Depth of Sample: 1.5' -7.7'
Date of Testing: 6/15/99

Liquid Limit Dermination

Can No.	A14	A50	A41	A51	A21	
Wt of Soil + can, Mcws	15.40	13.91	18.89	13.63	20.16	
Wt. of dry soil + can,Mcds	14.57	13.44	18.25	13.17	19.16	
Wt. of can, Mc	11.16	10.93	15.33	11.29	15.36	
Wt. of dry soil, Ms	3.41	2.51	2.92	1.88	3.80	0.00
Wt. of moisture	0.83	0.47	0.64	0.46	1.00	0.00
Water content, w%	24.34	18.73	21.92	24.47	26.32	#DIV/0!
No. of blows, N	10	36	26	34	16	

Plastic Limit Determination

Can no.	C23	C7	C6			
Wt. of wet soil + can, Mcws	6.45	4.54	6.11			
Wt. of dry soil +can, Mcds	6.11	4.17	5.81			
Wt. of can, Mc	4.35	2.39	4.29			
Wt. of dry soil, Ms	1.76	1.78	1.52	0	0	0
Wt. of moisture, Mw	0.34	0.37	0.30	0	0	0
Water content, W% = Wp	19.32	20.79	19.74	#DIV/0!	#DIV/0!	#DIV/0!

LIQUID LIMIT =	22.5
PLASTIC LIMIT =	20.00
PLASTICITY INDEX =	2.50
CLASSIFICATION	ML

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GRAIN SIZE ANALYSIS-SIEVE (ASTM D422)

Project: SAIC	Job No.: 99065Y
Project Location: HAAF	Sample No.:AF1831
Sample Description: Dark Gray Tan Clay With Sand	Sample Depth:.1.5-7.7'
	Boring No.:
Tested By: FB/AJ	Date of Testing: 5/17/99

Mcws	Mcds	Mc : A36	Mw	Ms	w%	Mws	Ms
17.04	16.70	10.90	0.34	5.80	5.9	200.09	189.01

Sieve No.	Diam. (mm)	Wt. retained	% retained	E % retained	% passing
3	76.2	0	0.00	0.00	100.00
2	50.8	0	0.00	0.00	100.00
1 1/2	25.4	0	0.00	0.00	100.00
3/4	19.05	0	0.00	0.00	100.00
3/8	9.51	0	0.00	0.00	100.00
4	4.76	0	0.00	0.00	100.00
10	2.00	0.09	0.05	0.05	99.95
20	0.841	1.21	0.64	0.69	99.31
40	0.42	1.91	1.01	1.70	98.30
60	0.25	3.41	1.80	3.50	96.50
140	0.106	113.58	60.09	63.59	36.41
200	0.074	22.92	12.13	75.72	24.28
pan	---	0.6	0.32	76.04	23.96
total		143.72			

GRAIN SIZE ANALYSIS-SIEVE (ASTM D422)

Project: SAIC	Job No.: 99095Y
Project Location: HAAF	Sample No.: AF1931
Sample Description: Gray Sand	Sample Depth: 1.5-7.3'
	Boring No.:
Tested By:FB/CA	Date of Testing: 5/17/99

Mcws	Mcds	Mc : A44	Mw	Ms	w%	Mws	Ms
15.89	15.82	11.22	0.07	4.60	1.5	143.05	140.91

Sieve No.	Diam. (mm)	Wt. retained	% retained	E % retained	% passing
3	76.2	0	0.00	0.00	100.00
2	50.8	0	0.00	0.00	100.00
1 1/2	25.4	0	0.00	0.00	100.00
3/4	19.05	0	0.00	0.00	100.00
3/8	9.51	0	0.00	0.00	100.00
4	4.76	0	0.00	0.00	100.00
10	2.00	0.01	0.01	0.01	99.99
20	0.841	0.91	0.65	0.65	99.35
40	0.42	2.18	1.55	2.20	97.80
60	0.25	4.53	3.21	5.41	94.59
140	0.106	84.12	59.70	65.11	34.89
200	0.074	17.59	12.48	77.60	22.40
pan	---	0.48	0.34	77.94	22.06
total		109.82			

GRAIN SIZE ANALYSIS-SIEVE (ASTM D422)

Project: SAIC	Job No.: 99095Y
Project Location: HAAF	Sample No.: AF2031
Sample Description:Dark Gray Sand	Sample Depth: 7.0-13'
	Boring No.:
Tested By:FB/CA	Date of Testing: 5/17/99

Mcws	Mcds	Mc : A23	Mw	Ms	w%	Mws	Ms
17.37	17.20	11.34	0.17	5.86	2.9	200.63	194.97

Sieve No.	Diam. (mm)	Wt. retained	% retained	E % retained	% passing
3	76.2	0	0.00	0.00	100.00
2	50.8	0	0.00	0.00	100.00
1 1/2	25.4	0	0.00	0.00	100.00
3/4	19.05	0	0.00	0.00	100.00
3/8	9.51	1.94	1.00	1.00	99.00
4	4.76	1.06	0.54	1.54	98.46
10	2.00	1.36	0.70	2.24	97.76
20	0.841	2.57	1.32	3.55	96.45
40	0.42	4.7	2.41	5.96	94.04
60	0.25	6.99	3.59	9.55	90.45
140	0.106	116.54	59.77	69.32	30.68
200	0.074	14.54	7.46	76.78	23.22
pan	---	0.47	0.24	77.02	22.98
total		148.23			

GRAIN SIZE ANALYSIS-SIEVE (ASTM D422)

Project: SAIC	Job No.: 99095Y
Project Location: HAAF	Sample No.: AF2331
Sample Description: Gray Sand	Sample Depth: 7.5-13'
	Boring No.:
Tested By:FB/CA	Date of Testing: 5/17/99

Mcws	Mcds	Mc : A48	Mw	Ms	w%	Mws	Ms
15.56	15.22	10.91	0.34	4.31	7.9	200.58	185.91

Sieve No.	Diam. (mm)	Wt. retained	% retained	E % retained	% passing
3	76.2	0	0.00	0.00	100.00
2	50.8	0	0.00	0.00	100.00
1 1/2	25.4	0	0.00	0.00	100.00
3/4	19.05	0	0.00	0.00	100.00
3/8	9.51	0	0.00	0.00	100.00
4	4.76	1.3	0.70	0.70	99.30
10	2.00	2.43	1.31	2.01	97.99
20	0.841	4.97	2.67	4.68	95.32
40	0.42	8.81	4.74	9.42	90.58
60	0.25	9.27	4.99	14.40	85.60
140	0.106	117.99	63.46	77.87	22.13
200	0.074	18.19	9.78	87.65	12.35
pan	---	1.03	0.55	88.21	11.79
total		163.99			

GRAIN SIZE ANALYSIS-SIEVE (ASTM D422)

Project: SAIC	Job No.: 99095Y
Project Location: HAAF PILOT STUDY / UST	Sample No.: AF2431
Sample Description: Gray Sand	Sample Depth: 2-8'
	Boring No.:
Tested By:FB/CA	Date of Testing: 5/17/99

Mcws	Mcds	Mc : A20	Mw	Ms	w%	Mws	Ms
22.14	21.83	11.23	0.31	10.60	2.9	200.74	195.04

Sieve No.	Diam. (mm)	Wt. retained	% retained	E % retained	% passing
3	76.2	0	0.00	0.00	100.00
2	50.8	0	0.00	0.00	100.00
1 1/2	25.4	0	0.00	0.00	100.00
3/4	19.05	0	0.00	0.00	100.00
3/8	9.51	0	0.00	0.00	100.00
4	4.76	1.08	0.55	0.55	99.45
10	2.00	2.42	1.24	1.79	98.21
20	0.841	7.43	3.81	5.60	94.40
40	0.42	16.62	8.52	14.13	85.87
60	0.25	17.9	9.18	23.30	76.70
140	0.106	104.87	53.77	77.07	22.93
200	0.074	12.56	6.44	83.51	16.49
pan	---	0.65	0.33	83.85	16.15
total		163.53			

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ATTACHMENT B

FATE AND TRANSPORT MODELING RESULTS

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Table B.1. Natural Attenuation Modeling Results (Concentration vs. Distance) for the USTs 25 & 26 Site

Distance from the source (ft)	Distance from the source (m)	Predicted Maximum Benzene Concentration In Groundwater (µg/L)	Distance from the source (ft)	Distance from the source (m)	Predicted Maximum Benzene Concentration In Groundwater (µg/L)
0.0	0.0	9940	131.2	40.0	754
6.6	2.0	8290	164.0	50.0	427
9.8	3.0	7510	196.9	60.0	244
16.4	5.0	6130	229.7	70.0	140
23.0	7.0	5300	262.5	80.0	80.7
32.8	10.0	4580	295.3	90.0	46.7
39.4	12.0	4090	328.1	100.0	27.2
49.2	15.0	3390	393.7	120.0	9.23
65.6	20.0	2390	492.1	150.0	1.86
75.0	22.9	2060	574.1	175.0	0.5
82.0	25.0	1830	656.2	200.0	0.11
98.4	30.0	1340			

Table B.2. Natural Attenuation Modeling Results (Concentration vs. Time) for the USTs 25 & 26 Site

Time (year)	Predicted Maximum Benzene Concentration In Groundwater (µg/L)	Time (year)	Predicted Maximum Benzene Concentration In Groundwater (µg/L)
0.0	9940	14.0	37.4
1.0	6640	15.0	23.9
2.0	4060	16.0	15.3
3.0	2470	17.0	9.82
4.0	1520	18.0	6.31
5.0	938	19.0	4.06
6.0	584	20.0	2.61
7.0	366	21.0	1.69
8.0	230	22.0	1.09
11.0	146	23.0	0.703
12.0	92.3	24.0	0.454
13.0	58.7	25.0	0.294

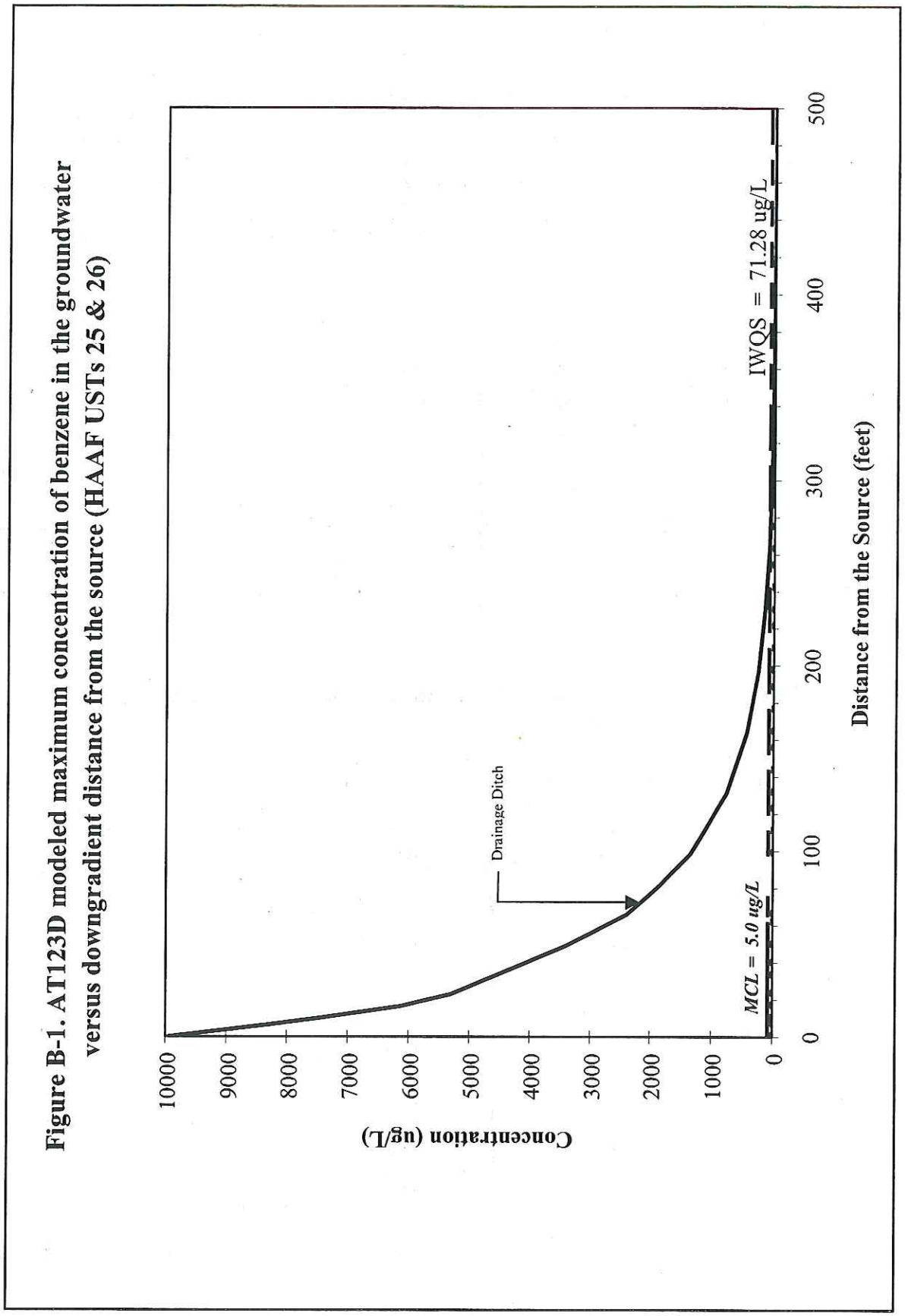

Figure B-1. AT123D modeled maximum concentration of benzene in the groundwater versus downgradient distance from the source (HAAF USTs 25 & 26)

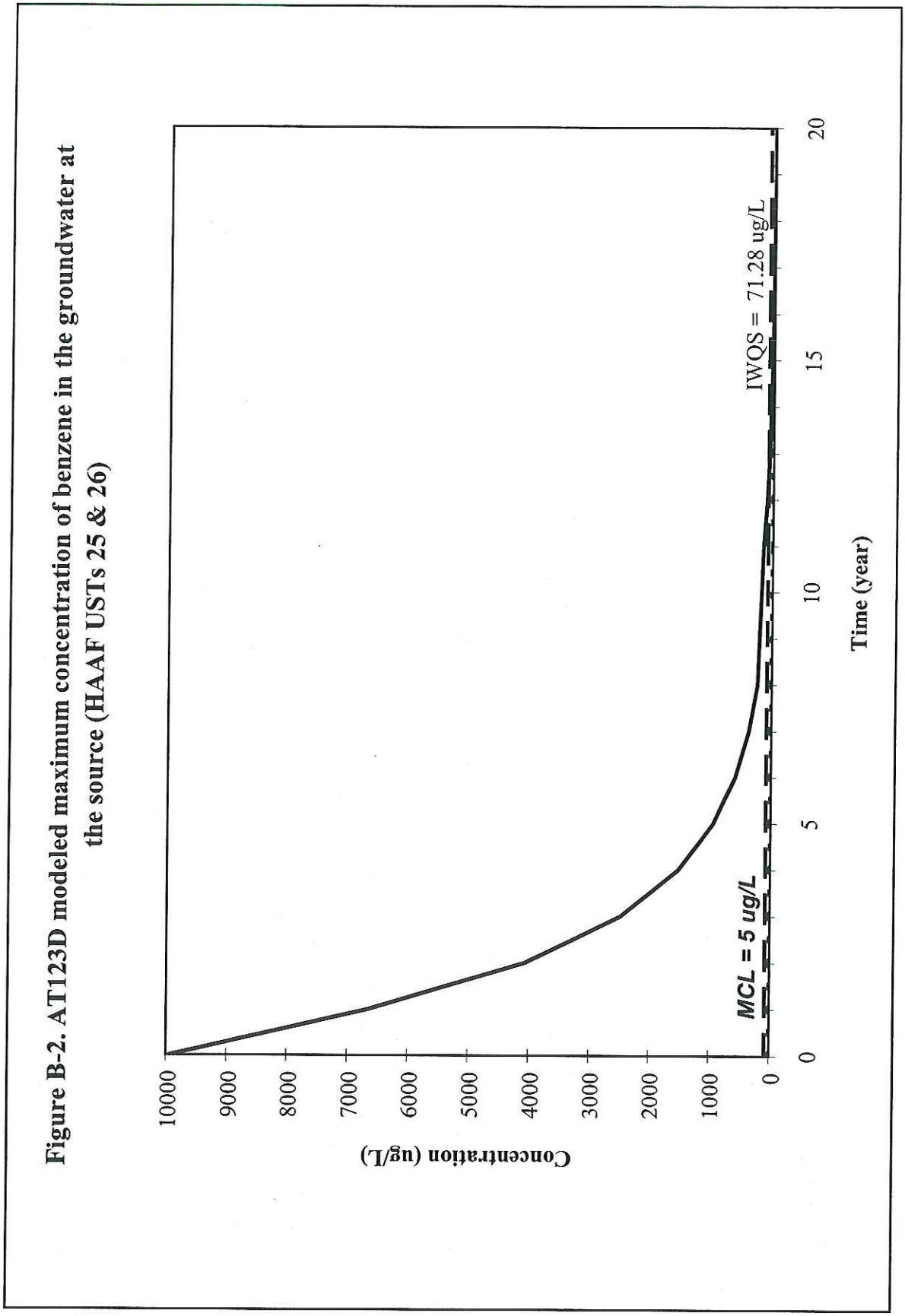

Figure B-2. AT123D modeled maximum concentration of benzene in the groundwater at the source (HAAF USTs 25 & 26)

HAAF USTs 25 & 26: Benzene - CAP B Modeling

NO. OF POINTS IN X-DIRECTION	13
NO. OF POINTS IN Y-DIRECTION	3
NO. OF POINTS IN Z-DIRECTION	1
NO. OF ROOTS: NO. OF SERIES TERMS	400
NO. OF BEGINNING TIME STEP	13
NO. OF ENDING TIME STEP	220
NO. OF TIME INTERVALS FOR PRINTED OUT SOLUTION	12
INSTANTANEOUS SOURCE CONTROL = 0 FOR INSTANT SOURCE	1
SOURCE CONDITION CONTROL = 0 FOR STEADY SOURCE	0
INTERMITTENT OUTPUT CONTROL = 0 NO SUCH OUTPUT	1
CASE CONTROL =1 THERMAL, = 2 FOR CHEMICAL, = 3 RAD	2
AQUIFER DEPTH, = 0.0 FOR INFINITE DEEP (METERS) ...	0.1524E+02
AQUIFER WIDTH, = 0.0 FOR INFINITE WIDE (METERS) ...	0.0000E+00
BEGIN POINT OF X-SOURCE LOCATION (METERS)	-0.2286E+02
END POINT OF X-SOURCE LOCATION (METERS)	0.0000E+00
BEGIN POINT OF Y-SOURCE LOCATION (METERS)	-0.4600E+01
END POINT OF Y-SOURCE LOCATION (METERS)	0.4600E+01
BEGIN POINT OF Z-SOURCE LOCATION (METERS)	0.0000E+00
END POINT OF Z-SOURCE LOCATION (METERS)	0.4000E+01
POROSITY	0.2000E+00
HYDRAULIC CONDUCTIVITY (METER/HOUR)	0.1058E-01
HYDRAULIC GRADIENT	0.1800E-01
LONGITUDINAL DISPERSIVITY (METER)	0.1500E+02
LATERAL DISPERSIVITY (METER)	0.5000E+01
VERTICAL DISPERSIVITY (METER)	0.1500E+01
DISTRIBUTION COEFFICIENT, KD (M**3/KG)	0.1620E-03
HEAT EXCHANGE COEFFICIENT (KCAL/HR-M**2-DEGREE C)..	0.0000E+00
MOLECULAR DIFFUSION MULTIPLY BY POROSITY (M**2/HR)	0.3530E-05
DECAY CONSTANT (PER HOUR)	0.4000E-04
BULK DENSITY OF THE SOIL (KG/M**3)	0.1400E+04
ACCURACY TOLERANCE FOR REACHING STEADY STATE	0.1000E-02
DENSITY OF WATER (KG/M**3)	0.1000E+04
TIME INTERVAL SIZE FOR THE DESIRED SOLUTION (HR) ..	0.7300E+03
DISCHARGE TIME (HR)	0.1139E+06
WASTE RELEASE RATE (KCAL/HR), (KG/HR), OR (CI/HR) .	0.8080E-03
RETARDATION FACTOR	0.2134E+01
RETARDED DARCY VELOCITY (M/HR)	0.4464E-03
RETARDED LONGITUDINAL DISPERSION COEF. (M**2/HR) ..	0.6704E-02
RETARDED LATERAL DISPERSION COEFFICIENT (M**2/HR) .	0.2240E-02
RETARDED VERTICAL DISPERSION COEFFICIENT (M**2/HR).	0.6778E-03

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.0000E+00 HRS
(ADSORBED CHEMICAL CONC. = 0.1620E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	X 0.	2.	3.	5.	7.	10.	12.	15.	20.	23.
5.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

CONTINUE

Y	X 25.	30.	40.
5.	0.000E+00	0.000E+00	0.000E+00
3.	0.000E+00	0.000E+00	0.000E+00
0.	0.000E+00	0.000E+00	0.000E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.8760E+04 HRS
(ADSORBED CHEMICAL CONC. = 0.1620E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	X 0.	2.	3.	5.	7.	10.	12.	15.	20.	23.
5.	0.369E+01	0.289E+01	0.251E+01	0.185E+01	0.134E+01	0.791E+00	0.544E+00	0.298E+00	0.973E-01	0.480E-01
3.	0.532E+01	0.407E+01	0.349E+01	0.250E+01	0.177E+01	0.102E+01	0.694E+00	0.375E+00	0.121E+00	0.591E-01
0.	0.633E+01	0.482E+01	0.412E+01	0.293E+01	0.206E+01	0.118E+01	0.796E+00	0.426E+00	0.136E+00	0.664E-01

CONTINUE

Y	X 25.	30.	40.
5.	0.274E-01	0.656E-02	0.225E-03
3.	0.335E-01	0.798E-02	0.271E-03
0.	0.376E-01	0.890E-02	0.301E-03

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1752E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.1620E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	X 0.	2.	3.	5.	7.	10.	12.	15.	20.	23.
5.	0.538E+01	0.448E+01	0.404E+01	0.324E+01	0.258E+01	0.181E+01	0.141E+01	0.958E+00	0.482E+00	0.317E+00
3.	0.725E+01	0.588E+01	0.522E+01	0.408E+01	0.318E+01	0.217E+01	0.168E+01	0.112E+01	0.555E+00	0.362E+00
0.	0.841E+01	0.677E+01	0.599E+01	0.463E+01	0.357E+01	0.242E+01	0.185E+01	0.123E+01	0.602E+00	0.391E+00

CONTINUE

Y	X 25.	30.	40.
5.	0.228E+00	0.101E+00	0.160E-01
3.	0.260E+00	0.114E+00	0.179E-01
0.	0.280E+00	0.123E+00	0.191E-01

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.2628E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.1620E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	X 0.	2.	3.	5.	7.	10.	12.	15.	20.	23.
5.	0.610E+01	0.518E+01	0.473E+01	0.391E+01	0.321E+01	0.238E+01	0.194E+01	0.142E+01	0.828E+00	0.600E+00
3.	0.802E+01	0.664E+01	0.597E+01	0.480E+01	0.386E+01	0.280E+01	0.225E+01	0.162E+01	0.929E+00	0.669E+00
0.	0.921E+01	0.756E+01	0.677E+01	0.539E+01	0.429E+01	0.307E+01	0.245E+01	0.175E+01	0.993E+00	0.711E+00

CONTINUE

Y	X 25.	30.	40.
5.	0.468E+00	0.256E+00	0.679E-01
3.	0.519E+00	0.282E+00	0.738E-01
0.	0.551E+00	0.297E+00	0.774E-01

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.3504E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.1620E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	X 0.	2.	3.	5.	7.	10.	12.	15.	20.	23.
5.	0.642E+01	0.551E+01	0.506E+01	0.423E+01	0.353E+01	0.269E+01	0.224E+01	0.169E+01	0.106E+01	0.803E+00
3.	0.837E+01	0.698E+01	0.632E+01	0.515E+01	0.420E+01	0.312E+01	0.257E+01	0.191E+01	0.117E+01	0.883E+00
0.	0.957E+01	0.792E+01	0.713E+01	0.574E+01	0.464E+01	0.340E+01	0.278E+01	0.205E+01	0.124E+01	0.932E+00

CONTINUE

Y	X 25.	30.	40.
5.	0.651E+00	0.394E+00	0.134E+00
3.	0.713E+00	0.427E+00	0.144E+00
0.	0.750E+00	0.448E+00	0.150E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.4380E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.1620E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	X 0.	2.	3.	5.	7.	10.	12.	15.	20.	23.
5.	0.659E+01	0.567E+01	0.522E+01	0.440E+01	0.370E+01	0.285E+01	0.240E+01	0.185E+01	0.120E+01	0.932E+00
3.	0.854E+01	0.716E+01	0.649E+01	0.532E+01	0.438E+01	0.329E+01	0.273E+01	0.207E+01	0.132E+01	0.102E+01
0.	0.974E+01	0.809E+01	0.730E+01	0.592E+01	0.482E+01	0.358E+01	0.295E+01	0.222E+01	0.139E+01	0.107E+01

CONTINUE

Y	X 25.	30.	40.
5.	0.772E+00	0.494E+00	0.194E+00
3.	0.839E+00	0.532E+00	0.207E+00
0.	0.880E+00	0.554E+00	0.214E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.5256E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.1620E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y \ X	0.	2.	3.	5.	7.	10.	12.	15.	20.	23.
5.	0.667E+01	0.576E+01	0.531E+01	0.449E+01	0.379E+01	0.294E+01	0.249E+01	0.194E+01	0.128E+01	0.101E+01
3.	0.862E+01	0.724E+01	0.658E+01	0.541E+01	0.447E+01	0.339E+01	0.283E+01	0.217E+01	0.140E+01	0.110E+01
0.	0.983E+01	0.818E+01	0.740E+01	0.601E+01	0.491E+01	0.367E+01	0.304E+01	0.231E+01	0.148E+01	0.115E+01

CONTINUE

Y \ X	25.	30.	40.
5.	0.848E+00	0.560E+00	0.240E+00
3.	0.917E+00	0.601E+00	0.255E+00
0.	0.960E+00	0.625E+00	0.263E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.6132E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.1620E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y \ X	0.	2.	3.	5.	7.	10.	12.	15.	20.	23.
5.	0.671E+01	0.580E+01	0.535E+01	0.453E+01	0.384E+01	0.299E+01	0.254E+01	0.199E+01	0.133E+01	0.106E+01
3.	0.867E+01	0.729E+01	0.663E+01	0.546E+01	0.452E+01	0.344E+01	0.288E+01	0.222E+01	0.145E+01	0.115E+01
0.	0.988E+01	0.823E+01	0.744E+01	0.606E+01	0.496E+01	0.372E+01	0.310E+01	0.236E+01	0.153E+01	0.120E+01

CONTINUE

Y \ X	25.	30.	40.
5.	0.894E+00	0.603E+00	0.273E+00
3.	0.965E+00	0.645E+00	0.288E+00
0.	0.101E+01	0.670E+00	0.297E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.7008E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.1620E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y \ X	0.	2.	3.	5.	7.	10.	12.	15.	20.	23.
5.	0.674E+01	0.583E+01	0.538E+01	0.456E+01	0.386E+01	0.302E+01	0.257E+01	0.202E+01	0.136E+01	0.109E+01
3.	0.869E+01	0.732E+01	0.666E+01	0.549E+01	0.455E+01	0.347E+01	0.291E+01	0.225E+01	0.148E+01	0.118E+01
0.	0.990E+01	0.826E+01	0.747E+01	0.609E+01	0.499E+01	0.375E+01	0.313E+01	0.239E+01	0.156E+01	0.123E+01

CONTINUE

Y \ X	25.	30.	40.
5.	0.922E+00	0.630E+00	0.295E+00
3.	0.994E+00	0.672E+00	0.311E+00
0.	0.104E+01	0.698E+00	0.321E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.7884E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.1620E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

	X									
Y	0.	2.	3.	5.	7.	10.	12.	15.	20.	23.
5.	0.675E+01	0.584E+01	0.539E+01	0.458E+01	0.388E+01	0.304E+01	0.258E+01	0.203E+01	0.138E+01	0.111E+01
3.	0.871E+01	0.733E+01	0.667E+01	0.550E+01	0.456E+01	0.348E+01	0.292E+01	0.226E+01	0.150E+01	0.120E+01
0.	0.992E+01	0.827E+01	0.749E+01	0.611E+01	0.501E+01	0.377E+01	0.314E+01	0.241E+01	0.158E+01	0.125E+01

CONTINUE

	X		
Y	25.	30.	40.
5.	0.940E+00	0.647E+00	0.310E+00
3.	0.101E+01	0.689E+00	0.326E+00
0.	0.106E+01	0.715E+00	0.336E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.8760E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.1620E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

	X									
Y	0.	2.	3.	5.	7.	10.	12.	15.	20.	23.
5.	0.676E+01	0.585E+01	0.540E+01	0.458E+01	0.389E+01	0.305E+01	0.259E+01	0.204E+01	0.139E+01	0.112E+01
3.	0.872E+01	0.734E+01	0.668E+01	0.551E+01	0.457E+01	0.349E+01	0.293E+01	0.228E+01	0.151E+01	0.121E+01
0.	0.993E+01	0.828E+01	0.750E+01	0.612E+01	0.502E+01	0.378E+01	0.315E+01	0.242E+01	0.159E+01	0.126E+01

CONTINUE

	X		
Y	25.	30.	40.
5.	0.950E+00	0.657E+00	0.320E+00
3.	0.102E+01	0.700E+00	0.336E+00
0.	0.107E+01	0.726E+00	0.346E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.9636E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.1620E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

	X									
Y	0.	2.	3.	5.	7.	10.	12.	15.	20.	23.
5.	0.676E+01	0.586E+01	0.541E+01	0.459E+01	0.389E+01	0.305E+01	0.260E+01	0.205E+01	0.139E+01	0.112E+01
3.	0.872E+01	0.735E+01	0.669E+01	0.552E+01	0.458E+01	0.350E+01	0.294E+01	0.228E+01	0.152E+01	0.121E+01
0.	0.993E+01	0.829E+01	0.750E+01	0.612E+01	0.502E+01	0.379E+01	0.316E+01	0.243E+01	0.160E+01	0.127E+01

CONTINUE

	X		
Y	25.	30.	40.
5.	0.957E+00	0.664E+00	0.326E+00
3.	0.103E+01	0.707E+00	0.343E+00
0.	0.107E+01	0.733E+00	0.352E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1051E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.1620E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	X 0.	2.	3.	5.	7.	10.	12.	15.	20.	23.
5.	0.677E+01	0.586E+01	0.541E+01	0.459E+01	0.390E+01	0.306E+01	0.260E+01	0.205E+01	0.140E+01	0.113E+01
3.	0.872E+01	0.735E+01	0.669E+01	0.552E+01	0.458E+01	0.350E+01	0.294E+01	0.229E+01	0.152E+01	0.122E+01
0.	0.993E+01	0.829E+01	0.750E+01	0.612E+01	0.503E+01	0.379E+01	0.316E+01	0.243E+01	0.160E+01	0.127E+01

CONTINUE

Y	X 25.	30.	40.
5.	0.961E+00	0.668E+00	0.330E+00
3.	0.103E+01	0.711E+00	0.347E+00
0.	0.108E+01	0.737E+00	0.357E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1139E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.1620E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	X 0.	2.	3.	5.	7.	10.	12.	15.	20.	23.
5.	0.677E+01	0.586E+01	0.541E+01	0.459E+01	0.390E+01	0.306E+01	0.260E+01	0.206E+01	0.140E+01	0.113E+01
3.	0.873E+01	0.735E+01	0.669E+01	0.552E+01	0.458E+01	0.350E+01	0.295E+01	0.229E+01	0.153E+01	0.122E+01
0.	0.994E+01	0.829E+01	0.751E+01	0.613E+01	0.503E+01	0.379E+01	0.316E+01	0.243E+01	0.160E+01	0.128E+01

CONTINUE

Y	X 25.	30.	40.
5.	0.963E+00	0.670E+00	0.333E+00
3.	0.104E+01	0.714E+00	0.350E+00
0.	0.108E+01	0.740E+00	0.359E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1226E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.1620E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	X 0.	2.	3.	5.	7.	10.	12.	15.	20.	23.
5.	0.443E+01	0.427E+01	0.417E+01	0.393E+01	0.367E+01	0.323E+01	0.292E+01	0.248E+01	0.181E+01	0.148E+01
3.	0.580E+01	0.555E+01	0.540E+01	0.506E+01	0.468E+01	0.406E+01	0.364E+01	0.304E+01	0.215E+01	0.174E+01
0.	0.664E+01	0.634E+01	0.616E+01	0.576E+01	0.530E+01	0.458E+01	0.409E+01	0.339E+01	0.237E+01	0.189E+01

CONTINUE

Y	X 25.	30.	40.
5.	0.127E+01	0.883E+00	0.422E+00
3.	0.147E+01	0.992E+00	0.456E+00
0.	0.160E+01	0.106E+01	0.477E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1314E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.1620E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	X = 0.	2.	3.	5.	7.	10.	12.	15.	20.	23.
5.	0.271E+01	0.269E+01	0.268E+01	0.263E+01	0.255E+01	0.241E+01	0.228E+01	0.208E+01	0.171E+01	0.150E+01
3.	0.354E+01	0.352E+01	0.349E+01	0.341E+01	0.330E+01	0.309E+01	0.292E+01	0.264E+01	0.213E+01	0.185E+01
0.	0.406E+01	0.402E+01	0.399E+01	0.390E+01	0.376E+01	0.351E+01	0.331E+01	0.298E+01	0.239E+01	0.206E+01

CONTINUE

Y	X = 25.	30.	40.
5.	0.134E+01	0.101E+01	0.530E+00
3.	0.164E+01	0.121E+01	0.607E+00
0.	0.183E+01	0.134E+01	0.655E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1402E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.1620E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	X = 0.	2.	3.	5.	7.	10.	12.	15.	20.	23.
5.	0.165E+01	0.167E+01	0.168E+01	0.168E+01	0.167E+01	0.163E+01	0.159E+01	0.151E+01	0.134E+01	0.123E+01
3.	0.216E+01	0.218E+01	0.219E+01	0.219E+01	0.217E+01	0.211E+01	0.205E+01	0.194E+01	0.171E+01	0.156E+01
0.	0.247E+01	0.250E+01	0.250E+01	0.250E+01	0.247E+01	0.240E+01	0.233E+01	0.220E+01	0.193E+01	0.175E+01

CONTINUE

Y	X = 25.	30.	40.
5.	0.115E+01	0.940E+00	0.571E+00
3.	0.144E+01	0.116E+01	0.684E+00
0.	0.162E+01	0.130E+01	0.754E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1489E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.1620E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	X = 0.	2.	3.	5.	7.	10.	12.	15.	20.	23.
5.	0.102E+01	0.104E+01	0.105E+01	0.106E+01	0.107E+01	0.107E+01	0.106E+01	0.104E+01	0.972E+00	0.920E+00
3.	0.133E+01	0.136E+01	0.137E+01	0.138E+01	0.139E+01	0.139E+01	0.137E+01	0.134E+01	0.124E+01	0.117E+01
0.	0.152E+01	0.155E+01	0.156E+01	0.158E+01	0.159E+01	0.158E+01	0.157E+01	0.152E+01	0.141E+01	0.133E+01

CONTINUE

Y	X = 25.	30.	40.
5.	0.877E+00	0.764E+00	0.527E+00
3.	0.111E+01	0.961E+00	0.648E+00
0.	0.126E+01	0.108E+01	0.723E+00

STEADY STATE SOLUTION HAS NOT BEEN REACHED BEFORE FINAL SIMULATING TIME

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1577E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.1620E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	X 0.	2.	3.	5.	7.	10.	12.	15.	20.	23.
5.	0.629E+00	0.648E+00	0.657E+00	0.671E+00	0.683E+00	0.693E+00	0.696E+00	0.694E+00	0.673E+00	0.651E+00
3.	0.821E+00	0.845E+00	0.856E+00	0.874E+00	0.888E+00	0.900E+00	0.902E+00	0.897E+00	0.865E+00	0.835E+00
0.	0.938E+00	0.966E+00	0.978E+00	0.998E+00	0.101E+01	0.103E+01	0.103E+01	0.102E+01	0.983E+00	0.948E+00

CONTINUE

Y	X 25.	30.	40.
5.	0.632E+00	0.576E+00	0.438E+00
3.	0.808E+00	0.732E+00	0.548E+00
0.	0.916E+00	0.827E+00	0.615E+00

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SESOIL MODELING RESULTS

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*****                                                                                                 *****
***** SESOIL-84 :  SEASONAL CYCLES OF WATER, SEDIMENT, AND POLLUTANTS IN SOIL ENVIRONMENTS            *****
*****                                                                                                 *****
***** DEVELOPERS:  M. BONAZOUNTAS,ARTHUR D. LITTLE INC.  ,(617)864-5770,X5871                        *****
*****             J. WAGNER     ,DIS/ADLPIPE, INC.      ,(617)492-1991,X5820                        *****
*****                                                                                                 *****
***** MODIFIED EXTENSIVELY BY:                                                                       *****
***** D.M. HETRICK                                                                                   *****
***** OAK RIDGE NATIONAL LABORATORY                                                                  *****
***** (615) 576-7556                                                                                 *****
***** VERSION   :  JANUARY 1995                                                                      *****
*****                                                                                                 *****
**********************************************************************************************************

                    ****** MONTHLY SESOIL MODEL OPERATION ******
                           MONTHLY SITE SPECIFIC SIMULATION

REGION          :      SAVANNAH WSO AP
SOIL TYPE       :      Siltysand
COMPOUND        :      benzene
WASHLOAD DATA   :
APPLICATION AREA:      HAAF USTs 25 & 26: Benzene


     GENERAL INPUT PARAMETERS
     ========================
     -- SOIL INPUT PARAMETERS --
SOIL DENSITY (G/CM**3):                                  1.40
INTRINSIC PERMEABILITY (CM**2):                          .300E-08
DISCONNECTEDNESS INDEX (-):                              9.00
POROSITY (-):                                            .470
ORGANIC CARBON CONTENT (%):                              .200
CATION EXCHANGE CAPACITY (MILLI EQ./100G DRY SOIL):      .000
FREUNDLICH EXPONENT (-):                                 1.00

     -- CHEMICAL INPUT PARAMETERS --
SOLUBILITY (UG/ML):                                      .178E+04
DIFFUSION COEFFICIENT IN AIR (CM**2/SEC):                .770E-01
HENRYS LAW CONSTANT (M**3-ATM/MOLE):                     .555E-02
ADSORPTION COEFFICIENT ON ORGANIC CARBON(KOC):           81.0
ADSORPTION COEFFICIENT ON SOIL (K):                      .000
MOLECULAR  WEIGHT (G/MOL):                               78.1
VALENCE (-):                                             .000
NEUTRAL HYDROLYSIS CONSTANT (/DAY):                      .000
BASE HYDROLYSIS CONSTANT (L/MOL-DAY):                    .000
ACID HYDROLYSIS CONSTANT (L/MOL-DAY):                    .000
DEGRADATION RATE IN MOISTURE (/DAY):                     .000
DEGRADATION RATE ON SOIL (/DAY):                         .000
LIGAND-POLLUTANT STABILITY CONSTANT (-):                 .000
NO. MOLES LIGAND/MOLE POLLUTANT (-):                     .000
LIGAND MOLECULAR WEIGHT (G/MOL):                         .000

     -- APPLICATION INPUT PARAMETERS --
NUMBER OF SOIL LAYERS:                                     3
YEARS TO BE SIMULATED:                                     5
AREA (CM**2):                                            0.630E+07
APPLICATION AREA LATITUDE (DEG.):                         32.1
SPILL (1) OR STEADY APPLICATION (0):                       1
```

MODIFIED SUMMERS MODEL USED (1) OR NOT (0) FOR GWR. CONC.:	0		
INITIAL CHEMICAL CONCENTRATIONS GIVEN (1) OR NOT GIVEN (0)	1		
DEPTHS (CM):	30.	46.	30.
NUMBER OF SUBLAYERS/LAYER	2	2	2
PH (CM):	7.0	7.0	7.0
INTRINSIC PERMEABILITIES (CM**2):	0.00	0.00	0.00
KDEL RATIOS (-):	1.0	1.0	
KDES RATIOS (-):	1.0	1.0	
OC RATIOS (-):	1.0	1.0	
CEC RATIOS (-):	1.0	1.0	
FRN RATIOS(-):	1.0	1.0	
ADS RATIOS(-):	1.0	1.0	

YEAR - 1 MONTHLY INPUT PARAMETERS

-- CLIMATIC INPUT PARAMETERS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TEMP. (DEG C)	20.170	14.830	11.170	10.830	11.940	15.000	19.330	23.170	26.220	27.280	27.170	24.940
CLOUD CVR (FRAC.)	0.500	0.500	0.550	0.550	0.550	0.550	0.500	0.500	0.600	0.600	0.600	0.600
REL. HUM.(FRAC.)	0.750	0.750	0.750	0.750	0.700	0.700	0.700	0.700	0.700	0.800	0.800	0.800
ALBEDO (-)	0.140	0.140	0.140	0.140	0.140	0.140	0.140	0.140	0.140	0.140	0.140	0.140
EVAPOT. (CM/DAY)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
PRECIP. (CM)	5.700	4.850	7.240	7.550	8.020	9.830	8.300	11.140	14.220	18.200	17.440	13.780
M.TIME RAIN(DAYS)	0.440	0.380	0.440	0.480	0.440	0.370	0.370	0.310	0.290	0.260	0.290	0.380
M. STORM NO. (-)	3.170	3.080	4.970	4.970	5.140	5.690	4.260	5.490	7.360	9.560	7.920	6.390
M. SEASON (DAYS)	30.400	30.400	30.400	30.400	30.400	30.400	30.400	30.400	30.400	30.400	30.400	30.400

INITIAL POLLUTANT CONCENTRATIONS IN UG/ML, INPUT FOR MONTH 1 OF YEAR 1

LAYER 1:

SUBLAYER	1	2
INITIAL CONC. (UG/ML)	4.63E+00	4.63E+00

LAYER 2:

SUBLAYER	1	2
INITIAL CONC. (UG/ML)	4.63E+00	4.63E+00

LAYER 3:

SUBLAYER	1	2
INITIAL CONC. (UG/ML)	4.63E+00	4.63E+00

-- POLLUTANT INPUT PARAMETERS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
POL. INP-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRNSFORMD-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SINKS-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LIG.INPUT-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VOLATILIZATION MULT.-1	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
SURFACE RUNOFF MULT.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
POL. IN RAIN (FRAC-SL)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
POL. INP-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRNSFORMD-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SINKS-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LIG.INPUT-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VOLATILIZATION MULT.-2	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
POL. INP-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRNSFORMD-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

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SINKS-L (UG/CM**2)      0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
LIG.INPUT-L (UG/CM**2) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
VOLATILIZATION MULT.-L 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00

     YEAR -   2    MONTHLY INPUT PARAMETERS
     ========    ========================
     -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
     -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

     YEAR -   3    MONTHLY INPUT PARAMETERS
     ========    ========================
     -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
     -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

     YEAR -   4    MONTHLY INPUT PARAMETERS
     ========    ========================
     -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
     -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

     YEAR -   5    MONTHLY INPUT PARAMETERS
     ========    ========================
     -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
     -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

**** WARNING (MONTH 3) - PROBLEM IN HYDRO CYCLE: W EQUALS OR EXCEEDS EP
    W SET TO EP


     YEAR -   1    MONTHLY RESULTS (OUTPUT)
     ========    ========================
     -- HYDROLOGIC CYCLE COMPONENTS --
                        OCT      NOV      DEC      JAN      FEB      MAR      APR      MAY      JUN      JUL      AUG      SEP
MOIS. IN L1 (%)      24.993   26.356   28.612   28.753   28.001   27.296   25.933   26.356   26.967   28.001   28.095   27.860
MOIS. BELOW L1 (%)   24.993   26.356   28.612   28.753   28.001   27.296   25.933   26.356   26.967   28.001   28.095   27.860
PRECIPATION (CM)      5.699    4.864    7.244    7.487    8.085    9.910    8.368   11.054   14.182   18.155   17.320   13.818
NET INFILT. (CM)      5.670    4.824    7.205    7.450    8.031    9.764    8.235   10.786   13.888   17.675   16.756   13.602
EVAPOTRANS. (CM)      7.030    4.571    2.973    3.462    5.565    8.320    8.566   10.353   12.285   13.520   12.436   10.168
MOIS. RETEN (CM)     -0.146    0.121    0.201    0.013   -0.067   -0.063   -0.121    0.038    0.055    0.092    0.009   -0.021
SUR. RUNOFF (CM)      0.029    0.040    0.039    0.037    0.055    0.146    0.133    0.269    0.294    0.480    0.564    0.216
GRW. RUNOFF (CM)     -1.213    0.131    4.032    3.975    2.532    1.506   -0.210    0.395    1.548    4.063    4.312    3.455
YIELD (CM)           -1.185    0.171    4.071    4.012    2.587    1.652   -0.076    0.664    1.842    4.543    4.875    3.671

PAU/MPA (GZU)         1.000    1.003    1.001    0.992    1.008    1.008    1.008    0.992    0.997    0.998    0.993    1.003
PA/MPA (GZ)           1.000    1.003    1.001    0.992    1.008    1.008    1.008    0.992    0.997    0.998    0.993    1.003

                  -- POLLUTANT MASS INPUT TO COLUMN (UG) - INCLUDES INITIAL POLLUTANT CONCENTRATIONS --
                  ------------------------------------------------------------------------------------
                OCT       NOV       DEC       JAN       FEB       MAR       APR       MAY       JUN       JUL       AUG       SEP
PRECIP.     0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LOAD UPPER  8.891E+08 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LOAD ZONE 2 1.334E+09 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LOAD LOWER  0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00

TOTAL INPUT 2.223E+09 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
          ---------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
VOLATILIZED 1.280E+09 5.191E+08 2.427E+08 1.803E+08 1.693E+08 1.545E+08 1.538E+08 1.035E+08 6.426E+07 3.588E+07 2.549E+07 2.139E+07
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IN SOIL MOI 3.279E+07 2.423E+07 1.806E+07 1.458E+07 1.182E+07 9.224E+06 7.056E+06 5.051E+06 3.584E+06 2.435E+06 1.845E+06 1.503E+06
ADS ON SOIL 2.976E+07 2.085E+07 1.431E+07 1.150E+07 9.572E+06 7.664E+06 6.171E+06 4.347E+06 3.014E+06 1.972E+06 1.489E+06 1.223E+06
IN SOIL AIR 6.622E+06 4.435E+06 2.747E+06 2.216E+06 1.915E+06 1.579E+06 1.317E+06 8.969E+05 5.971E+05 3.692E+05 2.774E+05 2.322E+05

          SUBLAYER  2
DIFFUSED UP 1.015E+09 5.187E+08 2.542E+08 1.976E+08 1.859E+08 1.704E+08 1.642E+08 1.114E+08 7.252E+07 4.342E+07 3.143E+07 2.540E+07
IN SOIL MOI 6.579E+07 4.865E+07 3.766E+07 3.059E+07 2.472E+07 1.934E+07 1.447E+07 1.054E+07 7.686E+06 5.452E+06 4.120E+06 3.266E+06
ADS ON SOIL 5.970E+07 4.187E+07 2.985E+07 2.413E+07 2.002E+07 1.607E+07 1.266E+07 9.069E+06 6.464E+06 4.416E+06 3.326E+06 2.658E+06
IN SOIL AIR 1.329E+07 8.905E+06 5.729E+06 4.648E+06 4.006E+06 3.311E+06 2.701E+06 1.871E+06 1.280E+06 8.265E+05 6.195E+05 5.046E+05

   SOIL ZONE 2:
          SUBLAYER  1
DIFFUSED UP 7.754E+08 4.896E+08 2.518E+08 2.065E+08 1.940E+08 1.770E+08 1.653E+08 1.119E+08 7.565E+07 4.800E+07 3.563E+07 2.802E+07
IN SOIL MOI 1.689E+08 1.253E+08 1.021E+08 8.348E+07 6.716E+07 5.251E+07 3.817E+07 2.833E+07 2.131E+07 1.588E+07 1.198E+07 9.212E+06
ADS ON SOIL 1.532E+08 1.078E+08 8.095E+07 6.585E+07 5.440E+07 4.363E+07 3.338E+07 2.438E+07 1.792E+07 1.286E+07 9.673E+06 7.500E+06
IN SOIL AIR 3.410E+07 2.294E+07 1.554E+07 1.268E+07 1.088E+07 8.989E+06 7.126E+06 5.029E+06 3.550E+06 2.408E+06 1.802E+06 1.423E+06

          SUBLAYER  2
DIFFUSED UP 4.907E+08 3.926E+08 2.264E+08 1.989E+08 1.841E+08 1.637E+08 1.443E+08 9.637E+07 6.814E+07 4.629E+07 3.557E+07 2.720E+07
IN SOIL MOI 2.247E+08 1.677E+08 1.457E+08 1.192E+08 9.535E+07 7.397E+07 5.210E+07 3.924E+07 3.030E+07 2.356E+07 1.778E+07 1.332E+07
ADS ON SOIL 2.039E+08 1.443E+08 1.155E+08 9.403E+07 7.723E+07 6.146E+07 4.556E+07 3.376E+07 2.549E+07 1.908E+07 1.435E+07 1.085E+07
IN SOIL AIR 4.537E+07 3.069E+07 2.217E+07 1.811E+07 1.545E+07 1.266E+07 9.725E+06 6.966E+06 5.048E+06 3.572E+06 2.674E+06 2.058E+06

     LOWER SOIL ZONE:
          SUBLAYER  1
DIFFUSED UP 2.677E+08 2.439E+08 1.882E+08 1.653E+08 1.467E+08 1.215E+08 9.597E+07 6.302E+07 4.627E+07 3.342E+07 2.634E+07 1.963E+07
IN SOIL MOI 1.650E+08 1.236E+08 1.137E+08 9.270E+07 7.336E+07 5.627E+07 3.872E+07 2.935E+07 2.295E+07 1.823E+07 1.376E+07 1.018E+07
ADS ON SOIL 1.498E+08 1.063E+08 9.015E+07 7.312E+07 5.942E+07 4.675E+07 3.386E+07 2.526E+07 1.931E+07 1.477E+07 1.111E+07 8.289E+06
IN SOIL AIR 3.333E+07 2.262E+07 1.730E+07 1.408E+07 1.189E+07 9.632E+06 7.227E+06 5.212E+06 3.824E+06 2.764E+06 2.070E+06 1.573E+06

          SUBLAYER  2
DIFFUSED UP 8.382E+07 9.837E+07 3.448E+07 6.584E+07 1.062E+08 7.808E+07 5.139E+07 3.318E+07 2.482E+07 1.855E+07 1.483E+07 1.091E+07
IN SOIL MOI 1.710E+08 1.284E+08 1.172E+08 1.037E+08 8.038E+07 6.069E+07 4.080E+07 3.104E+07 2.444E+07 1.965E+07 1.484E+07 1.090E+07
ADS ON SOIL 1.552E+08 1.105E+08 9.287E+07 8.177E+07 6.510E+07 5.043E+07 3.568E+07 2.671E+07 2.056E+07 1.592E+07 1.198E+07 8.873E+06
IN SOIL AIR 3.453E+07 2.350E+07 1.783E+07 1.575E+07 1.302E+07 1.039E+07 7.616E+06 5.512E+06 4.072E+06 2.979E+06 2.231E+06 1.684E+06
GWR. RUNOFF 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 3.522E+06 1.048E+07 2.122E+07 1.719E+07 1.027E+07

     -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --
     ----------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
MOISTURE    1.366E+00 9.575E-01 6.573E-01 5.282E-01 4.396E-01 3.520E-01 2.834E-01 1.996E-01 1.384E-01 9.058E-02 6.839E-02 5.617E-02
%SOLUBILITY 7.677E-02 5.379E-02 3.693E-02 2.968E-02 2.470E-02 1.977E-02 1.592E-02 1.121E-02 7.777E-03 5.089E-03 3.842E-03 3.156E-03
ADSORBED    2.214E-01 1.551E-01 1.065E-01 8.558E-02 7.121E-02 5.702E-02 4.591E-02 3.234E-02 2.243E-02 1.467E-02 1.108E-02 9.100E-03
SOIL AIR    3.134E-01 2.237E-01 1.556E-01 1.265E-01 1.050E-01 8.346E-02 6.512E-02 4.525E-02 3.104E-02 2.024E-02 1.528E-02 1.263E-02

          SUBLAYER  2
MOISTURE    2.742E+00 1.923E+00 1.371E+00 1.108E+00 9.195E-01 7.380E-01 5.812E-01 4.165E-01 2.969E-01 2.028E-01 1.527E-01 1.221E-01
%SOLUBILITY 1.540E-01 1.080E-01 7.701E-02 6.225E-02 5.166E-02 4.146E-02 3.265E-02 2.340E-02 1.668E-02 1.139E-02 8.580E-03 6.859E-03
ADSORBED    4.442E-01 3.115E-01 2.221E-01 1.795E-01 1.490E-01 1.196E-01 9.415E-02 6.747E-02 4.809E-02 3.285E-02 2.474E-02 1.978E-02
SOIL AIR    6.288E-01 4.493E-01 3.245E-01 2.653E-01 2.196E-01 1.750E-01 1.335E-01 9.440E-02 6.657E-02 4.531E-02 3.413E-02 2.746E-02

     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE    4.692E+00 3.302E+00 2.478E+00 2.016E+00 1.665E+00 1.336E+00 1.022E+00 7.463E-01 5.487E-01 3.939E-01 2.961E-01 2.296E-01
%SOLUBILITY 2.636E-01 1.855E-01 1.392E-01 1.133E-01 9.356E-02 7.505E-02 5.742E-02 4.193E-02 3.083E-02 2.213E-02 1.664E-02 1.290E-02
ADSORBED    7.600E-01 5.349E-01 4.015E-01 3.266E-01 2.698E-01 2.164E-01 1.656E-01 1.209E-01 8.890E-02 6.381E-02 4.798E-02 3.720E-02
SOIL AIR    1.076E+00 7.715E-01 5.867E-01 4.826E-01 3.977E-01 3.168E-01 2.349E-01 1.692E-01 1.231E-01 8.799E-02 6.618E-02 5.164E-02
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          SUBLAYER  2
MOISTURE     6.242E+00 4.417E+00 3.537E+00 2.879E+00 2.364E+00 1.882E+00 1.395E+00 1.034E+00 7.803E-01 5.843E-01 4.394E-01 3.320E-01
%SOLUBILITY 3.507E-01 2.482E-01 1.987E-01 1.617E-01 1.328E-01 1.057E-01 7.837E-02 5.807E-02 4.384E-02 3.282E-02 2.469E-02 1.865E-02
ADSORBED     1.011E+00 7.156E-01 5.730E-01 4.664E-01 3.830E-01 3.048E-01 2.260E-01 1.675E-01 1.264E-01 9.465E-02 7.119E-02 5.379E-02
SOIL AIR     1.432E+00 1.032E+00 8.373E-01 6.893E-01 5.646E-01 4.462E-01 3.205E-01 2.343E-01 1.750E-01 1.305E-01 9.820E-02 7.467E-02

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE     6.878E+00 4.883E+00 4.140E+00 3.358E+00 2.729E+00 2.147E+00 1.555E+00 1.160E+00 8.866E-01 6.781E-01 5.102E-01 3.806E-01
%SOLUBILITY 3.864E-01 2.743E-01 2.326E-01 1.886E-01 1.533E-01 1.206E-01 8.736E-02 6.517E-02 4.981E-02 3.810E-02 2.866E-02 2.138E-02
ADSORBED     1.114E+00 7.911E-01 6.707E-01 5.440E-01 4.421E-01 3.478E-01 2.519E-01 1.879E-01 1.436E-01 1.099E-01 8.265E-02 6.166E-02
SOIL AIR     1.577E+00 1.141E+00 9.800E-01 8.039E-01 6.516E-01 5.091E-01 3.573E-01 2.629E-01 1.988E-01 1.515E-01 1.140E-01 8.561E-02

          SUBLAYER  2
MOISTURE     7.126E+00 5.073E+00 4.265E+00 3.755E+00 2.990E+00 2.316E+00 1.639E+00 1.227E+00 9.440E-01 7.309E-01 5.501E-01 4.075E-01
%SOLUBILITY 4.004E-01 2.850E-01 2.396E-01 2.110E-01 1.680E-01 1.301E-01 9.206E-02 6.892E-02 5.304E-02 4.106E-02 3.090E-02 2.289E-02
ADSORBED     1.154E+00 8.219E-01 6.909E-01 6.083E-01 4.843E-01 3.752E-01 2.655E-01 1.987E-01 1.529E-01 1.184E-01 8.911E-02 6.601E-02
SOIL AIR     1.634E+00 1.185E+00 1.010E+00 8.991E-01 7.140E-01 5.492E-01 3.765E-01 2.781E-01 2.117E-01 1.633E-01 1.229E-01 9.164E-02

POL DEP CM   7.694E+01 7.843E+01 8.649E+01 9.450E+01 1.005E+02 1.054E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02

                          YEAR -   1 ANNUAL SUMMARY REPORT
                           ==================================
       -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              8.891E+08
SOIL ZONE 2                  1.334E+09
LOWER SOIL ZONE              0.000E+00

          -- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)              27.268
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.268
TOTAL PRECIPITATION (CM)                     126.186
TOTAL INFILTRATION (CM)                      123.885
TOTAL EVAPOTRANSPIRATION (CM)                 99.247
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.526
TOTAL MOISTURE RETENTION (CM)                  0.111
TOTAL YIELD (CM)                              26.828

         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
         ------------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
-------------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED              2.951E+09
          SUBLAYER  2
               TOTAL DIFFUSED (UP)            2.790E+09
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)            2.559E+09
          SUBLAYER  2
               TOTAL DIFFUSED (UP)            2.074E+09
     LOWER SOIL ZONE:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)            1.418E+09
          SUBLAYER  2
               TOTAL DIFFUSED (UP)            6.205E+08
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TOTAL IN GROUNDWATER RUNOFF 6.268E+07

-- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON-ZERO VALUES ARE PRINTED --

UPPER SOIL ZONE:
SUBLAYER 1
SOIL MOISTURE (UG/ML) 4.281E-01
ADSORBED SOIL (UG/G) 6.936E-02
SOIL AIR (UG/ML) 9.976E-02
SUBLAYER 2
SOIL MOISTURE (UG/ML) 8.811E-01
ADSORBED SOIL (UG/G) 1.427E-01
SOIL AIR (UG/ML) 2.053E-01
SOIL ZONE 2:
SUBLAYER 1
SOIL MOISTURE (UG/ML) 1.560E+00
ADSORBED SOIL (UG/G) 2.528E-01
SOIL AIR (UG/ML) 3.637E-01
SUBLAYER 2
SOIL MOISTURE (UG/ML) 2.157E+00
ADSORBED SOIL (UG/G) 3.495E-01
SOIL AIR (UG/ML) 5.029E-01
LOWER SOIL ZONE:
SUBLAYER 1
SOIL MOISTURE (UG/ML) 2.442E+00
ADSORBED SOIL (UG/G) 3.956E-01
SOIL AIR (UG/ML) 5.694E-01
SUBLAYER 2
SOIL MOISTURE (UG/ML) 2.585E+00
ADSORBED SOIL (UG/G) 4.188E-01
SOIL AIR (UG/ML) 6.030E-01

MAX. POLL. DEPTH (M) 1.067E+00

**** WARNING (MONTH 3) - PROBLEM IN HYDRO CYCLE: W EQUALS OR EXCEEDS EP
W SET TO EP

YEAR - 2 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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LOAD ZONE 2 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LOAD LOWER  0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00

TOTAL INPUT 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
        -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
        ---------------------------------------------------------------------------------------------------------

    UPPER SOIL ZONE:
        SUBLAYER  1
VOLATILIZED 3.036E+07 1.910E+07 8.917E+06 6.138E+06 5.221E+06 4.370E+06 4.102E+06 2.720E+06 1.688E+06 9.426E+05 6.695E+05 5.620E+05
IN SOIL MOI 1.185E+06 8.987E+05 6.449E+05 4.717E+05 3.482E+05 2.519E+05 1.858E+05 1.327E+05 9.416E+04 6.397E+04 4.846E+04 3.947E+04
ADS ON SOIL 1.072E+06 7.734E+05 5.112E+05 3.721E+05 2.820E+05 2.093E+05 1.625E+05 1.142E+05 7.919E+04 5.182E+04 3.912E+04 3.213E+04
IN SOIL AIR 2.375E+05 1.645E+05 9.812E+04 7.167E+04 5.642E+04 4.313E+04 3.468E+04 2.356E+04 1.569E+04 9.698E+03 7.288E+03 6.099E+03

        SUBLAYER  2
DIFFUSED UP 3.211E+07 1.917E+07 9.267E+06 6.599E+06 5.643E+06 4.762E+06 4.359E+06 2.928E+06 1.905E+06 1.141E+06 8.256E+05 6.673E+05
IN SOIL MOI 2.395E+06 1.805E+06 1.333E+06 9.806E+05 7.228E+05 5.260E+05 3.808E+05 2.769E+05 2.019E+05 1.432E+05 1.082E+05 8.579E+04
ADS ON SOIL 2.165E+06 1.553E+06 1.057E+06 7.735E+05 5.855E+05 4.371E+05 3.331E+05 2.383E+05 1.698E+05 1.160E+05 8.736E+04 6.984E+04
IN SOIL AIR 4.797E+05 3.303E+05 2.029E+05 1.490E+05 1.171E+05 9.004E+04 7.109E+04 4.916E+04 3.364E+04 2.171E+04 1.627E+04 1.326E+04

    SOIL ZONE 2:
        SUBLAYER  1
DIFFUSED UP 3.224E+07 1.821E+07 9.012E+06 6.649E+06 5.719E+06 4.845E+06 4.355E+06 2.939E+06 1.987E+06 1.261E+06 9.359E+05 7.360E+05
IN SOIL MOI 6.213E+06 4.649E+06 3.549E+06 2.630E+06 1.935E+06 1.416E+06 1.004E+06 7.442E+05 5.598E+05 4.172E+05 3.148E+05 2.420E+05
ADS ON SOIL 5.617E+06 4.001E+06 2.813E+06 2.074E+06 1.567E+06 1.176E+06 8.779E+05 6.404E+05 4.709E+05 3.380E+05 2.541E+05 1.970E+05
IN SOIL AIR 1.245E+06 8.510E+05 5.400E+05 3.996E+05 3.135E+05 2.424E+05 1.874E+05 1.321E+05 9.327E+04 6.325E+04 4.734E+04 3.739E+04

        SUBLAYER  2
DIFFUSED UP 2.795E+07 1.474E+07 7.501E+06 5.764E+06 4.989E+06 4.240E+06 3.732E+06 2.530E+06 1.790E+06 1.216E+06 9.344E+05 7.145E+05
IN SOIL MOI 8.365E+06 6.219E+06 4.877E+06 3.641E+06 2.674E+06 1.965E+06 1.369E+06 1.031E+06 7.961E+05 6.189E+05 4.671E+05 3.500E+05
ADS ON SOIL 7.563E+06 5.352E+06 3.866E+06 2.872E+06 2.166E+06 1.633E+06 1.197E+06 8.870E+05 6.695E+05 5.013E+05 3.771E+05 2.849E+05
IN SOIL AIR 1.676E+06 1.138E+06 7.420E+05 5.532E+05 4.333E+05 3.363E+05 2.555E+05 1.830E+05 1.326E+05 9.383E+04 7.024E+04 5.407E+04

    LOWER SOIL ZONE:
        SUBLAYER  1
DIFFUSED UP 1.827E+07 9.187E+06 4.849E+06 3.841E+06 3.320E+06 2.815E+06 2.425E+06 1.653E+06 1.215E+06 8.781E+05 6.918E+05 5.157E+05
IN SOIL MOI 6.179E+06 4.581E+06 3.641E+06 2.728E+06 2.001E+06 1.472E+06 1.017E+06 7.711E+05 6.030E+05 4.789E+05 3.615E+05 2.675E+05
ADS ON SOIL 5.587E+06 3.942E+06 2.886E+06 2.152E+06 1.621E+06 1.223E+06 8.892E+05 6.636E+05 5.072E+05 3.879E+05 2.919E+05 2.177E+05
IN SOIL AIR 1.238E+06 8.385E+05 5.540E+05 4.145E+05 3.242E+05 2.520E+05 1.898E+05 1.369E+05 1.005E+05 7.260E+04 5.437E+04 4.133E+04

        SUBLAYER  2
DIFFUSED UP 9.726E+06 4.732E+06 2.561E+06 2.068E+06 1.780E+06 1.501E+06 1.278E+06 8.704E+05 6.520E+05 4.873E+05 3.895E+05 2.865E+05
IN SOIL MOI 6.492E+06 4.806E+06 3.851E+06 2.890E+06 2.117E+06 1.558E+06 1.071E+06 8.155E+05 6.421E+05 5.162E+05 3.898E+05 2.863E+05
ADS ON SOIL 5.869E+06 4.135E+06 3.052E+06 2.280E+06 1.715E+06 1.295E+06 9.368E+05 7.018E+05 5.400E+05 4.181E+05 3.147E+05 2.331E+05
IN SOIL AIR 1.300E+06 8.796E+05 5.858E+05 4.392E+05 3.430E+05 2.667E+05 2.000E+05 1.448E+05 1.070E+05 7.825E+04 5.862E+04 4.424E+04
GWR. RUNOFF 0.000E+00 1.851E+05 4.092E+06 3.028E+06 1.453E+06 6.516E+05 0.000E+00 9.251E+04 2.754E+05 5.574E+05 4.516E+05 2.698E+05


    -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --
    ---------------------------------------------------------------------------------------------------------------------
    UPPER SOIL ZONE:
        SUBLAYER  1
MOISTURE    4.922E-02 3.552E-02 2.348E-02 1.709E-02 1.295E-02 9.614E-03 7.462E-03 5.245E-03 3.637E-03 2.380E-03 1.796E-03 1.476E-03
%SOLUBILITY 2.765E-03 1.995E-03 1.319E-03 9.599E-04 7.276E-04 5.401E-04 4.192E-04 2.946E-04 2.043E-04 1.337E-04 1.009E-04 8.290E-05
ADSORBED    7.973E-03 5.754E-03 3.803E-03 2.768E-03 2.098E-03 1.557E-03 1.209E-03 8.496E-04 5.891E-04 3.855E-04 2.910E-04 2.391E-04
SOIL AIR    1.129E-02 8.299E-03 5.558E-03 4.091E-03 3.093E-03 2.280E-03 1.715E-03 1.189E-03 8.155E-04 5.316E-04 4.015E-04 3.319E-04

        SUBLAYER  2
MOISTURE    9.942E-02 7.132E-02 4.854E-02 3.552E-02 2.689E-02 2.007E-02 1.530E-02 1.094E-02 7.798E-03 5.328E-03 4.012E-03 3.207E-03
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%SOLUBILITY 5.586E-03 4.007E-03 2.727E-03 1.996E-03 1.511E-03 1.128E-03 8.593E-04 6.147E-04 4.381E-04 2.993E-04 2.254E-04 1.802E-04
ADSORBED    1.611E-02 1.155E-02 7.863E-03 5.755E-03 4.356E-03 3.252E-03 2.478E-03 1.773E-03 1.263E-03 8.631E-04 6.499E-04 5.196E-04
SOIL AIR    2.280E-02 1.667E-02 1.149E-02 8.505E-03 6.421E-03 4.759E-03 3.514E-03 2.480E-03 1.749E-03 1.190E-03 8.966E-04 7.213E-04

     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE    1.720E-01 1.225E-01 8.613E-02 6.350E-02 4.798E-02 3.602E-02 2.688E-02 1.961E-02 1.442E-02 1.035E-02 7.780E-03 6.032E-03
%SOLUBILITY 9.660E-03 6.881E-03 4.839E-03 3.568E-03 2.695E-03 2.023E-03 1.510E-03 1.101E-03 8.099E-04 5.813E-04 4.371E-04 3.389E-04
ADSORBED    2.786E-02 1.984E-02 1.395E-02 1.029E-02 7.773E-03 5.835E-03 4.354E-03 3.176E-03 2.335E-03 1.676E-03 1.260E-03 9.771E-04
SOIL AIR    3.944E-02 2.862E-02 2.039E-02 1.520E-02 1.146E-02 8.541E-03 6.176E-03 4.444E-03 3.233E-03 2.312E-03 1.739E-03 1.357E-03

          SUBLAYER  2
MOISTURE    2.315E-01 1.639E-01 1.184E-01 8.792E-02 6.631E-02 4.998E-02 3.665E-02 2.716E-02 2.050E-02 1.535E-02 1.154E-02 8.722E-03
%SOLUBILITY 1.301E-02 9.205E-03 6.649E-03 4.939E-03 3.726E-03 2.808E-03 2.059E-03 1.526E-03 1.152E-03 8.623E-04 6.485E-04 4.900E-04
ADSORBED    3.751E-02 2.654E-02 1.917E-02 1.424E-02 1.074E-02 8.097E-03 5.937E-03 4.399E-03 3.321E-03 2.486E-03 1.870E-03 1.413E-03
SOIL AIR    5.310E-02 3.829E-02 2.802E-02 2.105E-02 1.584E-02 1.185E-02 8.421E-03 6.155E-03 4.597E-03 3.429E-03 2.580E-03 1.962E-03

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE    2.566E-01 1.810E-01 1.326E-01 9.882E-02 7.442E-02 5.617E-02 4.083E-02 3.047E-02 2.329E-02 1.781E-02 1.340E-02 9.999E-03
%SOLUBILITY 1.441E-02 1.017E-02 7.447E-03 5.552E-03 4.181E-03 3.155E-03 2.294E-03 1.712E-03 1.308E-03 1.001E-03 7.530E-04 5.618E-04
ADSORBED    4.156E-02 2.933E-02 2.147E-02 1.601E-02 1.206E-02 9.099E-03 6.615E-03 4.937E-03 3.773E-03 2.886E-03 2.171E-03 1.620E-03
SOIL AIR    5.884E-02 4.230E-02 3.138E-02 2.366E-02 1.777E-02 1.332E-02 9.383E-03 6.907E-03 5.223E-03 3.980E-03 2.995E-03 2.249E-03

          SUBLAYER  2
MOISTURE    2.695E-01 1.899E-01 1.402E-01 1.047E-01 7.875E-02 5.946E-02 4.302E-02 3.223E-02 2.480E-02 1.920E-02 1.445E-02 1.070E-02
%SOLUBILITY 1.514E-02 1.067E-02 7.875E-03 5.882E-03 4.424E-03 3.340E-03 2.417E-03 1.810E-03 1.393E-03 1.079E-03 8.118E-04 6.014E-04
ADSORBED    4.366E-02 3.077E-02 2.271E-02 1.696E-02 1.276E-02 9.632E-03 6.970E-03 5.221E-03 4.018E-03 3.110E-03 2.341E-03 1.734E-03
SOIL AIR    6.181E-02 4.438E-02 3.318E-02 2.507E-02 1.881E-02 1.410E-02 9.885E-03 7.305E-03 5.561E-03 4.289E-03 3.229E-03 2.407E-03

POL DEP CM  1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02


                         YEAR -   2 ANNUAL SUMMARY REPORT
                          ================================
      -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

      -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918

        -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
        ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
-------------------------------------------------------------------------------------------------------------------------------------
    UPPER SOIL ZONE:
         SUBLAYER  1
              TOTAL VOLATILIZED              8.479E+07
         SUBLAYER  2
              TOTAL DIFFUSED (UP)            8.937E+07
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SOIL ZONE 2:
     SUBLAYER  1
          TOTAL DIFFUSED (UP)               8.888E+07
     SUBLAYER  2
          TOTAL DIFFUSED (UP)               7.609E+07
LOWER SOIL ZONE:
     SUBLAYER  1
          TOTAL DIFFUSED (UP)               4.966E+07
     SUBLAYER  2
          TOTAL DIFFUSED (UP)               2.633E+07
          TOTAL IN GROUNDWATER RUNOFF       1.106E+07

                    -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                     ---------------------------------------------------------------------------------
UPPER SOIL ZONE:
     SUBLAYER  1
          SOIL MOISTURE (UG/ML)  1.415E-02
          ADSORBED SOIL (UG/G)   2.293E-03
          SOIL AIR (UG/ML)       3.299E-03
     SUBLAYER  2
          SOIL MOISTURE (UG/ML)  2.903E-02
          ADSORBED SOIL (UG/G)   4.703E-03
          SOIL AIR (UG/ML)       6.766E-03
SOIL ZONE 2:
     SUBLAYER  1
          SOIL MOISTURE (UG/ML)  5.109E-02
          ADSORBED SOIL (UG/G)   8.277E-03
          SOIL AIR (UG/ML)       1.191E-02
     SUBLAYER  2
          SOIL MOISTURE (UG/ML)  6.982E-02
          ADSORBED SOIL (UG/G)   1.131E-02
          SOIL AIR (UG/ML)       1.627E-02
LOWER SOIL ZONE:
     SUBLAYER  1
          SOIL MOISTURE (UG/ML)  7.795E-02
          ADSORBED SOIL (UG/G)   1.263E-02
          SOIL AIR (UG/ML)       1.817E-02
     SUBLAYER  2
          SOIL MOISTURE (UG/ML)  8.224E-02
          ADSORBED SOIL (UG/G)   1.332E-02
          SOIL AIR (UG/ML)       1.917E-02

          MAX. POLL. DEPTH (M)   1.067E+00

YEAR -   3    MONTHLY RESULTS (OUTPUT)
========    ========================
-- HYDROLOGIC CYCLE COMPONENTS --
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	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:

SUBLAYER 1

VOLATILIZED	7.976E+05	5.017E+05	2.342E+05	1.612E+05	1.371E+05	1.148E+05	1.078E+05	7.145E+04	4.435E+04	2.476E+04	1.759E+04	1.476E+04
IN SOIL MOI	3.114E+04	2.361E+04	1.694E+04	1.239E+04	9.146E+03	6.619E+03	4.881E+03	3.486E+03	2.473E+03	1.680E+03	1.273E+03	1.037E+03
ADS ON SOIL	2.815E+04	2.032E+04	1.343E+04	9.774E+03	7.408E+03	5.499E+03	4.269E+03	3.000E+03	2.080E+03	1.361E+03	1.028E+03	8.440E+02
IN SOIL AIR	6.238E+03	4.321E+03	2.578E+03	1.883E+03	1.482E+03	1.133E+03	9.111E+02	6.190E+02	4.121E+02	2.547E+02	1.914E+02	1.602E+02

SUBLAYER 2

DIFFUSED UP	8.434E+05	5.036E+05	2.434E+05	1.734E+05	1.483E+05	1.251E+05	1.145E+05	7.692E+04	5.005E+04	2.996E+04	2.169E+04	1.753E+04
IN SOIL MOI	6.291E+04	4.741E+04	3.503E+04	2.576E+04	1.899E+04	1.382E+04	1.000E+04	7.273E+03	5.304E+03	3.762E+03	2.843E+03	2.253E+03
ADS ON SOIL	5.687E+04	4.080E+04	2.777E+04	2.032E+04	1.538E+04	1.148E+04	8.749E+03	6.259E+03	4.461E+03	3.048E+03	2.295E+03	1.834E+03
IN SOIL AIR	1.260E+04	8.678E+03	5.329E+03	3.914E+03	3.077E+03	2.365E+03	1.867E+03	1.291E+03	8.836E+02	5.704E+02	4.275E+02	3.482E+02

SOIL ZONE 2:

SUBLAYER 1

DIFFUSED UP	8.468E+05	4.783E+05	2.367E+05	1.747E+05	1.502E+05	1.273E+05	1.144E+05	7.721E+04	5.221E+04	3.312E+04	2.458E+04	1.933E+04
IN SOIL MOI	1.632E+05	1.221E+05	9.324E+04	6.908E+04	5.083E+04	3.720E+04	2.637E+04	1.955E+04	1.471E+04	1.096E+04	8.269E+03	6.357E+03
ADS ON SOIL	1.475E+05	1.051E+05	7.391E+04	5.449E+04	4.117E+04	3.091E+04	2.306E+04	1.682E+04	1.237E+04	8.878E+03	6.675E+03	5.175E+03
IN SOIL AIR	3.269E+04	2.235E+04	1.419E+04	1.050E+04	8.236E+03	6.367E+03	4.922E+03	3.471E+03	2.450E+03	1.662E+03	1.243E+03	9.822E+02

SUBLAYER 2

DIFFUSED UP	7.342E+05	3.871E+05	1.971E+05	1.514E+05	1.311E+05	1.114E+05	9.804E+04	6.645E+04	4.703E+04	3.194E+04	2.455E+04	1.877E+04
IN SOIL MOI	2.198E+05	1.634E+05	1.281E+05	9.564E+04	7.025E+04	5.162E+04	3.596E+04	2.708E+04	2.091E+04	1.626E+04	1.227E+04	9.193E+03
ADS ON SOIL	1.987E+05	1.406E+05	1.016E+05	7.544E+04	5.690E+04	4.289E+04	3.145E+04	2.330E+04	1.759E+04	1.317E+04	9.905E+03	7.483E+03
IN SOIL AIR	4.402E+04	2.990E+04	1.949E+04	1.453E+04	1.138E+04	8.836E+03	6.712E+03	4.807E+03	3.484E+03	2.465E+03	1.845E+03	1.420E+03

LOWER SOIL ZONE:

SUBLAYER 1

DIFFUSED UP	4.800E+05	2.413E+05	1.274E+05	1.009E+05	8.721E+04	7.396E+04	6.369E+04	4.343E+04	3.193E+04	2.307E+04	1.817E+04	1.355E+04
IN SOIL MOI	1.623E+05	1.203E+05	9.566E+04	7.167E+04	5.256E+04	3.867E+04	2.671E+04	2.026E+04	1.584E+04	1.258E+04	9.497E+03	7.026E+03
ADS ON SOIL	1.468E+05	1.036E+05	7.583E+04	5.653E+04	4.257E+04	3.213E+04	2.336E+04	1.743E+04	1.332E+04	1.019E+04	7.667E+03	5.720E+03
IN SOIL AIR	3.252E+04	2.203E+04	1.455E+04	1.089E+04	8.516E+03	6.619E+03	4.986E+03	3.596E+03	2.639E+03	1.907E+03	1.428E+03	1.086E+03

SUBLAYER 2

DIFFUSED UP	2.555E+05	1.243E+05	6.727E+04	5.433E+04	4.675E+04	3.944E+04	3.357E+04	2.286E+04	1.713E+04	1.280E+04	1.023E+04	7.526E+03
IN SOIL MOI	1.705E+05	1.262E+05	1.012E+05	7.593E+04	5.561E+04	4.093E+04	2.814E+04	2.142E+04	1.687E+04	1.356E+04	1.024E+04	7.521E+03
ADS ON SOIL	1.542E+05	1.086E+05	8.018E+04	5.989E+04	4.505E+04	3.401E+04	2.461E+04	1.843E+04	1.419E+04	1.098E+04	8.266E+03	6.123E+03
IN SOIL AIR	3.416E+04	2.311E+04	1.539E+04	1.154E+04	9.012E+03	7.007E+03	5.253E+03	3.804E+03	2.810E+03	2.055E+03	1.540E+03	1.162E+03
GWR. RUNOFF	0.000E+00	4.861E+03	1.075E+05	7.956E+04	3.817E+04	1.712E+04	0.000E+00	2.430E+03	7.235E+03	1.464E+04	1.186E+04	7.087E+03

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --

UPPER SOIL ZONE:

SUBLAYER 1

MOISTURE	1.293E-03	9.330E-04	6.168E-04	4.489E-04	3.402E-04	2.526E-04	1.960E-04	1.378E-04	9.553E-05	6.251E-05	4.719E-05	3.876E-05

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%SOLUBILITY 7.263E-05 5.242E-05 3.465E-05 2.522E-05 1.911E-05 1.419E-05 1.101E-05 7.740E-06 5.367E-06 3.512E-06 2.651E-06 2.178E-06
ADSORBED    2.094E-04 1.511E-04 9.991E-05 7.272E-05 5.512E-05 4.091E-05 3.176E-05 2.232E-05 1.548E-05 1.013E-05 7.645E-06 6.279E-06
SOIL AIR    2.965E-04 2.180E-04 1.460E-04 1.075E-04 8.125E-05 5.989E-05 4.504E-05 3.123E-05 2.142E-05 1.397E-05 1.055E-05 8.717E-06

         SUBLAYER  2
MOISTURE    2.612E-03 1.874E-03 1.275E-03 9.332E-04 7.063E-04 5.273E-04 4.018E-04 2.874E-04 2.049E-04 1.400E-04 1.054E-04 8.424E-05
%SOLUBILITY 1.467E-04 1.053E-04 7.164E-05 5.242E-05 3.968E-05 2.962E-05 2.257E-05 1.615E-05 1.151E-05 7.862E-06 5.921E-06 4.733E-06
ADSORBED    4.231E-04 3.035E-04 2.066E-04 1.512E-04 1.144E-04 8.542E-05 6.509E-05 4.656E-05 3.319E-05 2.267E-05 1.707E-05 1.365E-05
SOIL AIR    5.990E-04 4.378E-04 3.019E-04 2.234E-04 1.687E-04 1.250E-04 9.232E-05 6.515E-05 4.594E-05 3.127E-05 2.355E-05 1.895E-05

     SOIL ZONE 2:
         SUBLAYER  1
MOISTURE    4.517E-03 3.218E-03 2.263E-03 1.668E-03 1.260E-03 9.462E-04 7.061E-04 5.150E-04 3.787E-04 2.718E-04 2.044E-04 1.584E-04
%SOLUBILITY 2.538E-04 1.808E-04 1.271E-04 9.372E-05 7.081E-05 5.316E-05 3.967E-05 2.893E-05 2.127E-05 1.527E-05 1.148E-05 8.901E-06
ADSORBED    7.318E-04 5.213E-04 3.666E-04 2.703E-04 2.042E-04 1.533E-04 1.144E-04 8.344E-05 6.135E-05 4.403E-05 3.311E-05 2.567E-05
SOIL AIR    1.036E-03 7.519E-04 5.356E-04 3.994E-04 3.010E-04 2.244E-04 1.622E-04 1.167E-04 8.492E-05 6.072E-05 4.567E-05 3.563E-05

         SUBLAYER  2
MOISTURE    6.082E-03 4.304E-03 3.109E-03 2.310E-03 1.742E-03 1.313E-03 9.628E-04 7.134E-04 5.385E-04 4.032E-04 3.032E-04 2.291E-04
%SOLUBILITY 3.417E-04 2.418E-04 1.747E-04 1.298E-04 9.787E-05 7.377E-05 5.409E-05 4.008E-05 3.025E-05 2.265E-05 1.704E-05 1.287E-05
ADSORBED    9.853E-04 6.973E-04 5.037E-04 3.742E-04 2.822E-04 2.127E-04 1.560E-04 1.156E-04 8.723E-05 6.532E-05 4.912E-05 3.712E-05
SOIL AIR    1.395E-03 1.006E-03 7.360E-04 5.530E-04 4.160E-04 3.114E-04 2.212E-04 1.617E-04 1.208E-04 9.008E-05 6.777E-05 5.153E-05

     LOWER SOIL ZONE:
         SUBLAYER  1
MOISTURE    6.740E-03 4.756E-03 3.482E-03 2.596E-03 1.955E-03 1.475E-03 1.073E-03 8.005E-04 6.118E-04 4.680E-04 3.521E-04 2.627E-04
%SOLUBILITY 3.786E-04 2.672E-04 1.956E-04 1.458E-04 1.098E-04 8.289E-05 6.026E-05 4.497E-05 3.437E-05 2.629E-05 1.978E-05 1.476E-05
ADSORBED    1.092E-03 7.704E-04 5.641E-04 4.206E-04 3.167E-04 2.390E-04 1.738E-04 1.297E-04 9.912E-05 7.581E-05 5.704E-05 4.255E-05
SOIL AIR    1.546E-03 1.111E-03 8.243E-04 6.215E-04 4.669E-04 3.499E-04 2.465E-04 1.814E-04 1.372E-04 1.045E-04 7.868E-05 5.907E-05

         SUBLAYER  2
MOISTURE    7.080E-03 4.989E-03 3.682E-03 2.751E-03 2.069E-03 1.562E-03 1.130E-03 8.466E-04 6.515E-04 5.044E-04 3.796E-04 2.812E-04
%SOLUBILITY 3.978E-04 2.803E-04 2.069E-04 1.545E-04 1.162E-04 8.775E-05 6.349E-05 4.756E-05 3.660E-05 2.833E-05 2.133E-05 1.580E-05
ADSORBED    1.147E-03 8.082E-04 5.965E-04 4.456E-04 3.351E-04 2.530E-04 1.831E-04 1.371E-04 1.055E-04 8.171E-05 6.149E-05 4.555E-05
SOIL AIR    1.624E-03 1.166E-03 8.717E-04 6.585E-04 4.940E-04 3.704E-04 2.597E-04 1.919E-04 1.461E-04 1.127E-04 8.483E-05 6.324E-05


POL DEP CM  1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02

                          YEAR -   3 ANNUAL SUMMARY REPORT
                           ==================================
       -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

          -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918

         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
          ------------------------------------------------------------------------------------------------------
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FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)

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     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED                2.227E+06
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              2.348E+06
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)              2.335E+06
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              1.999E+06
     LOWER SOIL ZONE:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)              1.305E+06
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              6.917E+05
               TOTAL IN GROUNDWATER RUNOFF      2.904E+05

                    -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --

     UPPER SOIL ZONE:
          SUBLAYER  1
               SOIL MOISTURE (UG/ML)  3.718E-04
               ADSORBED SOIL (UG/G)   6.024E-05
               SOIL AIR (UG/ML)       8.667E-05
          SUBLAYER  2
               SOIL MOISTURE (UG/ML)  7.626E-04
               ADSORBED SOIL (UG/G)   1.235E-04
               SOIL AIR (UG/ML)       1.777E-04
     SOIL ZONE 2:
          SUBLAYER  1
               SOIL MOISTURE (UG/ML)  1.342E-03
               ADSORBED SOIL (UG/G)   2.174E-04
               SOIL AIR (UG/ML)       3.128E-04
        SUBLAYER  2
               SOIL MOISTURE (UG/ML)  1.834E-03
               ADSORBED SOIL (UG/G)   2.971E-04
               SOIL AIR (UG/ML)       4.275E-04
     LOWER SOIL ZONE:
          SUBLAYER  1
               SOIL MOISTURE (UG/ML)  2.048E-03
               ADSORBED SOIL (UG/G)   3.317E-04
               SOIL AIR (UG/ML)       4.772E-04
          SUBLAYER  2
               SOIL MOISTURE (UG/ML)  2.160E-03
               ADSORBED SOIL (UG/G)   3.500E-04
               SOIL AIR (UG/ML)       5.035E-04

               MAX. POLL. DEPTH (M)   1.067E+00

     YEAR -   4    MONTHLY RESULTS (OUTPUT)
     ========    ========================
     -- HYDROLOGIC CYCLE COMPONENTS --
                      OCT      NOV      DEC      JAN      FEB      MAR      APR      MAY      JUN      JUL      AUG      SEP

MOIS. IN L1 (%)      25.087   26.356   28.612   28.753   28.001   27.296   25.933   26.356   26.967   28.001   28.095   27.860
MOIS. BELOW L1 (%)   25.087   26.356   28.612   28.753   28.001   27.296   25.933   26.356   26.967   28.001   28.095   27.860
PRECIPATION (CM)      5.722    4.855    7.244    7.487    8.085    9.910    8.368   11.054   14.182   18.155   17.320   13.818
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NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:												
SUBLAYER 1												
VOLATILIZED	2.095E+04	1.318E+04	6.151E+03	4.233E+03	3.600E+03	3.013E+03	2.827E+03	1.873E+03	1.162E+03	6.481E+02	4.599E+02	3.854E+02
IN SOIL MOI	8.179E+02	6.200E+02	4.449E+02	3.253E+02	2.401E+02	1.736E+02	1.280E+02	9.137E+01	6.478E+01	4.396E+01	3.326E+01	2.707E+01
ADS ON SOIL	7.395E+02	5.336E+02	3.527E+02	2.566E+02	1.945E+02	1.443E+02	1.120E+02	7.863E+01	5.448E+01	3.560E+01	2.685E+01	2.204E+01
IN SOIL AIR	1.639E+02	1.135E+02	6.769E+01	4.943E+01	3.890E+01	2.972E+01	2.390E+01	1.622E+01	1.079E+01	6.663E+00	5.002E+00	4.183E+00
SUBLAYER 2												
DIFFUSED UP	2.215E+04	1.323E+04	6.393E+03	4.552E+03	3.892E+03	3.283E+03	3.005E+03	2.017E+03	1.312E+03	7.847E+02	5.676E+02	4.581E+02
IN SOIL MOI	1.652E+03	1.245E+03	9.198E+02	6.763E+02	4.985E+02	3.626E+02	2.624E+02	1.907E+02	1.389E+02	9.845E+01	7.431E+01	5.885E+01
ADS ON SOIL	1.494E+03	1.072E+03	7.291E+02	5.335E+02	4.037E+02	3.013E+02	2.295E+02	1.641E+02	1.168E+02	7.974E+01	5.999E+01	4.791E+01
IN SOIL AIR	3.310E+02	2.279E+02	1.399E+02	1.028E+02	8.077E+01	6.207E+01	4.899E+01	3.385E+01	2.315E+01	1.492E+01	1.118E+01	9.093E+00
SOIL ZONE 2:												
SUBLAYER 1												
DIFFUSED UP	2.224E+04	1.256E+04	6.218E+03	4.587E+03	3.945E+03	3.341E+03	3.002E+03	2.026E+03	1.369E+03	8.681E+02	6.437E+02	5.056E+02
IN SOIL MOI	4.287E+03	3.208E+03	2.448E+03	1.814E+03	1.334E+03	9.762E+02	6.918E+02	5.126E+02	3.854E+02	2.870E+02	2.163E+02	1.660E+02
ADS ON SOIL	3.875E+03	2.760E+03	1.941E+03	1.431E+03	1.081E+03	8.111E+02	6.050E+02	4.411E+02	3.241E+02	2.324E+02	1.746E+02	1.352E+02
IN SOIL AIR	8.587E+02	5.871E+02	3.725E+02	2.756E+02	2.162E+02	1.671E+02	1.291E+02	9.101E+01	6.420E+01	4.350E+01	3.252E+01	2.565E+01
SUBLAYER 2												
DIFFUSED UP	1.928E+04	1.017E+04	5.175E+03	3.976E+03	3.441E+03	2.924E+03	2.573E+03	1.743E+03	1.233E+03	8.370E+02	6.427E+02	4.911E+02
IN SOIL MOI	5.772E+03	4.291E+03	3.364E+03	2.511E+03	1.844E+03	1.355E+03	9.433E+02	7.100E+02	5.480E+02	4.258E+02	3.210E+02	2.401E+02
ADS ON SOIL	5.218E+03	3.693E+03	2.667E+03	1.981E+03	1.494E+03	1.126E+03	8.250E+02	6.110E+02	4.609E+02	3.449E+02	2.592E+02	1.955E+02
IN SOIL AIR	1.156E+03	7.854E+02	5.119E+02	3.816E+02	2.988E+02	2.319E+02	1.761E+02	1.261E+02	9.130E+01	6.454E+01	4.828E+01	3.710E+01
LOWER SOIL ZONE:												
SUBLAYER 1												
DIFFUSED UP	1.261E+04	6.338E+03	3.346E+03	2.650E+03	2.289E+03	1.941E+03	1.671E+03	1.139E+03	8.368E+02	6.041E+02	4.758E+02	3.542E+02
IN SOIL MOI	4.264E+03	3.161E+03	2.512E+03	1.882E+03	1.380E+03	1.015E+03	7.007E+02	5.311E+02	4.151E+02	3.294E+02	2.485E+02	1.835E+02
ADS ON SOIL	3.855E+03	2.720E+03	1.991E+03	1.484E+03	1.118E+03	8.432E+02	6.128E+02	4.571E+02	3.491E+02	2.668E+02	2.006E+02	1.494E+02
IN SOIL AIR	8.542E+02	5.785E+02	3.822E+02	2.859E+02	2.236E+02	1.737E+02	1.308E+02	9.430E+01	6.916E+01	4.994E+01	3.737E+01	2.836E+01
SUBLAYER 2												
DIFFUSED UP	6.711E+03	3.265E+03	1.767E+03	1.427E+03	1.227E+03	1.035E+03	8.809E+02	5.996E+02	4.489E+02	3.355E+02	2.680E+02	1.966E+02
IN SOIL MOI	4.479E+03	3.316E+03	2.656E+03	1.994E+03	1.460E+03	1.074E+03	7.383E+02	5.617E+02	4.420E+02	3.551E+02	2.679E+02	1.965E+02
ADS ON SOIL	4.050E+03	2.853E+03	2.106E+03	1.573E+03	1.183E+03	8.926E+02	6.457E+02	4.834E+02	3.718E+02	2.876E+02	2.162E+02	1.599E+02

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IN SOIL AIR 8.973E+02 6.069E+02 4.042E+02 3.029E+02 2.366E+02 1.839E+02 1.378E+02 9.973E+01 7.364E+01 5.382E+01 4.028E+01 3.036E+01
GWR. RUNOFF 0.000E+00 1.277E+02 2.823E+03 2.089E+03 1.002E+03 4.493E+02 0.000E+00 6.374E+01 1.896E+02 3.836E+02 3.106E+02 1.853E+02

     -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --
     ---------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
MOISTURE    3.396E-05 2.450E-05 1.620E-05 1.178E-05 8.930E-06 6.626E-06 5.142E-06 3.611E-06 2.502E-06 1.635E-06 1.233E-06 1.012E-06
%SOLUBILITY 1.908E-06 1.377E-06 9.098E-07 6.620E-07 5.017E-07 3.722E-07 2.889E-07 2.029E-07 1.406E-07 9.185E-08 6.927E-08 5.685E-08
ADSORBED    5.501E-06 3.969E-06 2.624E-06 1.909E-06 1.447E-06 1.073E-06 8.330E-07 5.850E-07 4.053E-07 2.649E-07 1.997E-07 1.639E-07
SOIL AIR    7.788E-06 5.726E-06 3.834E-06 2.821E-06 2.133E-06 1.571E-06 1.182E-06 8.185E-07 5.611E-07 3.653E-07 2.756E-07 2.276E-07

          SUBLAYER  2
MOISTURE    6.860E-05 4.921E-05 3.348E-05 2.450E-05 1.854E-05 1.384E-05 1.054E-05 7.535E-06 5.366E-06 3.662E-06 2.755E-06 2.200E-06
%SOLUBILITY 3.854E-06 2.764E-06 1.881E-06 1.376E-06 1.042E-06 7.773E-07 5.921E-07 4.233E-07 3.015E-07 2.057E-07 1.548E-07 1.236E-07
ADSORBED    1.111E-05 7.972E-06 5.424E-06 3.969E-06 3.004E-06 2.241E-06 1.707E-06 1.221E-06 8.693E-07 5.932E-07 4.463E-07 3.564E-07
SOIL AIR    1.573E-05 1.150E-05 7.927E-06 5.866E-06 4.428E-06 3.281E-06 2.422E-06 1.708E-06 1.203E-06 8.181E-07 6.157E-07 4.948E-07

     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE    1.186E-04 8.451E-05 5.942E-05 4.380E-05 3.309E-05 2.483E-05 1.852E-05 1.350E-05 9.923E-06 7.116E-06 5.345E-06 4.138E-06
%SOLUBILITY 6.666E-06 4.748E-06 3.338E-06 2.461E-06 1.859E-06 1.395E-06 1.041E-06 7.587E-07 5.575E-07 3.998E-07 3.003E-07 2.325E-07
ADSORBED    1.922E-05 1.369E-05 9.626E-06 7.096E-06 5.360E-06 4.023E-06 3.001E-06 2.188E-06 1.608E-06 1.153E-06 8.659E-07 6.704E-07
SOIL AIR    2.721E-05 1.975E-05 1.407E-05 1.049E-05 7.901E-06 5.888E-06 4.256E-06 3.061E-06 2.225E-06 1.590E-06 1.195E-06 9.306E-07

          SUBLAYER  2
MOISTURE    1.598E-04 1.130E-04 8.165E-05 6.065E-05 4.573E-05 3.446E-05 2.526E-05 1.871E-05 1.411E-05 1.056E-05 7.934E-06 5.984E-06
%SOLUBILITY 8.975E-06 6.351E-06 4.587E-06 3.407E-06 2.569E-06 1.936E-06 1.419E-06 1.051E-06 7.928E-07 5.931E-07 4.457E-07 3.362E-07
ADSORBED    2.588E-05 1.831E-05 1.323E-05 9.825E-06 7.409E-06 5.583E-06 4.092E-06 3.030E-06 2.286E-06 1.710E-06 1.285E-06 9.694E-07
SOIL AIR    3.664E-05 2.642E-05 1.933E-05 1.452E-05 1.092E-05 8.172E-06 5.804E-06 4.240E-06 3.164E-06 2.359E-06 1.773E-06 1.346E-06

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE    1.770E-04 1.249E-04 9.144E-05 6.816E-05 5.132E-05 3.872E-05 2.814E-05 2.099E-05 1.603E-05 1.225E-05 9.212E-06 6.861E-06
%SOLUBILITY 9.945E-06 7.017E-06 5.137E-06 3.829E-06 2.883E-06 2.175E-06 1.581E-06 1.179E-06 9.007E-07 6.884E-07 5.175E-07 3.854E-07
ADSORBED    2.868E-05 2.023E-05 1.481E-05 1.104E-05 8.314E-06 6.273E-06 4.559E-06 3.400E-06 2.597E-06 1.985E-06 1.492E-06 1.111E-06
SOIL AIR    4.060E-05 2.919E-05 2.165E-05 1.632E-05 1.226E-05 9.182E-06 6.467E-06 4.758E-06 3.595E-06 2.737E-06 2.059E-06 1.543E-06

          SUBLAYER  2
MOISTURE    1.860E-04 1.310E-04 9.670E-05 7.222E-05 5.431E-05 4.099E-05 2.965E-05 2.220E-05 1.707E-05 1.321E-05 9.930E-06 7.345E-06
%SOLUBILITY 1.045E-05 7.361E-06 5.433E-06 4.057E-06 3.051E-06 2.303E-06 1.666E-06 1.247E-06 9.591E-07 7.420E-07 5.579E-07 4.126E-07
ADSORBED    3.013E-05 2.123E-05 1.567E-05 1.170E-05 8.798E-06 6.641E-06 4.803E-06 3.596E-06 2.766E-06 2.140E-06 1.609E-06 1.190E-06
SOIL AIR    4.265E-05 3.062E-05 2.289E-05 1.729E-05 1.297E-05 9.720E-06 6.813E-06 5.032E-06 3.828E-06 2.951E-06 2.219E-06 1.652E-06

POL DEP CM  1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02

                         YEAR -   4 ANNUAL SUMMARY REPORT
                          ==================================
      -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

         -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
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TOTAL SURFACE RUNOFF (CM)                    2.302
TOTAL GRW RUNOFF (CM)                       24.616
TOTAL MOISTURE RETENTION (CM)                0.003
TOTAL YIELD (CM)                            26.918

        -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
         ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
-------------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED              5.848E+04
          SUBLAYER  2
               TOTAL DIFFUSED (UP)            6.165E+04
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)            6.131E+04

          SUBLAYER  2
               TOTAL DIFFUSED (UP)            5.249E+04
     LOWER SOIL ZONE:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)            3.425E+04
          SUBLAYER  2
               TOTAL DIFFUSED (UP)            1.816E+04
               TOTAL IN GROUNDWATER RUNOFF    7.624E+03

                    -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                     ------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
               SOIL MOISTURE (UG/ML)  9.761E-06
               ADSORBED SOIL (UG/G)   1.581E-06
               SOIL AIR (UG/ML)       2.275E-06
          SUBLAYER  2
               SOIL MOISTURE (UG/ML)  2.002E-05
               ADSORBED SOIL (UG/G)   3.243E-06
               SOIL AIR (UG/ML)       4.666E-06
     SOIL ZONE 2:
          SUBLAYER  1
               SOIL MOISTURE (UG/ML)  3.524E-05
               ADSORBED SOIL (UG/G)   5.708E-06
               SOIL AIR (UG/ML)       8.213E-06
          SUBLAYER  2
               SOIL MOISTURE (UG/ML)  4.815E-05
               ADSORBED SOIL (UG/G)   7.801E-06
               SOIL AIR (UG/ML)       1.122E-05
     LOWER SOIL ZONE:
          SUBLAYER  1
               SOIL MOISTURE (UG/ML)  5.376E-05
               ADSORBED SOIL (UG/G)   8.708E-06
               SOIL AIR (UG/ML)       1.253E-05
          SUBLAYER  2
               SOIL MOISTURE (UG/ML)  5.672E-05
               ADSORBED SOIL (UG/G)   9.188E-06
               SOIL AIR (UG/ML)       1.322E-05

               MAX. POLL. DEPTH (M)   1.067E+00
```

YEAR - 5 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
UPPER SOIL ZONE:												
SUBLAYER 1												
VOLATILIZED	5.461E+02	3.425E+02	1.591E+02	1.087E+02	9.191E+01	7.632E+01	7.094E+01	4.647E+01	2.808E+01	1.517E+01	1.056E+01	8.792E+00
IN SOIL MOI	2.129E+01	1.609E+01	1.146E+01	8.337E+00	6.103E+00	4.350E+00	3.187E+00	2.277E+00	1.553E+00	1.075E+00	8.092E-01	5.885E-01
ADS ON SOIL	1.925E+01	1.385E+01	9.080E+00	6.576E+00	4.943E+00	3.615E+00	2.787E+00	1.960E+00	1.307E+00	8.710E-01	6.533E-01	4.791E-01
IN SOIL AIR	4.265E+00	2.946E+00	1.743E+00	1.267E+00	9.889E-01	7.447E-01	5.949E-01	4.043E-01	2.588E-01	1.630E-01	1.217E-01	9.093E-02
SUBLAYER 2												
DIFFUSED UP	5.781E+02	3.443E+02	1.659E+02	1.175E+02	9.996E+01	8.379E+01	7.610E+01	5.042E+01	3.213E+01	1.868E+01	1.311E+01	1.036E+01
IN SOIL MOI	4.304E+01	3.234E+01	2.373E+01	1.739E+01	1.269E+01	9.172E+00	6.573E+00	4.707E+00	3.340E+00	2.339E+00	1.699E+00	1.337E+00
ADS ON SOIL	3.891E+01	2.783E+01	1.881E+01	1.372E+01	1.028E+01	7.621E+00	5.749E+00	4.050E+00	2.809E+00	1.894E+00	1.372E+00	1.089E+00
IN SOIL AIR	8.623E+00	5.919E+00	3.611E+00	2.643E+00	2.056E+00	1.570E+00	1.227E+00	8.357E-01	5.564E-01	3.546E-01	2.556E-01	2.067E-01
SOIL ZONE 2:												
SUBLAYER 1												
DIFFUSED UP	5.808E+02	3.275E+02	1.618E+02	1.188E+02	1.017E+02	8.574E+01	7.639E+01	5.101E+01	3.380E+01	2.107E+01	1.501E+01	1.141E+01
IN SOIL MOI	1.117E+02	8.339E+01	6.337E+01	4.675E+01	3.416E+01	2.484E+01	1.744E+01	1.272E+01	9.321E+00	6.775E+00	4.977E+00	3.651E+00
ADS ON SOIL	1.010E+02	7.176E+01	5.024E+01	3.688E+01	2.767E+01	2.064E+01	1.525E+01	1.094E+01	7.839E+00	5.487E+00	4.018E+00	2.972E+00
IN SOIL AIR	2.239E+01	1.526E+01	9.642E+00	7.104E+00	5.535E+00	4.253E+00	3.256E+00	2.258E+00	1.553E+00	1.027E+00	7.484E-01	5.642E-01
SUBLAYER 2												
DIFFUSED UP	5.034E+02	2.649E+02	1.345E+02	1.031E+02	8.874E+01	7.498E+01	6.562E+01	4.389E+01	3.030E+01	2.021E+01	1.512E+01	1.055E+01
IN SOIL MOI	1.505E+02	1.116E+02	8.719E+01	6.476E+01	4.726E+01	3.451E+01	2.383E+01	1.765E+01	1.328E+01	1.008E+01	7.364E+00	5.216E+00
ADS ON SOIL	1.360E+02	9.603E+01	6.912E+01	5.109E+01	3.828E+01	2.868E+01	2.084E+01	1.519E+01	1.117E+01	8.166E+00	5.945E+00	4.246E+00
IN SOIL AIR	3.015E+01	2.043E+01	1.327E+01	9.841E+00	7.658E+00	5.908E+00	4.448E+00	3.134E+00	2.213E+00	1.528E+00	1.107E+00	8.059E-01

LOWER SOIL ZONE:

SUBLAYER 1

DIFFUSED UP	3.290E+02	1.650E+02	8.667E+01	6.855E+01	5.879E+01	4.923E+01	4.246E+01	2.816E+01	2.029E+01	1.446E+01	1.101E+01	7.491E+00
IN SOIL MOI	1.111E+02	8.216E+01	6.511E+01	4.853E+01	3.533E+01	2.587E+01	1.770E+01	1.318E+01	1.005E+01	7.796E+00	5.665E+00	3.959E+00
ADS ON SOIL	1.005E+02	7.071E+01	5.161E+01	3.828E+01	2.861E+01	2.149E+01	1.548E+01	1.135E+01	8.449E+00	6.315E+00	4.573E+00	3.223E+00
IN SOIL AIR	2.226E+01	1.504E+01	9.905E+00	7.374E+00	5.724E+00	4.428E+00	3.305E+00	2.341E+00	1.674E+00	1.182E+00	8.519E-01	6.117E-01

SUBLAYER 2

DIFFUSED UP	1.751E+02	8.485E+01	4.587E+01	3.704E+01	3.140E+01	2.615E+01	2.249E+01	1.497E+01	1.082E+01	8.071E+00	6.269E+00	4.379E+00
IN SOIL MOI	1.167E+02	8.619E+01	6.881E+01	5.143E+01	3.737E+01	2.736E+01	1.862E+01	1.392E+01	1.072E+01	8.415E+00	6.069E+00	4.226E+00
ADS ON SOIL	1.055E+02	7.417E+01	5.455E+01	4.057E+01	3.027E+01	2.273E+01	1.629E+01	1.198E+01	9.015E+00	6.816E+00	4.899E+00	3.441E+00
IN SOIL AIR	2.339E+01	1.578E+01	1.047E+01	7.815E+00	6.055E+00	4.683E+00	3.477E+00	2.471E+00	1.786E+00	1.276E+00	9.127E-01	6.530E-01
GWR. RUNOFF	0.000E+00	3.325E+00	7.328E+01	5.402E+01	2.576E+01	1.147E+01	0.000E+00	1.595E+00	4.640E+00	9.203E+00	7.228E+00	4.102E+00

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --

UPPER SOIL ZONE:

SUBLAYER 1

MOISTURE	8.840E-07	6.360E-07	4.170E-07	3.020E-07	2.270E-07	1.660E-07	1.280E-07	9.000E-08	6.000E-08	4.000E-08	3.000E-08	2.200E-08
%SOLUBILITY	4.966E-08	3.573E-08	2.343E-08	1.697E-08	1.275E-08	9.326E-09	7.191E-09	5.056E-09	3.371E-09	2.247E-09	1.685E-09	1.236E-09
ADSORBED	1.432E-07	1.030E-07	6.755E-08	4.892E-08	3.677E-08	2.689E-08	2.074E-08	1.458E-08	9.720E-09	6.480E-09	4.860E-09	3.564E-09
SOIL AIR	2.027E-07	1.486E-07	9.872E-08	7.231E-08	5.421E-08	3.936E-08	2.941E-08	2.040E-08	1.346E-08	8.936E-09	6.704E-09	4.948E-09

SUBLAYER 2

MOISTURE	1.787E-06	1.278E-06	8.640E-07	6.300E-07	4.720E-07	3.500E-07	2.640E-07	1.860E-07	1.290E-07	8.700E-08	6.300E-08	5.000E-08
%SOLUBILITY	1.004E-07	7.180E-08	4.854E-08	3.539E-08	2.652E-08	1.966E-08	1.483E-08	1.045E-08	7.247E-09	4.888E-09	3.539E-09	2.809E-09
ADSORBED	2.895E-07	2.070E-07	1.400E-07	1.021E-07	7.646E-08	5.670E-08	4.277E-08	3.013E-08	2.090E-08	1.409E-08	1.021E-08	8.100E-09
SOIL AIR	4.098E-07	2.986E-07	2.045E-07	1.508E-07	1.127E-07	8.299E-08	6.066E-08	4.216E-08	2.893E-08	1.944E-08	1.408E-08	1.124E-08

SOIL ZONE 2:

SUBLAYER 1

MOISTURE	3.093E-06	2.197E-06	1.538E-06	1.129E-06	8.470E-07	6.320E-07	4.670E-07	3.350E-07	2.400E-07	1.680E-07	1.230E-07	9.100E-08
%SOLUBILITY	1.738E-07	1.234E-07	8.640E-08	6.343E-08	4.758E-08	3.551E-08	2.624E-08	1.882E-08	1.348E-08	9.438E-09	6.910E-09	5.112E-09
ADSORBED	5.011E-07	3.559E-07	2.492E-07	1.829E-07	1.372E-07	1.024E-07	7.565E-08	5.427E-08	3.888E-08	2.722E-08	1.993E-08	1.474E-08
SOIL AIR	7.093E-07	5.134E-07	3.641E-07	2.703E-07	2.023E-07	1.499E-07	1.073E-07	7.593E-08	5.382E-08	3.753E-08	2.749E-08	2.047E-08

SUBLAYER 2

MOISTURE	4.165E-06	2.940E-06	2.116E-06	1.564E-06	1.172E-06	8.780E-07	6.380E-07	4.650E-07	3.420E-07	2.500E-07	1.820E-07	1.300E-07
%SOLUBILITY	2.340E-07	1.652E-07	1.189E-07	8.787E-08	6.584E-08	4.933E-08	3.584E-08	2.612E-08	1.921E-08	1.404E-08	1.022E-08	7.303E-09
ADSORBED	6.747E-07	4.763E-07	3.428E-07	2.534E-07	1.899E-07	1.422E-07	1.034E-07	7.533E-08	5.540E-08	4.050E-08	2.948E-08	2.106E-08
SOIL AIR	9.552E-07	6.870E-07	5.009E-07	3.745E-07	2.799E-07	2.082E-07	1.466E-07	1.054E-07	7.669E-08	5.585E-08	4.067E-08	2.924E-08

LOWER SOIL ZONE:

SUBLAYER 1

MOISTURE	4.614E-06	3.247E-06	2.370E-06	1.758E-06	1.314E-06	9.870E-07	7.110E-07	5.210E-07	3.880E-07	2.900E-07	2.100E-07	1.480E-07
%SOLUBILITY	2.592E-07	1.824E-07	1.331E-07	9.876E-08	7.382E-08	5.545E-08	3.994E-08	2.927E-08	2.180E-08	1.629E-08	1.180E-08	8.315E-09
ADSORBED	7.475E-07	5.260E-07	3.839E-07	2.848E-07	2.129E-07	1.599E-07	1.152E-07	8.440E-08	6.286E-08	4.698E-08	3.402E-08	2.398E-08
SOIL AIR	1.058E-06	7.587E-07	5.611E-07	4.209E-07	3.138E-07	2.340E-07	1.634E-07	1.181E-07	8.701E-08	6.479E-08	4.693E-08	3.329E-08

SUBLAYER 2

MOISTURE	4.847E-06	3.406E-06	2.505E-06	1.863E-06	1.390E-06	1.044E-06	7.480E-07	5.500E-07	4.140E-07	3.130E-07	2.250E-07	1.580E-07
%SOLUBILITY	2.723E-07	1.913E-07	1.407E-07	1.047E-07	7.809E-08	5.865E-08	4.202E-08	3.090E-08	2.326E-08	1.758E-08	1.264E-08	8.876E-09
ADSORBED	7.852E-07	5.518E-07	4.058E-07	3.018E-07	2.252E-07	1.691E-07	1.212E-07	8.910E-08	6.707E-08	5.071E-08	3.645E-08	2.560E-08
SOIL AIR	1.112E-06	7.959E-07	5.930E-07	4.460E-07	3.319E-07	2.476E-07	1.719E-07	1.247E-07	9.284E-08	6.993E-08	5.028E-08	3.553E-08

POL DEP CM	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02

YEAR - 5 ANNUAL SUMMARY REPORT

-- TOTAL INPUTS (UG) --

UPPER SOIL ZONE	0.000E+00
SOIL ZONE 2	0.000E+00
LOWER SOIL ZONE	0.000E+00

-- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)	27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)	27.276
TOTAL PRECIPITATION (CM)	126.201
TOTAL INFILTRATION (CM)	123.899
TOTAL EVAPOTRANSPIRATION (CM)	99.280
TOTAL SURFACE RUNOFF (CM)	2.302
TOTAL GRW RUNOFF (CM)	24.616
TOTAL MOISTURE RETENTION (CM)	0.003
TOTAL YIELD (CM)	26.918

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)

UPPER SOIL ZONE:	
SUBLAYER 1	
TOTAL VOLATILIZED	1.505E+03
SUBLAYER 2	
TOTAL DIFFUSED (UP)	1.590E+03
SOIL ZONE 2:	
SUBLAYER 1	
TOTAL DIFFUSED (UP)	1.585E+03
SUBLAYER 2	
TOTAL DIFFUSED (UP)	1.355E+03
LOWER SOIL ZONE:	
SUBLAYER 1	
TOTAL DIFFUSED (UP)	8.812E+02
SUBLAYER 2	
TOTAL DIFFUSED (UP)	4.674E+02
TOTAL IN GROUNDWATER RUNOFF	1.946E+02

-- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON-ZERO VALUES ARE PRINTED --

UPPER SOIL ZONE:	
SUBLAYER 1	
SOIL MOISTURE (UG/ML)	2.502E-07
ADSORBED SOIL (UG/G)	4.053E-08
SOIL AIR (UG/ML)	5.832E-08
SUBLAYER 2	
SOIL MOISTURE (UG/ML)	5.133E-07
ADSORBED SOIL (UG/G)	8.316E-08
SOIL AIR (UG/ML)	1.197E-07
SOIL ZONE 2:	
SUBLAYER 1	
SOIL MOISTURE (UG/ML)	9.050E-07
ADSORBED SOIL (UG/G)	1.466E-07
SOIL AIR (UG/ML)	2.110E-07
SUBLAYER 2	
SOIL MOISTURE (UG/ML)	1.237E-06
ADSORBED SOIL (UG/G)	2.004E-07

```
      SOIL AIR (UG/ML)          2.883E-07
   LOWER SOIL ZONE:
      SUBLAYER  1
         SOIL MOISTURE (UG/ML)  1.380E-06
         ADSORBED SOIL (UG/G)   2.235E-07
         SOIL AIR (UG/ML)       3.217E-07
      SUBLAYER  2
         SOIL MOISTURE (UG/ML)  1.455E-06
         ADSORBED SOIL (UG/G)   2.358E-07
         SOIL AIR (UG/ML)       3.393E-07

         MAX. POLL. DEPTH (M)   1.067E+00

**********EXECUTION COMPLETED**********
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**********************************************************************************************************
*****                                                                                                 *****
***** SESOIL-84 :  SEASONAL CYCLES OF WATER, SEDIMENT, AND POLLUTANTS IN SOIL ENVIRONMENTS            *****
*****                                                                                                 *****
***** DEVELOPERS:  M. BONAZOUNTAS,ARTHUR D. LITTLE INC.  ,(617)864-5770,X5871                        *****
*****             J. WAGNER     ,DIS/ADLPIPE, INC.      ,(617)492-1991,X5820                        *****
*****                                                                                                 *****
***** MODIFIED EXTENSIVELY BY:                                                                       *****
***** D.M. HETRICK                                                                                   *****
***** OAK RIDGE NATIONAL LABORATORY                                                                  *****
***** (615) 576-7556                                                                                 *****
***** VERSION   :  JANUARY 1995                                                                      *****
*****                                                                                                 *****
**********************************************************************************************************

                      ****** MONTHLY SESOIL MODEL OPERATION ******
                             MONTHLY SITE SPECIFIC SIMULATION

REGION          :      SAVANNAH WSO AP
SOIL TYPE       :      Siltysand
COMPOUND        :      Naphthalene
WASHLOAD DATA   :
APPLICATION AREA:      HAAF USTs 25 & 26: Naphthalene

     GENERAL INPUT PARAMETERS
     ========================
     -- SOIL INPUT PARAMETERS --
SOIL DENSITY (G/CM**3):                                  1.40
INTRINSIC PERMEABILITY (CM**2):                          .300E-08
DISCONNECTEDNESS INDEX (-):                              9.00
POROSITY (-):                                            .470
ORGANIC CARBON CONTENT (%):                              .200
CATION EXCHANGE CAPACITY (MILLI EQ./100G DRY SOIL):      .000
FREUNDLICH EXPONENT (-):                                 1.00

     -- CHEMICAL INPUT PARAMETERS --
SOLUBILITY (UG/ML):                                      30.0
DIFFUSION COEFFICIENT IN AIR (CM**2/SEC):                .590E-01
HENRYS LAW CONSTANT (M**3-ATM/MOLE):                     .483E-03
ADSORPTION COEFFICIENT ON ORGANIC CARBON(KOC):           .119E+04
ADSORPTION COEFFICIENT ON SOIL (K):                      .000
MOLECULAR  WEIGHT (G/MOL):                               128.
VALENCE (-):                                             .000
NEUTRAL HYDROLYSIS CONSTANT (/DAY):                      .000
BASE HYDROLYSIS CONSTANT (L/MOL-DAY):                    .000
ACID HYDROLYSIS CONSTANT (L/MOL-DAY):                    .000
DEGRADATION RATE IN MOISTURE (/DAY):                     .000
DEGRADATION RATE ON SOIL (/DAY):                         .000
LIGAND-POLLUTANT STABILITY CONSTANT (-):                 .000
NO. MOLES LIGAND/MOLE POLLUTANT (-):                     .000
LIGAND MOLECULAR WEIGHT (G/MOL):                         .000

     -- APPLICATION INPUT PARAMETERS --
NUMBER OF SOIL LAYERS:                                     3
YEARS TO BE SIMULATED:                                    30
AREA (CM**2):                                        0.630E+07
APPLICATION AREA LATITUDE (DEG.):                         32.1
SPILL (1) OR STEADY APPLICATION (0):                       1
MODIFIED SUMMERS MODEL USED (1) OR NOT (0) FOR GWR. CONC.:  0
```

INITIAL CHEMICAL CONCENTRATIONS GIVEN (1) OR NOT GIVEN (0)	1		
DEPTHS (CM):	30.	46.	30.
NUMBER OF SUBLAYERS/LAYER	2	2	2
PH (CM):	7.0	7.0	7.0
INTRINSIC PERMEABILITIES (CM**2):	0.00	0.00	0.00
KDEL RATIOS (-):	1.0	1.0	
KDES RATIOS (-):	1.0	1.0	
OC RATIOS (-):	1.0	1.0	
CEC RATIOS (-):	1.0	1.0	
FRN RATIOS(-):	1.0	1.0	
ADS RATIOS(-):	1.0	1.0	

YEAR - 1 MONTHLY INPUT PARAMETERS

-- CLIMATIC INPUT PARAMETERS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TEMP. (DEG C)	20.170	14.830	11.170	10.830	11.940	15.000	19.330	23.170	26.220	27.280	27.170	24.940
CLOUD CVR (FRAC.)	0.500	0.500	0.550	0.550	0.550	0.550	0.500	0.500	0.600	0.600	0.600	0.600
REL. HUM.(FRAC.)	0.750	0.750	0.750	0.750	0.700	0.700	0.700	0.700	0.700	0.800	0.800	0.800
ALBEDO (-)	0.140	0.140	0.140	0.140	0.140	0.140	0.140	0.140	0.140	0.140	0.140	0.140
EVAPOT. (CM/DAY)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
PRECIP. (CM)	5.700	4.850	7.240	7.550	8.020	9.830	8.300	11.140	14.220	18.200	17.440	13.780
M.TIME RAIN(DAYS)	0.440	0.380	0.440	0.480	0.440	0.370	0.370	0.310	0.290	0.260	0.290	0.380
M. STORM NO. (-)	3.170	3.080	4.970	4.970	5.140	5.690	4.260	5.490	7.360	9.560	7.920	6.390
M. SEASON (DAYS)	30.400	30.400	30.400	30.400	30.400	30.400	30.400	30.400	30.400	30.400	30.400	30.400

INITIAL POLLUTANT CONCENTRATIONS IN UG/ML,INPUT FOR MONTH 1 OF YEAR 1

LAYER 1:

SUBLAYER	1	2
INITIAL CONC. (UG/ML)	1.40E+02	1.40E+02

LAYER 2:

SUBLAYER	1	2
INITIAL CONC. (UG/ML)	1.40E+02	1.40E+02

LAYER 3:

SUBLAYER	1	2
INITIAL CONC. (UG/ML)	0.00E+00	0.00E+00

-- POLLUTANT INPUT PARAMETERS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
POL. INP-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRNSFORMD-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SINKS-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LIG.INPUT-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VOLATILIZATION MULT.-1	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
SURFACE RUNOFF MULT.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
POL. IN RAIN (FRAC-SL)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
POL. INP-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRNSFORMD-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SINKS-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LIG.INPUT-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VOLATILIZATION MULT.-2	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
POL. INP-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRNSFORMD-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

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SINKS-L (UG/CM**2)      0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
LIG.INPUT-L (UG/CM**2) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
VOLATILIZATION MULT.-L 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00

     YEAR -   2    MONTHLY INPUT PARAMETERS
     ========    ========================
     -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
     -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

     YEAR -   3    MONTHLY INPUT PARAMETERS
     ========    ========================
     -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
     -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

     YEAR -   4    MONTHLY INPUT PARAMETERS
     ========    ========================
     -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
     -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

     YEAR -   5    MONTHLY INPUT PARAMETERS
     ========    ========================
     -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
     -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

     YEAR -   6    MONTHLY INPUT PARAMETERS
     ========    ========================
     -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
     -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

     YEAR -   7    MONTHLY INPUT PARAMETERS
     ========    ========================
     -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
     -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

     YEAR -   8    MONTHLY INPUT PARAMETERS
     ========    ========================
     -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
     -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

     YEAR -   9    MONTHLY INPUT PARAMETERS
     ========    ========================
     -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
     -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

     YEAR -  10    MONTHLY INPUT PARAMETERS
     ========    ========================
     -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
     -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

     YEAR -  11    MONTHLY INPUT PARAMETERS
     ========    ========================
     -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
     -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

     YEAR -  12    MONTHLY INPUT PARAMETERS
     ========    ========================
     -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
     -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR
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YEAR - 13    MONTHLY INPUT PARAMETERS
========     ========================
-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

YEAR - 14    MONTHLY INPUT PARAMETERS
========     ========================
-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

YEAR - 15    MONTHLY INPUT PARAMETERS
========     ========================
-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

YEAR - 16    MONTHLY INPUT PARAMETERS
========     ========================
-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

YEAR - 17    MONTHLY INPUT PARAMETERS
========     ========================
-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

YEAR - 18    MONTHLY INPUT PARAMETERS
========     ========================
-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

YEAR - 19    MONTHLY INPUT PARAMETERS
========     ========================
-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

YEAR - 20    MONTHLY INPUT PARAMETERS
========     ========================
-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

YEAR - 21    MONTHLY INPUT PARAMETERS
========     ========================
-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

YEAR - 22    MONTHLY INPUT PARAMETERS
========     ========================
-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR
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YEAR - 23 MONTHLY INPUT PARAMETERS
-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

YEAR - 24 MONTHLY INPUT PARAMETERS
-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

YEAR - 25 MONTHLY INPUT PARAMETERS
-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

YEAR - 26 MONTHLY INPUT PARAMETERS
-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

YEAR - 27 MONTHLY INPUT PARAMETERS
-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

YEAR - 28 MONTHLY INPUT PARAMETERS
-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

YEAR - 29 MONTHLY INPUT PARAMETERS
-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

YEAR - 30 MONTHLY INPUT PARAMETERS
-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

**** WARNING (MONTH 3) - PROBLEM IN HYDRO CYCLE: W EQUALS OR EXCEEDS EP
W SET TO EP

YEAR - 1 MONTHLY RESULTS (OUTPUT)
-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	24.993	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	24.993	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.699	4.864	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.670	4.824	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.030	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.146	0.121	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.213	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.185	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.000	1.003	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

PA/MPA (GZ) 1.000 1.003 1.001 0.992 1.008 1.008 1.008 0.992 0.997 0.998 0.993 1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) - INCLUDES INITIAL POLLUTANT CONCENTRATIONS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	2.684E+10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	4.025E+10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	6.709E+10	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:

SUBLAYER 1

VOLATILIZED	1.103E+09	8.886E+08	5.253E+08	4.386E+08	4.280E+08	4.101E+08	4.343E+08	3.531E+08	2.682E+08	1.801E+08	1.404E+08	1.220E+08
IN SOIL MOI	7.199E+08	7.005E+08	6.373E+08	5.452E+08	4.554E+08	3.784E+08	3.219E+08	2.845E+08	2.414E+08	1.958E+08	1.576E+08	1.336E+08
ADS ON SOIL	9.597E+09	8.856E+09	7.422E+09	6.318E+09	5.419E+09	4.619E+09	4.136E+09	3.597E+09	2.983E+09	2.330E+09	1.869E+09	1.597E+09
IN SOIL AIR	1.265E+07	1.116E+07	8.439E+06	7.209E+06	6.422E+06	5.637E+06	5.230E+06	4.396E+06	3.500E+06	2.583E+06	2.063E+06	1.796E+06
PURE PHASE	8.776E+08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

SUBLAYER 2

DIFFUSED UP	0.000E+00	1.924E+07	1.001E+08	1.779E+08	2.755E+08	3.787E+08	5.209E+08	4.772E+08	3.872E+08	2.907E+08	2.542E+08	2.379E+08
IN SOIL MOI	7.199E+08	7.591E+08	8.241E+08	8.282E+08	8.065E+08	7.862E+08	7.470E+08	6.767E+08	6.053E+08	5.325E+08	4.570E+08	4.006E+08
ADS ON SOIL	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	8.555E+09	7.479E+09	6.337E+09	5.420E+09	4.791E+09
IN SOIL AIR	1.265E+07	1.209E+07	1.091E+07	1.095E+07	1.137E+07	1.171E+07	1.213E+07	1.046E+07	8.776E+06	7.025E+06	5.981E+06	5.386E+06
PURE PHASE	3.274E+09	3.326E+09	3.043E+09	2.576E+09	1.934E+09	1.019E+09	1.980E+07	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

SOIL ZONE 2:

SUBLAYER 1

DIFFUSED UP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.354E+07	8.858E+07	1.249E+08	1.686E+08	2.128E+08
IN SOIL MOI	1.080E+09	1.139E+09	1.236E+09	1.242E+09	1.210E+09	1.179E+09	1.120E+09	1.139E+09	1.165E+09	1.210E+09	1.214E+09	1.204E+09
ADS ON SOIL	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10
IN SOIL AIR	1.898E+07	1.814E+07	1.637E+07	1.643E+07	1.706E+07	1.757E+07	1.820E+07	1.759E+07	1.689E+07	1.596E+07	1.589E+07	1.619E+07
PURE PHASE	4.910E+09	5.042E+09	5.075E+09	5.210E+09	5.464E+09	5.829E+09	6.229E+09	6.514E+09	6.570E+09	6.210E+09	5.567E+09	4.825E+09

SUBLAYER 2

IN SOIL MOI	1.080E+09	1.139E+09	1.236E+09	1.242E+09	1.210E+09	1.179E+09	1.120E+09	1.139E+09	1.165E+09	1.210E+09	1.214E+09	1.204E+09
ADS ON SOIL	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10
IN SOIL AIR	1.898E+07	1.814E+07	1.637E+07	1.643E+07	1.706E+07	1.757E+07	1.820E+07	1.759E+07	1.689E+07	1.596E+07	1.589E+07	1.619E+07
PURE PHASE	5.275E+09	5.685E+09	6.651E+09	7.724E+09	8.754E+09	9.849E+09	1.070E+10	1.174E+10	1.279E+10	1.330E+10	1.380E+10	1.422E+10

LOWER SOIL ZONE:

SUBLAYER 1

IN SOIL MOI	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.869E+07	1.461E+08	2.621E+08	3.526E+08
ADS ON SOIL	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.545E+08	1.738E+09	3.108E+09	4.217E+09
IN SOIL AIR	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.159E+05	1.927E+06	3.430E+06	4.741E+06

SUBLAYER 2

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --

UPPER SOIL ZONE:

SUBLAYER 1

MOISTURE	3.000E+01	2.768E+01	2.320E+01	1.975E+01	1.694E+01	1.444E+01	1.293E+01	1.124E+01	9.324E+00	7.282E+00	5.843E+00	4.993E+00
%SOLUBILITY	1.000E+02	9.227E+01	7.734E+01	6.583E+01	5.647E+01	4.813E+01	4.310E+01	3.748E+01	3.108E+01	2.427E+01	1.948E+01	1.664E+01
ADSORBED	7.140E+01	6.588E+01	5.522E+01	4.700E+01	4.032E+01	3.436E+01	3.077E+01	2.676E+01	2.219E+01	1.733E+01	1.391E+01	1.188E+01
SOIL AIR	5.988E-01	5.629E-01	4.780E-01	4.115E-01	3.521E-01	2.979E-01	2.585E-01	2.218E-01	1.820E-01	1.416E-01	1.136E-01	9.772E-02

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PURE PHASE  9.140E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00

          SUBLAYER  2
MOISTURE    3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 2.674E+01 2.338E+01 1.981E+01 1.694E+01 1.498E+01
%SOLUBILITY 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 8.914E+01 7.793E+01 6.603E+01 5.647E+01 4.992E+01
ADSORBED    7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 6.365E+01 5.564E+01 4.714E+01 4.032E+01 3.564E+01
SOIL AIR    5.988E-01 6.101E-01 6.181E-01 6.251E-01 6.235E-01 6.191E-01 5.999E-01 5.275E-01 4.563E-01 3.851E-01 3.295E-01 2.931E-01
PURE PHASE  3.410E+01 3.464E+01 3.170E+01 2.683E+01 2.014E+01 1.062E+01 2.062E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00

     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE    3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01
%SOLUBILITY 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02
ADSORBED    7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01
SOIL AIR    5.988E-01 6.101E-01 6.181E-01 6.251E-01 6.235E-01 6.191E-01 5.999E-01 5.918E-01 5.855E-01 5.833E-01 5.835E-01 5.872E-01
PURE PHASE  3.410E+01 3.501E+01 3.524E+01 3.618E+01 3.794E+01 4.047E+01 4.325E+01 4.523E+01 4.562E+01 4.312E+01 3.866E+01 3.350E+01

          SUBLAYER  2
MOISTURE    3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01
%SOLUBILITY 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02
ADSORBED    7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01
SOIL AIR    5.988E-01 6.101E-01 6.181E-01 6.251E-01 6.235E-01 6.191E-01 5.999E-01 5.918E-01 5.855E-01 5.833E-01 5.835E-01 5.872E-01
PURE PHASE  3.662E+01 3.947E+01 4.618E+01 5.363E+01 6.079E+01 6.839E+01 7.433E+01 8.154E+01 8.883E+01 9.235E+01 9.582E+01 9.875E+01

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE    0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 1.108E+00 5.434E+00 9.715E+00 1.318E+01
%SOLUBILITY 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 3.693E+00 1.811E+01 3.238E+01 4.394E+01
ADSORBED    0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 2.637E+00 1.293E+01 2.312E+01 3.137E+01
SOIL AIR    0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 2.162E-02 1.057E-01 1.889E-01 2.580E-01

POL DEP CM  6.539E+01 6.608E+01 6.763E+01 6.921E+01 7.067E+01 7.223E+01 7.335E+01 7.490E+01 7.659E+01 7.825E+01 7.994E+01 8.129E+01

                         YEAR -    1 ANNUAL SUMMARY REPORT
                          ==================================
       -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              2.684E+10
SOIL ZONE 2                  4.025E+10
LOWER SOIL ZONE              0.000E+00

          -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.268
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.268
TOTAL PRECIPITATION (CM)                     126.186
TOTAL INFILTRATION (CM)                      123.885
TOTAL EVAPOTRANSPIRATION (CM)                 99.247
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.526
TOTAL MOISTURE RETENTION (CM)                  0.111
TOTAL YIELD (CM)                              26.828

         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
         ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
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     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED              5.292E+09
          SUBLAYER  2
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          TOTAL DIFFUSED (UP)                3.120E+09
     SOIL ZONE 2:
          SUBLAYER  1
          TOTAL DIFFUSED (UP)                6.284E+08
          SUBLAYER  2

     LOWER SOIL ZONE:
          SUBLAYER  1

          SUBLAYER  2

                    -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                     ------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
                                  SOIL MOISTURE (UG/ML)  1.530E+01
                                  ADSORBED SOIL (UG/G)   3.642E+01
                                  SOIL AIR (UG/ML)       3.097E-01
                                  PURE PHASE (UG/ML)     7.617E-01
          SUBLAYER  2
                                  SOIL MOISTURE (UG/ML)  2.599E+01
                                  ADSORBED SOIL (UG/G)   6.185E+01
                                  SOIL AIR (UG/ML)       5.238E-01
                                  PURE PHASE (UG/ML)     1.319E+01
     SOIL ZONE 2:
          SUBLAYER  1
                                  SOIL MOISTURE (UG/ML)  3.000E+01
                                  ADSORBED SOIL (UG/G)   7.140E+01
                                  SOIL AIR (UG/ML)       6.021E-01
                                  PURE PHASE (UG/ML)     3.903E+01
          SUBLAYER  2
                                  SOIL MOISTURE (UG/ML)  3.000E+01
                                  ADSORBED SOIL (UG/G)   7.140E+01
                                  SOIL AIR (UG/ML)       6.021E-01
                                  PURE PHASE (UG/ML)     6.973E+01
     LOWER SOIL ZONE:
          SUBLAYER  1
                                  SOIL MOISTURE (UG/ML)  2.453E+00
                                  ADSORBED SOIL (UG/G)   5.839E+00
                                  SOIL AIR (UG/ML)       4.785E-02

                                  MAX. POLL. DEPTH (M)   8.129E-01

**** WARNING (MONTH 3) - PROBLEM IN HYDRO CYCLE: W EQUALS OR EXCEEDS EP
     W SET TO EP

     YEAR -   2    MONTHLY RESULTS (OUTPUT)
     ========    ========================
     -- HYDROLOGIC CYCLE COMPONENTS --
                        OCT       NOV       DEC       JAN       FEB       MAR       APR       MAY       JUN       JUL       AUG       SEP
MOIS. IN L1 (%)      25.087    26.356    28.612    28.753    28.001    27.296    25.933    26.356    26.967    28.001    28.095    27.860
MOIS. BELOW L1 (%)   25.087    26.356    28.612    28.753    28.001    27.296    25.933    26.356    26.967    28.001    28.095    27.860
PRECIPATION (CM)      5.722     4.855     7.244     7.487     8.085     9.910     8.368    11.054    14.182    18.155    17.320    13.818
NET INFILT. (CM)      5.693     4.815     7.205     7.450     8.031     9.764     8.235    10.786    13.888    17.675    16.756    13.602
EVAPOTRANS. (CM)      7.063     4.571     2.973     3.462     5.565     8.320     8.566    10.353    12.285    13.520    12.436    10.168
MOIS. RETEN (CM)     -0.246     0.113     0.201     0.013    -0.067    -0.063    -0.121     0.038     0.055     0.092     0.009    -0.021
SUR. RUNOFF (CM)      0.029     0.040     0.039     0.037     0.055     0.146     0.133     0.269     0.294     0.480     0.564     0.216
GRW. RUNOFF (CM)     -1.124     0.131     4.032     3.975     2.532     1.506    -0.210     0.395     1.548     4.063     4.312     3.455
YIELD (CM)           -1.095     0.171     4.071     4.012     2.587     1.652    -0.076     0.664     1.842     4.543     4.875     3.671
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PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:												
SUBLAYER 1												
VOLATILIZED	1.814E+08	1.503E+08	9.915E+07	9.076E+07	9.653E+07	1.005E+08	1.154E+08	1.006E+08	8.124E+07	5.757E+07	4.712E+07	4.297E+07
IN SOIL MOI	1.200E+08	1.255E+08	1.261E+08	1.176E+08	1.070E+08	9.643E+07	8.874E+07	8.365E+07	7.529E+07	6.414E+07	5.416E+07	4.815E+07
ADS ON SOIL	1.593E+09	1.587E+09	1.469E+09	1.363E+09	1.274E+09	1.177E+09	1.140E+09	1.058E+09	9.303E+08	7.633E+08	6.424E+08	5.759E+08
IN SOIL AIR	2.092E+06	1.999E+06	1.670E+06	1.555E+06	1.510E+06	1.437E+06	1.442E+06	1.292E+06	1.092E+06	8.462E+05	7.088E+05	6.475E+05
SUBLAYER 2												
DIFFUSED UP	3.511E+08	2.766E+08	1.807E+08	1.692E+08	1.853E+08	2.004E+08	2.371E+08	2.126E+08	1.805E+08	1.378E+08	1.216E+08	1.157E+08
IN SOIL MOI	3.459E+08	3.524E+08	3.582E+08	3.398E+08	3.156E+08	2.928E+08	2.725E+08	2.635E+08	2.474E+08	2.243E+08	1.982E+08	1.792E+08
ADS ON SOIL	4.594E+09	4.455E+09	4.172E+09	3.938E+09	3.755E+09	3.574E+09	3.501E+09	3.332E+09	3.057E+09	2.669E+09	2.350E+09	2.144E+09
IN SOIL AIR	6.031E+06	5.613E+06	4.743E+06	4.493E+06	4.450E+06	4.362E+06	4.427E+06	4.072E+06	3.587E+06	2.959E+06	2.593E+06	2.410E+06
SOIL ZONE 2:												
SUBLAYER 1												
DIFFUSED UP	3.697E+08	3.206E+08	2.304E+08	2.377E+08	2.811E+08	3.252E+08	4.014E+08	3.568E+08	3.013E+08	2.372E+08	2.198E+08	2.173E+08
IN SOIL MOI	1.084E+09	1.139E+09	1.236E+09	1.242E+09	1.210E+09	1.179E+09	1.112E+09	1.068E+09	1.022E+09	9.720E+08	8.970E+08	8.310E+08
ADS ON SOIL	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.429E+10	1.350E+10	1.263E+10	1.157E+10	1.064E+10	9.939E+09
IN SOIL AIR	1.890E+07	1.814E+07	1.637E+07	1.643E+07	1.706E+07	1.757E+07	1.806E+07	1.650E+07	1.482E+07	1.282E+07	1.174E+07	1.117E+07
PURE PHASE	4.382E+09	3.849E+09	2.994E+09	2.185E+09	1.427E+09	6.004E+08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SUBLAYER 2												
DIFFUSED UP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.567E+05	2.157E+07	4.973E+07	7.134E+07	9.948E+07	1.296E+08
IN SOIL MOI	1.084E+09	1.139E+09	1.236E+09	1.242E+09	1.210E+09	1.179E+09	1.120E+09	1.139E+09	1.165E+09	1.210E+09	1.214E+09	1.204E+09
ADS ON SOIL	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10
IN SOIL AIR	1.890E+07	1.814E+07	1.637E+07	1.643E+07	1.706E+07	1.757E+07	1.820E+07	1.759E+07	1.689E+07	1.596E+07	1.589E+07	1.619E+07
PURE PHASE	1.461E+10	1.475E+10	1.478E+10	1.492E+10	1.517E+10	1.554E+10	1.594E+10	1.628E+10	1.656E+10	1.667E+10	1.661E+10	1.644E+10
LOWER SOIL ZONE:												
SUBLAYER 1												
IN SOIL MOI	3.451E+08	3.817E+08	4.855E+08	5.622E+08	6.087E+08	6.498E+08	6.524E+08	7.089E+08	7.767E+08	8.065E+08	8.092E+08	8.025E+08
ADS ON SOIL	4.584E+09	4.825E+09	5.654E+09	6.515E+09	7.243E+09	7.932E+09	8.383E+09	8.962E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09
IN SOIL AIR	6.017E+06	6.080E+06	6.429E+06	7.435E+06	8.584E+06	9.680E+06	1.060E+07	1.095E+07	1.126E+07	1.064E+07	1.059E+07	1.079E+07
PURE PHASE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.551E+08	1.729E+09	3.213E+09	3.864E+09
SUBLAYER 2												
IN SOIL MOI	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.287E+07
ADS ON SOIL	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.127E+08
IN SOIL AIR	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.765E+05

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --

UPPER SOIL ZONE:

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          SUBLAYER  1
MOISTURE     4.981E+00 4.960E+00 4.592E+00 4.260E+00 3.982E+00 3.679E+00 3.564E+00 3.306E+00 2.908E+00 2.386E+00 2.008E+00 1.800E+00
%SOLUBILITY 1.660E+01 1.653E+01 1.531E+01 1.420E+01 1.327E+01 1.226E+01 1.188E+01 1.102E+01 9.693E+00 7.953E+00 6.693E+00 6.001E+00
ADSORBED     1.185E+01 1.181E+01 1.093E+01 1.014E+01 9.477E+00 8.757E+00 8.482E+00 7.867E+00 6.921E+00 5.678E+00 4.779E+00 4.285E+00
SOIL AIR     9.941E-02 1.009E-01 9.460E-02 8.877E-02 8.275E-02 7.593E-02 7.127E-02 6.521E-02 5.675E-02 4.639E-02 3.905E-02 3.523E-02

          SUBLAYER  2
MOISTURE     1.436E+01 1.392E+01 1.304E+01 1.231E+01 1.174E+01 1.117E+01 1.094E+01 1.041E+01 9.556E+00 8.343E+00 7.346E+00 6.701E+00
%SOLUBILITY 4.787E+01 4.642E+01 4.347E+01 4.103E+01 3.913E+01 3.724E+01 3.648E+01 3.472E+01 3.185E+01 2.781E+01 2.449E+01 2.234E+01
ADSORBED     3.418E+01 3.314E+01 3.104E+01 2.929E+01 2.794E+01 2.659E+01 2.605E+01 2.479E+01 2.274E+01 1.986E+01 1.748E+01 1.595E+01
SOIL AIR     2.866E-01 2.832E-01 2.687E-01 2.565E-01 2.439E-01 2.305E-01 2.188E-01 2.054E-01 1.865E-01 1.622E-01 1.429E-01 1.312E-01

     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE     3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 2.977E+01 2.814E+01 2.631E+01 2.410E+01 2.217E+01 2.071E+01
%SOLUBILITY 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 9.924E+01 9.380E+01 8.771E+01 8.034E+01 7.390E+01 6.904E+01
ADSORBED     7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.086E+01 6.697E+01 6.263E+01 5.736E+01 5.276E+01 4.929E+01
SOIL AIR     5.988E-01 6.101E-01 6.181E-01 6.251E-01 6.235E-01 6.191E-01 5.953E-01 5.551E-01 5.136E-01 4.686E-01 4.312E-01 4.054E-01
PURE PHASE   3.043E+01 2.673E+01 2.079E+01 1.517E+01 9.905E+00 4.169E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00

          SUBLAYER  2
MOISTURE     3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01
%SOLUBILITY 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02
ADSORBED     7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01
SOIL AIR     5.988E-01 6.101E-01 6.181E-01 6.251E-01 6.235E-01 6.191E-01 5.999E-01 5.918E-01 5.855E-01 5.833E-01 5.835E-01 5.872E-01
PURE PHASE   1.015E+02 1.024E+02 1.026E+02 1.036E+02 1.053E+02 1.079E+02 1.107E+02 1.130E+02 1.150E+02 1.157E+02 1.153E+02 1.141E+02

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE     1.433E+01 1.508E+01 1.767E+01 2.037E+01 2.264E+01 2.479E+01 2.620E+01 2.801E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01
%SOLUBILITY 4.776E+01 5.028E+01 5.892E+01 6.789E+01 7.547E+01 8.265E+01 8.734E+01 9.338E+01 1.000E+02 1.000E+02 1.000E+02 1.000E+02
ADSORBED     3.410E+01 3.590E+01 4.207E+01 4.847E+01 5.389E+01 5.901E+01 6.236E+01 6.667E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01
SOIL AIR     2.860E-01 3.067E-01 3.641E-01 4.244E-01 4.706E-01 5.116E-01 5.240E-01 5.526E-01 5.855E-01 5.833E-01 5.835E-01 5.872E-01
PURE PHASE   0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 2.657E+00 1.801E+01 3.347E+01 4.025E+01

          SUBLAYER  2
MOISTURE     0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 1.603E+00
%SOLUBILITY 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 5.343E+00
ADSORBED     0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 3.815E+00
SOIL AIR     0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 3.137E-02

POL DEP CM   8.141E+01 8.163E+01 8.287E+01 8.411E+01 8.502E+01 8.577E+01 8.607E+01 8.660E+01 8.751E+01 8.917E+01 9.086E+01 9.222E+01

                         YEAR -   2 ANNUAL SUMMARY REPORT
                            ==================================
       -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

          -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
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TOTAL YIELD (CM)                                26.918

        -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
        ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
-------------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED                  1.164E+09
          SUBLAYER  2
               TOTAL DIFFUSED (UP)                2.369E+09
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)                3.499E+09
          SUBLAYER  2
               TOTAL DIFFUSED (UP)                3.722E+08
     LOWER SOIL ZONE:
          SUBLAYER  1

          SUBLAYER  2

                        -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                         ------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
                                    SOIL MOISTURE (UG/ML)  3.535E+00
                                    ADSORBED SOIL (UG/G)   8.414E+00
                                    SOIL AIR (UG/ML)       7.135E-02
          SUBLAYER  2
                                    SOIL MOISTURE (UG/ML)  1.082E+01
                                    ADSORBED SOIL (UG/G)   2.575E+01
                                    SOIL AIR (UG/ML)       2.180E-01
     SOIL ZONE 2:
          SUBLAYER  1
                                    SOIL MOISTURE (UG/ML)  2.760E+01
                                    ADSORBED SOIL (UG/G)   6.569E+01
                                    SOIL AIR (UG/ML)       5.553E-01
                                    PURE PHASE (UG/ML)     8.932E+00
          SUBLAYER  2
                                    SOIL MOISTURE (UG/ML)  3.000E+01
                                    ADSORBED SOIL (UG/G)   7.140E+01
                                    SOIL AIR (UG/ML)       6.021E-01
                                    PURE PHASE (UG/ML)     1.089E+02
     LOWER SOIL ZONE:
          SUBLAYER  1
                                    SOIL MOISTURE (UG/ML)  2.409E+01
                                    ADSORBED SOIL (UG/G)   5.734E+01
                                    SOIL AIR (UG/ML)       4.816E-01
                                    PURE PHASE (UG/ML)     7.865E+00
          SUBLAYER  2
                                    SOIL MOISTURE (UG/ML)  1.336E-01
                                    ADSORBED SOIL (UG/G)   3.179E-01
                                    SOIL AIR (UG/ML)       2.614E-03

                                    MAX. POLL. DEPTH (M)   9.222E-01

     YEAR -   3    MONTHLY RESULTS (OUTPUT)
     ========    ========================
     -- HYDROLOGIC CYCLE COMPONENTS --
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	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
UPPER SOIL ZONE:												
SUBLAYER 1												
VOLATILIZED	6.785E+07	5.982E+07	4.116E+07	3.886E+07	4.255E+07	4.562E+07	5.388E+07	4.814E+07	3.964E+07	2.852E+07	2.365E+07	2.185E+07
IN SOIL MOI	4.641E+07	5.121E+07	5.319E+07	5.106E+07	4.786E+07	4.436E+07	4.200E+07	4.045E+07	3.704E+07	3.198E+07	2.736E+07	2.465E+07
ADS ON SOIL	6.165E+08	6.474E+08	6.194E+08	5.917E+08	5.695E+08	5.415E+08	5.396E+08	5.114E+08	4.576E+08	3.806E+08	3.244E+08	2.948E+08
IN SOIL AIR	8.092E+05	8.156E+05	7.043E+05	6.751E+05	6.749E+05	6.608E+05	6.822E+05	6.251E+05	5.370E+05	4.219E+05	3.580E+05	3.315E+05
SUBLAYER 2												
DIFFUSED UP	1.775E+08	1.462E+08	9.739E+07	9.160E+07	1.003E+08	1.082E+08	1.274E+08	1.140E+08	9.696E+07	7.431E+07	6.595E+07	6.341E+07
IN SOIL MOI	1.636E+08	1.729E+08	1.787E+08	1.714E+08	1.607E+08	1.501E+08	1.406E+08	1.370E+08	1.297E+08	1.185E+08	1.058E+08	9.698E+07
ADS ON SOIL	2.172E+09	2.186E+09	2.081E+09	1.986E+09	1.912E+09	1.832E+09	1.807E+09	1.732E+09	1.603E+09	1.410E+09	1.255E+09	1.160E+09
IN SOIL AIR	2.852E+06	2.755E+06	2.366E+06	2.266E+06	2.265E+06	2.235E+06	2.285E+06	2.117E+06	1.881E+06	1.564E+06	1.385E+06	1.304E+06
SOIL ZONE 2:												
SUBLAYER 1												
DIFFUSED UP	3.323E+08	2.646E+08	1.739E+08	1.644E+08	1.811E+08	1.972E+08	2.336E+08	2.104E+08	1.834E+08	1.474E+08	1.389E+08	1.399E+08
IN SOIL MOI	7.304E+08	7.485E+08	7.731E+08	7.443E+08	7.008E+08	6.612E+08	6.176E+08	6.092E+08	5.958E+08	5.760E+08	5.407E+08	5.110E+08
ADS ON SOIL	9.701E+09	9.462E+09	9.003E+09	8.625E+09	8.339E+09	8.072E+09	7.935E+09	7.701E+09	7.361E+09	6.854E+09	6.413E+09	6.112E+09
IN SOIL AIR	1.273E+07	1.192E+07	1.024E+07	9.842E+06	9.882E+06	9.851E+06	1.003E+07	9.412E+06	8.638E+06	7.599E+06	7.077E+06	6.871E+06
SUBLAYER 2												
DIFFUSED UP	2.289E+08	2.033E+08	1.506E+08	1.597E+08	1.926E+08	2.261E+08	2.823E+08	2.687E+08	2.511E+08	2.228E+08	2.331E+08	2.560E+08
IN SOIL MOI	1.084E+09	1.139E+09	1.236E+09	1.242E+09	1.210E+09	1.179E+09	1.120E+09	1.139E+09	1.165E+09	1.210E+09	1.214E+09	1.204E+09
ADS ON SOIL	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10
IN SOIL AIR	1.890E+07	1.814E+07	1.637E+07	1.643E+07	1.706E+07	1.757E+07	1.820E+07	1.759E+07	1.689E+07	1.596E+07	1.589E+07	1.619E+07
PURE PHASE	1.640E+10	1.618E+10	1.568E+10	1.523E+10	1.488E+10	1.456E+10	1.433E+10	1.398E+10	1.351E+10	1.275E+10	1.194E+10	1.119E+10
LOWER SOIL ZONE:												
SUBLAYER 1												
IN SOIL MOI	7.226E+08	7.591E+08	8.241E+08	8.282E+08	8.065E+08	7.862E+08	7.470E+08	7.591E+08	7.767E+08	8.065E+08	8.092E+08	8.025E+08
ADS ON SOIL	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09
IN SOIL AIR	1.260E+07	1.209E+07	1.091E+07	1.095E+07	1.137E+07	1.171E+07	1.213E+07	1.173E+07	1.126E+07	1.064E+07	1.059E+07	1.079E+07
PURE PHASE	4.119E+09	4.210E+09	4.232E+09	4.321E+09	4.491E+09	4.734E+09	5.000E+09	5.268E+09	5.584E+09	5.923E+09	6.256E+09	6.537E+09

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          SUBLAYER  2
IN SOIL MOI 5.177E+07 6.527E+07 1.374E+08 2.051E+08 2.487E+08 2.813E+08 2.847E+08 3.150E+08 3.686E+08 4.695E+08 5.604E+08 6.275E+08
ADS ON SOIL 6.876E+08 8.252E+08 1.600E+09 2.376E+09 2.959E+09 3.433E+09 3.658E+09 3.982E+09 4.554E+09 5.587E+09 6.646E+09 7.505E+09
IN SOIL AIR 9.025E+05 1.040E+06 1.819E+06 2.712E+06 3.507E+06 4.190E+06 4.624E+06 4.867E+06 5.343E+06 6.194E+06 7.334E+06 8.438E+06

     -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --
     ---------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
MOISTURE    1.927E+00 2.024E+00 1.936E+00 1.849E+00 1.780E+00 1.693E+00 1.687E+00 1.599E+00 1.431E+00 1.190E+00 1.014E+00 9.217E-01
%SOLUBILITY 6.423E+00 6.745E+00 6.454E+00 6.165E+00 5.934E+00 5.642E+00 5.622E+00 5.329E+00 4.768E+00 3.965E+00 3.380E+00 3.072E+00
ADSORBED    4.586E+00 4.816E+00 4.608E+00 4.402E+00 4.237E+00 4.028E+00 4.014E+00 3.805E+00 3.405E+00 2.831E+00 2.414E+00 2.194E+00
SOIL AIR    3.846E-02 4.115E-02 3.989E-02 3.854E-02 3.700E-02 3.493E-02 3.373E-02 3.154E-02 2.792E-02 2.313E-02 1.972E-02 1.804E-02

          SUBLAYER  2
MOISTURE    6.791E+00 6.834E+00 6.504E+00 6.207E+00 5.976E+00 5.726E+00 5.649E+00 5.414E+00 5.010E+00 4.409E+00 3.922E+00 3.626E+00
%SOLUBILITY 2.264E+01 2.278E+01 2.168E+01 2.069E+01 1.992E+01 1.909E+01 1.883E+01 1.805E+01 1.670E+01 1.470E+01 1.307E+01 1.209E+01
ADSORBED    1.616E+01 1.627E+01 1.548E+01 1.477E+01 1.422E+01 1.363E+01 1.344E+01 1.289E+01 1.192E+01 1.049E+01 9.334E+00 8.629E+00
SOIL AIR    1.355E-01 1.390E-01 1.340E-01 1.293E-01 1.242E-01 1.182E-01 1.130E-01 1.068E-01 9.777E-02 8.572E-02 7.628E-02 7.096E-02

     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE    2.022E+01 1.972E+01 1.876E+01 1.797E+01 1.738E+01 1.682E+01 1.654E+01 1.605E+01 1.534E+01 1.428E+01 1.336E+01 1.274E+01
%SOLUBILITY 6.739E+01 6.573E+01 6.254E+01 5.991E+01 5.792E+01 5.607E+01 5.512E+01 5.350E+01 5.113E+01 4.761E+01 4.455E+01 4.245E+01
ADSORBED    4.812E+01 4.693E+01 4.465E+01 4.278E+01 4.136E+01 4.003E+01 3.935E+01 3.820E+01 3.651E+01 3.399E+01 3.181E+01 3.031E+01
SOIL AIR    4.035E-01 4.010E-01 3.865E-01 3.745E-01 3.611E-01 3.471E-01 3.307E-01 3.166E-01 2.994E-01 2.777E-01 2.599E-01 2.493E-01

          SUBLAYER  2

MOISTURE    3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01
%SOLUBILITY 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02
ADSORBED    7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01
SOIL AIR    5.988E-01 6.101E-01 6.181E-01 6.251E-01 6.235E-01 6.191E-01 5.999E-01 5.918E-01 5.855E-01 5.833E-01 5.835E-01 5.872E-01
PURE PHASE  1.139E+02 1.123E+02 1.088E+02 1.058E+02 1.033E+02 1.011E+02 9.949E+01 9.706E+01 9.377E+01 8.851E+01 8.290E+01 7.771E+01

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE    3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01
%SOLUBILITY 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02
ADSORBED    7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01
SOIL AIR    5.988E-01 6.101E-01 6.181E-01 6.251E-01 6.235E-01 6.191E-01 5.999E-01 5.918E-01 5.855E-01 5.833E-01 5.835E-01 5.872E-01
PURE PHASE  4.291E+01 4.385E+01 4.408E+01 4.501E+01 4.678E+01 4.931E+01 5.207E+01 5.487E+01 5.816E+01 6.169E+01 6.516E+01 6.808E+01

          SUBLAYER  2
MOISTURE    2.149E+00 2.579E+00 5.001E+00 7.429E+00 9.250E+00 1.073E+01 1.143E+01 1.245E+01 1.423E+01 1.747E+01 2.078E+01 2.346E+01
%SOLUBILITY 7.164E+00 8.598E+00 1.667E+01 2.476E+01 3.083E+01 3.578E+01 3.811E+01 4.149E+01 4.745E+01 5.822E+01 6.925E+01 7.820E+01
ADSORBED    5.115E+00 6.139E+00 1.190E+01 1.768E+01 2.201E+01 2.554E+01 2.721E+01 2.963E+01 3.388E+01 4.157E+01 4.944E+01 5.583E+01
SOIL AIR    4.290E-02 5.245E-02 1.030E-01 1.548E-01 1.922E-01 2.215E-01 2.286E-01 2.455E-01 2.778E-01 3.396E-01 4.041E-01 4.592E-01

POL DEP CM  9.233E+01 9.256E+01 9.379E+01 9.503E+01 9.595E+01 9.669E+01 9.700E+01 9.752E+01 9.844E+01 1.001E+02 1.018E+02 1.031E+02

                         YEAR -   3 ANNUAL SUMMARY REPORT
                           ==================================
       -- TOTAL INPUTS (UG) --

UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00
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-- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)	27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)	27.276
TOTAL PRECIPITATION (CM)	126.201
TOTAL INFILTRATION (CM)	123.899
TOTAL EVAPOTRANSPIRATION (CM)	99.280
TOTAL SURFACE RUNOFF (CM)	2.302
TOTAL GRW RUNOFF (CM)	24.616
TOTAL MOISTURE RETENTION (CM)	0.003
TOTAL YIELD (CM)	26.918

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)

UPPER SOIL ZONE:	
SUBLAYER 1	
TOTAL VOLATILIZED	5.115E+08
SUBLAYER 2	
TOTAL DIFFUSED (UP)	1.263E+09
SOIL ZONE 2:	
SUBLAYER 1	
TOTAL DIFFUSED (UP)	2.367E+09
SUBLAYER 2	
TOTAL DIFFUSED (UP)	2.675E+09
LOWER SOIL ZONE:	
SUBLAYER 1	
SUBLAYER 2	

-- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON-ZERO VALUES ARE PRINTED --

UPPER SOIL ZONE:		
SUBLAYER 1		
	SOIL MOISTURE (UG/ML)	1.588E+00
	ADSORBED SOIL (UG/G)	3.778E+00
	SOIL AIR (UG/ML)	3.200E-02
SUBLAYER 2		
	SOIL MOISTURE (UG/ML)	5.506E+00
	ADSORBED SOIL (UG/G)	1.310E+01
	SOIL AIR (UG/ML)	1.109E-01
SOIL ZONE 2:		
SUBLAYER 1		
	SOIL MOISTURE (UG/ML)	1.660E+01
	ADSORBED SOIL (UG/G)	3.950E+01
	SOIL AIR (UG/ML)	3.339E-01
SUBLAYER 2		
	SOIL MOISTURE (UG/ML)	3.000E+01
	ADSORBED SOIL (UG/G)	7.140E+01
	SOIL AIR (UG/ML)	6.021E-01
	PURE PHASE (UG/ML)	9.873E+01
LOWER SOIL ZONE:		
SUBLAYER 1		
	SOIL MOISTURE (UG/ML)	3.000E+01
	ADSORBED SOIL (UG/G)	7.140E+01
	SOIL AIR (UG/ML)	6.021E-01
	PURE PHASE (UG/ML)	5.266E+01

SUBLAYER 2

SOIL MOISTURE (UG/ML)	1.141E+01
ADSORBED SOIL (UG/G)	2.716E+01
SOIL AIR (UG/ML)	2.268E-01
MAX. POLL. DEPTH (M)	1.031E+00

YEAR - 4 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:

SUBLAYER 1

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
VOLATILIZED	3.513E+07	3.162E+07	2.211E+07	2.115E+07	2.350E+07	2.562E+07	3.087E+07	2.818E+07	2.367E+07	1.733E+07	1.461E+07	1.373E+07
IN SOIL MOI	2.429E+07	2.732E+07	2.876E+07	2.798E+07	2.663E+07	2.513E+07	2.432E+07	2.392E+07	2.233E+07	1.959E+07	1.703E+07	1.562E+07
ADS ON SOIL	3.226E+08	3.454E+08	3.349E+08	3.242E+08	3.169E+08	3.067E+08	3.125E+08	3.025E+08	2.759E+08	2.332E+08	2.020E+08	1.868E+08
IN SOIL AIR	4.235E+05	4.351E+05	3.808E+05	3.700E+05	3.756E+05	3.743E+05	3.951E+05	3.697E+05	3.237E+05	2.585E+05	2.229E+05	2.100E+05

SUBLAYER 2

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DIFFUSED UP	9.941E+07	8.419E+07	5.726E+07	5.467E+07	6.083E+07	6.682E+07	8.050E+07	7.372E+07	6.387E+07	4.963E+07	4.459E+07	4.352E+07
IN SOIL MOI	9.087E+07	9.831E+07	1.031E+08	1.003E+08	9.562E+07	9.103E+07	8.741E+07	8.699E+07	8.387E+07	7.772E+07	7.041E+07	6.567E+07
ADS ON SOIL	1.207E+09	1.243E+09	1.200E+09	1.162E+09	1.138E+09	1.111E+09	1.123E+09	1.100E+09	1.036E+09	9.248E+08	8.350E+08	7.854E+08
IN SOIL AIR	1.584E+06	1.566E+06	1.365E+06	1.326E+06	1.348E+06	1.356E+06	1.420E+06	1.344E+06	1.216E+06	1.025E+06	9.215E+05	8.830E+05

SOIL ZONE 2:

SUBLAYER 1

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DIFFUSED UP	2.209E+08	1.829E+08	1.233E+08	1.185E+08	1.329E+08	1.474E+08	1.785E+08	1.641E+08	1.451E+08	1.176E+08	1.114E+08	1.133E+08
IN SOIL MOI	4.656E+08	4.909E+08	5.157E+08	5.045E+08	4.837E+08	4.656E+08	4.454E+08	4.481E+08	4.451E+08	4.350E+08	4.131E+08	3.960E+08
ADS ON SOIL	6.184E+09	6.206E+09	6.005E+09	5.846E+09	5.756E+09	5.683E+09	5.723E+09	5.666E+09	5.500E+09	5.176E+09	4.900E+09	4.736E+09
IN SOIL AIR	8.117E+06	7.820E+06	6.828E+06	6.671E+06	6.822E+06	6.936E+06	7.236E+06	6.924E+06	6.453E+06	5.738E+06	5.407E+06	5.325E+06

SUBLAYER 2

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DIFFUSED UP	4.141E+08	3.452E+08	2.407E+08	2.420E+08	2.799E+08	3.168E+08	3.841E+08	3.550E+08	3.220E+08	2.765E+08	2.809E+08	3.013E+08
IN SOIL MOI	1.084E+09	1.139E+09	1.236E+09	1.242E+09	1.210E+09	1.179E+09	1.120E+09	1.139E+09	1.165E+09	1.210E+09	1.214E+09	1.204E+09

ADS ON SOIL	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	1.440E+10	
IN SOIL AIR	1.890E+07	1.814E+07	1.637E+07	1.643E+07	1.706E+07	1.757E+07	1.820E+07	1.759E+07	1.689E+07	1.596E+07	1.589E+07	1.619E+07	
PURE PHASE	1.081E+10	1.033E+10	9.510E+09	8.767E+09	8.146E+09	7.552E+09	7.088E+09	6.497E+09	5.755E+09	4.692E+09	3.616E+09	2.662E+09	

LOWER SOIL ZONE:

SUBLAYER 1

IN SOIL MOI	7.226E+08	7.591E+08	8.241E+08	8.282E+08	8.065E+08	7.862E+08	7.470E+08	7.591E+08	7.767E+08	8.065E+08	8.092E+08	8.025E+08	
ADS ON SOIL	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	
IN SOIL AIR	1.260E+07	1.209E+07	1.091E+07	1.095E+07	1.137E+07	1.171E+07	1.213E+07	1.173E+07	1.126E+07	1.064E+07	1.059E+07	1.079E+07	
PURE PHASE	6.792E+09	6.882E+09	6.904E+09	6.994E+09	7.163E+09	7.406E+09	7.672E+09	7.941E+09	8.257E+09	8.595E+09	8.928E+09	9.209E+09	

SUBLAYER 2

IN SOIL MOI	5.822E+08	6.206E+08	7.365E+08	8.069E+08	8.065E+08	7.862E+08	7.470E+08	7.591E+08	7.767E+08	8.065E+08	8.092E+08	8.025E+08	
ADS ON SOIL	7.733E+09	7.846E+09	8.577E+09	9.351E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	
IN SOIL AIR	1.015E+07	9.885E+06	9.752E+06	1.067E+07	1.137E+07	1.171E+07	1.213E+07	1.173E+07	1.126E+07	1.064E+07	1.059E+07	1.079E+07	
PURE PHASE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.690E+08	5.119E+08	7.787E+08	1.047E+09	1.364E+09	1.702E+09	2.035E+09	2.316E+09	
GWR. RUNOFF	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.117E+08	2.847E+08	0.000E+00	7.462E+07	2.926E+08	7.679E+08	8.149E+08	6.530E+08	

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --

UPPER SOIL ZONE:

SUBLAYER 1

MOISTURE	1.008E+00	1.080E+00	1.047E+00	1.014E+00	9.907E-01	9.588E-01	9.768E-01	9.455E-01	8.623E-01	7.288E-01	6.315E-01	5.840E-01	
%SOLUBILITY	3.362E+00	3.599E+00	3.490E+00	3.378E+00	3.302E+00	3.196E+00	3.256E+00	3.152E+00	2.874E+00	2.429E+00	2.105E+00	1.947E+00	
ADSORBED	2.400E+00	2.569E+00	2.492E+00	2.412E+00	2.358E+00	2.282E+00	2.325E+00	2.250E+00	2.052E+00	1.735E+00	1.503E+00	1.390E+00	
SOIL AIR	2.013E-02	2.195E-02	2.157E-02	2.112E-02	2.059E-02	1.979E-02	1.953E-02	1.865E-02	1.683E-02	1.417E-02	1.228E-02	1.143E-02	

SUBLAYER 2

MOISTURE	3.773E+00	3.885E+00	3.752E+00	3.633E+00	3.557E+00	3.474E+00	3.511E+00	3.438E+00	3.239E+00	2.891E+00	2.610E+00	2.455E+00	
%SOLUBILITY	1.258E+01	1.295E+01	1.251E+01	1.211E+01	1.186E+01	1.158E+01	1.170E+01	1.146E+01	1.080E+01	9.636E+00	8.701E+00	8.183E+00	
ADSORBED	8.979E+00	9.247E+00	8.931E+00	8.647E+00	8.465E+00	8.267E+00	8.355E+00	8.182E+00	7.710E+00	6.880E+00	6.212E+00	5.843E+00	
SOIL AIR	7.530E-02	7.901E-02	7.731E-02	7.570E-02	7.392E-02	7.168E-02	7.020E-02	6.782E-02	6.322E-02	5.621E-02	5.077E-02	4.805E-02	

SOIL ZONE 2:

SUBLAYER 1

MOISTURE	1.289E+01	1.293E+01	1.251E+01	1.218E+01	1.200E+01	1.184E+01	1.193E+01	1.181E+01	1.146E+01	1.079E+01	1.021E+01	9.869E+00	
%SOLUBILITY	4.296E+01	4.311E+01	4.172E+01	4.061E+01	3.999E+01	3.948E+01	3.975E+01	3.936E+01	3.820E+01	3.595E+01	3.404E+01	3.290E+01	
ADSORBED	3.067E+01	3.078E+01	2.979E+01	2.900E+01	2.855E+01	2.819E+01	2.838E+01	2.810E+01	2.728E+01	2.567E+01	2.430E+01	2.349E+01	
SOIL AIR	2.572E-01	2.630E-01	2.578E-01	2.538E-01	2.493E-01	2.444E-01	2.385E-01	2.329E-01	2.237E-01	2.097E-01	1.986E-01	1.932E-01	

SUBLAYER 2

MOISTURE	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	
%SOLUBILITY	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	
ADSORBED	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	
SOIL AIR	5.988E-01	6.101E-01	6.181E-01	6.251E-01	6.235E-01	6.191E-01	5.999E-01	5.918E-01	5.855E-01	5.833E-01	5.835E-01	5.872E-01	
PURE PHASE	7.504E+01	7.174E+01	6.604E+01	6.088E+01	5.656E+01	5.244E+01	4.921E+01	4.511E+01	3.996E+01	3.258E+01	2.511E+01	1.849E+01	

LOWER SOIL ZONE:

SUBLAYER 1

MOISTURE	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	
%SOLUBILITY	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	
ADSORBED	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	
SOIL AIR	5.988E-01	6.101E-01	6.181E-01	6.251E-01	6.235E-01	6.191E-01	5.999E-01	5.918E-01	5.855E-01	5.833E-01	5.835E-01	5.872E-01	
PURE PHASE	7.074E+01	7.168E+01	7.191E+01	7.284E+01	7.461E+01	7.714E+01	7.991E+01	8.270E+01	8.600E+01	8.952E+01	9.299E+01	9.591E+01	

SUBLAYER 2

MOISTURE	2.417E+01	2.452E+01	2.681E+01	2.923E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	
%SOLUBILITY	8.057E+01	8.175E+01	8.937E+01	9.744E+01	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	
ADSORBED	5.753E+01	5.837E+01	6.381E+01	6.957E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	

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SOIL AIR    4.824E-01 4.987E-01 5.524E-01 6.091E-01 6.235E-01 6.191E-01 5.999E-01 5.918E-01 5.855E-01 5.833E-01 5.835E-01 5.872E-01
PURE PHASE  0.000E+00 0.000E+00 0.000E+00 0.000E+00 2.801E+00 5.331E+00 8.111E+00 1.091E+01 1.420E+01 1.773E+01 2.120E+01 2.412E+01


POL DEP CM  1.033E+02 1.035E+02 1.047E+02 1.060E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02

                          YEAR -   4 ANNUAL SUMMARY REPORT
                           ==================================
       -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

         -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918


        -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
        ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
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    UPPER SOIL ZONE:
        SUBLAYER  1
            TOTAL VOLATILIZED                 2.875E+08
        SUBLAYER  2
            TOTAL DIFFUSED (UP)               7.790E+08
    SOIL ZONE 2:
        SUBLAYER  1
            TOTAL DIFFUSED (UP)               1.756E+09
        SUBLAYER  2
            TOTAL DIFFUSED (UP)               3.758E+09
    LOWER SOIL ZONE:
        SUBLAYER  1

        SUBLAYER  2
           TOTAL IN GROUNDWATER RUNOFF        2.999E+09

                    -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                    ---------------------------------------------------------------------------------
    UPPER SOIL ZONE:
        SUBLAYER  1
                                SOIL MOISTURE (UG/ML)  9.022E-01
                                ADSORBED SOIL (UG/G)   2.147E+00
                                SOIL AIR (UG/ML)       1.817E-02
        SUBLAYER  2
                                SOIL MOISTURE (UG/ML)  3.351E+00
                                ADSORBED SOIL (UG/G)   7.977E+00
                                SOIL AIR (UG/ML)       6.743E-02
    SOIL ZONE 2:
        SUBLAYER  1
                                SOIL MOISTURE (UG/ML)  1.170E+01
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	ADSORBED SOIL (UG/G)	2.785E+01
	SOIL AIR (UG/ML)	2.352E-01
SUBLAYER 2		
	SOIL MOISTURE (UG/ML)	3.000E+01
	ADSORBED SOIL (UG/G)	7.140E+01
	SOIL AIR (UG/ML)	6.021E-01
	PURE PHASE (UG/ML)	4.943E+01
LOWER SOIL ZONE:		
SUBLAYER 1		
	SOIL MOISTURE (UG/ML)	3.000E+01
	ADSORBED SOIL (UG/G)	7.140E+01
	SOIL AIR (UG/ML)	6.021E-01
	PURE PHASE (UG/ML)	8.050E+01
SUBLAYER 2		
	SOIL MOISTURE (UG/ML)	2.873E+01
	ADSORBED SOIL (UG/G)	6.837E+01
	SOIL AIR (UG/ML)	5.764E-01
	PURE PHASE (UG/ML)	8.700E+00
	MAX. POLL. DEPTH (M)	1.067E+00

YEAR - 5 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:												
SUBLAYER 1												
VOLATILIZED	2.258E+07	2.085E+07	1.486E+07	1.443E+07	1.629E+07	1.807E+07	2.220E+07	2.066E+07	1.764E+07	1.308E+07	1.115E+07	1.058E+07
IN SOIL MOI	1.582E+07	1.821E+07	1.947E+07	1.923E+07	1.861E+07	1.788E+07	1.767E+07	1.769E+07	1.676E+07	1.487E+07	1.306E+07	1.209E+07
ADS ON SOIL	2.102E+08	2.302E+08	2.268E+08	2.228E+08	2.214E+08	2.182E+08	2.270E+08	2.237E+08	2.070E+08	1.770E+08	1.549E+08	1.446E+08
IN SOIL AIR	2.759E+05	2.901E+05	2.579E+05	2.543E+05	2.624E+05	2.663E+05	2.870E+05	2.734E+05	2.429E+05	1.962E+05	1.710E+05	1.626E+05
SUBLAYER 2												
DIFFUSED UP	6.996E+07	6.101E+07	4.231E+07	4.094E+07	4.618E+07	5.146E+07	6.296E+07	5.843E+07	5.105E+07	3.982E+07	3.586E+07	3.506E+07

IN SOIL MOI	6.342E+07	7.028E+07	7.476E+07	7.372E+07	7.134E+07	6.897E+07	6.738E+07	6.793E+07	6.608E+07	6.157E+07	5.602E+07	5.243E+07
ADS ON SOIL	8.423E+08	8.885E+08	8.706E+08	8.543E+08	8.490E+08	8.420E+08	8.658E+08	8.588E+08	8.165E+08	7.326E+08	6.644E+08	6.271E+08
IN SOIL AIR	1.106E+06	1.119E+06	9.898E+05	9.748E+05	1.006E+06	1.028E+06	1.095E+06	1.050E+06	9.581E+05	8.122E+05	7.332E+05	7.051E+05

SOIL ZONE 2:

SUBLAYER 1

DIFFUSED UP	1.822E+08	1.544E+08	1.056E+08	1.024E+08	1.156E+08	1.287E+08	1.559E+08	1.430E+08	1.256E+08	1.007E+08	9.419E+07	9.432E+07
IN SOIL MOI	3.702E+08	3.980E+08	4.226E+08	4.176E+08	4.039E+08	3.909E+08	3.755E+08	3.779E+08	3.742E+08	3.635E+08	3.422E+08	3.244E+08
ADS ON SOIL	4.916E+09	5.031E+09	4.922E+09	4.840E+09	4.806E+09	4.771E+09	4.824E+09	4.777E+09	4.624E+09	4.325E+09	4.059E+09	3.880E+09
IN SOIL AIR	6.453E+06	6.339E+06	5.596E+06	5.522E+06	5.696E+06	5.823E+06	6.100E+06	5.839E+06	5.425E+06	4.795E+06	4.479E+06	4.362E+06

SUBLAYER 2

DIFFUSED UP	4.808E+08	3.963E+08	2.733E+08	2.710E+08	2.958E+08	3.126E+08	3.601E+08	3.164E+08	2.713E+08	2.165E+08	2.038E+08	2.055E+08
IN SOIL MOI	1.084E+09	1.139E+09	1.236E+09	1.226E+09	1.144E+09	1.073E+09	9.939E+08	9.792E+08	9.644E+08	9.476E+08	9.034E+08	8.614E+08
ADS ON SOIL	1.440E+10	1.440E+10	1.440E+10	1.421E+10	1.361E+10	1.310E+10	1.277E+10	1.238E+10	1.192E+10	1.128E+10	1.071E+10	1.030E+10
IN SOIL AIR	1.890E+07	1.814E+07	1.637E+07	1.622E+07	1.613E+07	1.599E+07	1.615E+07	1.513E+07	1.398E+07	1.250E+07	1.182E+07	1.158E+07
PURE PHASE	2.152E+09	1.585E+09	6.491E+08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

LOWER SOIL ZONE:

SUBLAYER 1

DIFFUSED UP	0.000E+00	0.000E+00	0.000E+00	1.069E+06	2.382E+07	5.716E+07	9.602E+07	1.125E+08	1.243E+08	1.294E+08	1.536E+08	1.837E+08
IN SOIL MOI	7.226E+08	7.591E+08	8.241E+08	8.282E+08	8.065E+08	7.862E+08	7.470E+08	7.591E+08	7.767E+08	8.065E+08	8.092E+08	8.025E+08
ADS ON SOIL	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09
IN SOIL AIR	1.260E+07	1.209E+07	1.091E+07	1.095E+07	1.137E+07	1.171E+07	1.213E+07	1.173E+07	1.126E+07	1.064E+07	1.059E+07	1.079E+07
PURE PHASE	9.464E+09	9.554E+09	9.576E+09	9.663E+09	9.783E+09	9.916E+09	1.004E+10	1.011E+10	1.016E+10	1.007E+10	9.895E+09	9.667E+09

SUBLAYER 2

IN SOIL MOI	7.226E+08	7.591E+08	8.241E+08	8.282E+08	8.065E+08	7.862E+08	7.470E+08	7.591E+08	7.767E+08	8.065E+08	8.092E+08	8.025E+08
ADS ON SOIL	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09
IN SOIL AIR	1.260E+07	1.209E+07	1.091E+07	1.095E+07	1.137E+07	1.171E+07	1.213E+07	1.173E+07	1.126E+07	1.064E+07	1.059E+07	1.079E+07
PURE PHASE	2.578E+09	2.668E+09	2.690E+09	2.780E+09	2.950E+09	3.193E+09	3.459E+09	3.728E+09	4.044E+09	4.383E+09	4.716E+09	4.996E+09
GWR. RUNOFF	0.000E+00	2.480E+07	7.620E+08	7.513E+08	4.786E+08	2.847E+08	0.000E+00	7.462E+07	2.926E+08	7.679E+08	8.149E+08	6.530E+08

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --

UPPER SOIL ZONE:

SUBLAYER 1

MOISTURE	6.569E-01	7.197E-01	7.089E-01	6.965E-01	6.922E-01	6.821E-01	7.095E-01	6.992E-01	6.472E-01	5.533E-01	4.843E-01	4.521E-01
%SOLUBILITY	2.190E+00	2.399E+00	2.363E+00	2.322E+00	2.307E+00	2.274E+00	2.365E+00	2.331E+00	2.157E+00	1.844E+00	1.614E+00	1.507E+00
ADSORBED	1.563E+00	1.713E+00	1.687E+00	1.658E+00	1.647E+00	1.623E+00	1.689E+00	1.664E+00	1.540E+00	1.317E+00	1.153E+00	1.076E+00
SOIL AIR	1.311E-02	1.463E-02	1.461E-02	1.451E-02	1.438E-02	1.408E-02	1.419E-02	1.379E-02	1.263E-02	1.076E-02	9.419E-03	8.848E-03

SUBLAYER 2

MOISTURE	2.633E+00	2.777E+00	2.721E+00	2.670E+00	2.654E+00	2.632E+00	2.706E+00	2.685E+00	2.552E+00	2.290E+00	2.077E+00	1.960E+00
%SOLUBILITY	8.777E+00	9.258E+00	9.071E+00	8.902E+00	8.846E+00	8.773E+00	9.021E+00	8.948E+00	8.508E+00	7.634E+00	6.923E+00	6.534E+00
ADSORBED	6.266E+00	6.610E+00	6.477E+00	6.356E+00	6.316E+00	6.264E+00	6.441E+00	6.389E+00	6.075E+00	5.450E+00	4.943E+00	4.665E+00
SOIL AIR	5.255E-02	5.648E-02	5.607E-02	5.564E-02	5.515E-02	5.431E-02	5.412E-02	5.296E-02	4.981E-02	4.453E-02	4.039E-02	3.837E-02

SOIL ZONE 2:

SUBLAYER 1

MOISTURE	1.025E+01	1.048E+01	1.026E+01	1.009E+01	1.002E+01	9.943E+00	1.005E+01	9.956E+00	9.635E+00	9.013E+00	8.458E+00	8.085E+00
%SOLUBILITY	3.415E+01	3.495E+01	3.419E+01	3.362E+01	3.339E+01	3.314E+01	3.351E+01	3.319E+01	3.212E+01	3.004E+01	2.819E+01	2.695E+01
ADSORBED	2.438E+01	2.495E+01	2.441E+01	2.400E+01	2.384E+01	2.366E+01	2.393E+01	2.369E+01	2.293E+01	2.145E+01	2.013E+01	1.924E+01
SOIL AIR	2.045E-01	2.132E-01	2.113E-01	2.101E-01	2.082E-01	2.052E-01	2.010E-01	1.964E-01	1.880E-01	1.752E-01	1.645E-01	1.582E-01

SUBLAYER 2

MOISTURE	3.000E+01	3.000E+01	3.000E+01	2.962E+01	2.836E+01	2.730E+01	2.661E+01	2.580E+01	2.483E+01	2.350E+01	2.233E+01	2.147E+01
%SOLUBILITY	1.000E+02	1.000E+02	1.000E+02	9.873E+01	9.453E+01	9.099E+01	8.871E+01	8.599E+01	8.277E+01	7.833E+01	7.443E+01	7.156E+01

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ADSORBED     7.140E+01 7.140E+01 7.140E+01 7.049E+01 6.749E+01 6.497E+01 6.334E+01 6.140E+01 5.910E+01 5.593E+01 5.314E+01 5.110E+01
SOIL AIR     5.988E-01 6.101E-01 6.181E-01 6.171E-01 5.894E-01 5.633E-01 5.322E-01 5.089E-01 4.846E-01 4.569E-01 4.343E-01 4.202E-01
PURE PHASE   1.494E+01 1.101E+01 4.507E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE     3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01
%SOLUBILITY 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02
ADSORBED     7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01
SOIL AIR     5.988E-01 6.101E-01 6.181E-01 6.251E-01 6.235E-01 6.191E-01 5.999E-01 5.918E-01 5.855E-01 5.833E-01 5.835E-01 5.872E-01
PURE PHASE   9.857E+01 9.951E+01 9.974E+01 1.006E+02 1.019E+02 1.033E+02 1.046E+02 1.053E+02 1.058E+02 1.049E+02 1.031E+02 1.007E+02

          SUBLAYER  2
MOISTURE     3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01
%SOLUBILITY 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02
ADSORBED     7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01
SOIL AIR     5.988E-01 6.101E-01 6.181E-01 6.251E-01 6.235E-01 6.191E-01 5.999E-01 5.918E-01 5.855E-01 5.833E-01 5.835E-01 5.872E-01
PURE PHASE   2.685E+01 2.779E+01 2.802E+01 2.895E+01 3.072E+01 3.325E+01 3.603E+01 3.883E+01 4.212E+01 4.565E+01 4.912E+01 5.204E+01


POL DEP CM   1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02

                          YEAR -    5 ANNUAL SUMMARY REPORT
                           ================================
       -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

          -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)               27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)         27.276
TOTAL PRECIPITATION (CM)                      126.201
TOTAL INFILTRATION (CM)                       123.899
TOTAL EVAPOTRANSPIRATION (CM)                  99.280
TOTAL SURFACE RUNOFF (CM)                       2.302
TOTAL GRW RUNOFF (CM)                          24.616
TOTAL MOISTURE RETENTION (CM)                   0.003
TOTAL YIELD (CM)                               26.918

         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
         ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
-------------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED                2.024E+08
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              5.950E+08
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)              1.503E+09
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              3.603E+09
     LOWER SOIL ZONE:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)              8.816E+08
          SUBLAYER  2
               TOTAL IN GROUNDWATER RUNOFF      4.904E+09
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-- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON-ZERO VALUES ARE PRINTED --

UPPER SOIL ZONE:
SUBLAYER 1

SOIL MOISTURE (UG/ML)	6.418E-01
ADSORBED SOIL (UG/G)	1.528E+00
SOIL AIR (UG/ML)	1.291E-02

SUBLAYER 2

SOIL MOISTURE (UG/ML)	2.530E+00
ADSORBED SOIL (UG/G)	6.021E+00
SOIL AIR (UG/ML)	5.086E-02

SOIL ZONE 2:
SUBLAYER 1

SOIL MOISTURE (UG/ML)	9.686E+00
ADSORBED SOIL (UG/G)	2.305E+01
SOIL AIR (UG/ML)	1.947E-01

SUBLAYER 2

SOIL MOISTURE (UG/ML)	2.665E+01
ADSORBED SOIL (UG/G)	6.343E+01
SOIL AIR (UG/ML)	5.361E-01
PURE PHASE (UG/ML)	2.538E+00

LOWER SOIL ZONE:
SUBLAYER 1

SOIL MOISTURE (UG/ML)	3.000E+01
ADSORBED SOIL (UG/G)	7.140E+01
SOIL AIR (UG/ML)	6.021E-01
PURE PHASE (UG/ML)	1.023E+02

SUBLAYER 2

SOIL MOISTURE (UG/ML)	3.000E+01
ADSORBED SOIL (UG/G)	7.140E+01
SOIL AIR (UG/ML)	6.021E-01
PURE PHASE (UG/ML)	3.661E+01

MAX. POLL. DEPTH (M) 1.067E+00

YEAR - 6 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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 LOAD LOWER  0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00

 TOTAL INPUT 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
        ---------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
VOLATILIZED 1.759E+07 1.639E+07 1.173E+07 1.142E+07 1.291E+07 1.432E+07 1.757E+07 1.631E+07 1.388E+07 1.027E+07 8.724E+06 8.258E+06
IN SOIL MOI 1.239E+07 1.435E+07 1.540E+07 1.523E+07 1.475E+07 1.416E+07 1.396E+07 1.394E+07 1.317E+07 1.166E+07 1.021E+07 9.426E+06
ADS ON SOIL 1.646E+08 1.815E+08 1.793E+08 1.765E+08 1.755E+08 1.729E+08 1.794E+08 1.763E+08 1.627E+08 1.387E+08 1.211E+08 1.127E+08
IN SOIL AIR 2.160E+05 2.286E+05 2.039E+05 2.014E+05 2.080E+05 2.110E+05 2.269E+05 2.154E+05 1.909E+05 1.538E+05 1.336E+05 1.268E+05

          SUBLAYER  2
DIFFUSED UP 5.645E+07 4.916E+07 3.397E+07 3.274E+07 3.674E+07 4.067E+07 4.940E+07 4.554E+07 3.960E+07 3.080E+07 2.769E+07 2.704E+07
IN SOIL MOI 5.079E+07 5.624E+07 5.971E+07 5.871E+07 5.658E+07 5.442E+07 5.283E+07 5.299E+07 5.136E+07 4.774E+07 4.336E+07 4.053E+07
ADS ON SOIL 6.746E+08 7.110E+08 6.953E+08 6.804E+08 6.733E+08 6.643E+08 6.788E+08 6.700E+08 6.346E+08 5.681E+08 5.143E+08 4.847E+08
IN SOIL AIR 8.855E+05 8.959E+05 7.906E+05 7.763E+05 7.979E+05 8.107E+05 8.583E+05 8.188E+05 7.447E+05 6.298E+05 5.675E+05 5.449E+05

     SOIL ZONE 2:
          SUBLAYER  1
DIFFUSED UP 1.488E+08 1.235E+08 8.329E+07 7.973E+07 8.890E+07 9.795E+07 1.178E+08 1.077E+08 9.463E+07 7.612E+07 7.143E+07 7.183E+07
IN SOIL MOI 2.983E+08 3.166E+08 3.331E+08 3.257E+08 3.118E+08 2.995E+08 2.860E+08 2.873E+08 2.845E+08 2.768E+08 2.612E+08 2.484E+08
ADS ON SOIL 3.962E+09 4.003E+09 3.879E+09 3.774E+09 3.711E+09 3.655E+09 3.675E+09 3.632E+09 3.516E+09 3.294E+09 3.098E+09 2.970E+09
IN SOIL AIR 5.201E+06 5.044E+06 4.410E+06 4.307E+06 4.398E+06 4.461E+06 4.647E+06 4.439E+06 4.125E+06 3.652E+06 3.419E+06 3.340E+06

          SUBLAYER  2
DIFFUSED UP 3.218E+08 2.623E+08 1.748E+08 1.667E+08 1.860E+08 2.059E+08 2.489E+08 2.288E+08 2.035E+08 1.670E+08 1.608E+08 1.655E+08
IN SOIL MOI 7.743E+08 8.058E+08 8.429E+08 8.223E+08 7.873E+08 7.591E+08 7.237E+08 7.306E+08 7.341E+08 7.326E+08 7.085E+08 6.852E+08
ADS ON SOIL 1.028E+10 1.019E+10 9.816E+09 9.529E+09 9.368E+09 9.266E+09 9.298E+09 9.237E+09 9.071E+09 8.718E+09 8.402E+09 8.194E+09
IN SOIL AIR 1.350E+07 1.284E+07 1.116E+07 1.087E+07 1.110E+07 1.131E+07 1.176E+07 1.129E+07 1.064E+07 9.665E+06 9.272E+06 9.213E+06

     LOWER SOIL ZONE:
          SUBLAYER  1
DIFFUSED UP 3.071E+08 2.636E+08 1.925E+08 2.027E+08 2.415E+08 2.779E+08 3.382E+08 3.141E+08 2.876E+08 2.524E+08 2.629E+08 2.877E+08
IN SOIL MOI 7.226E+08 7.591E+08 8.241E+08 8.282E+08 8.065E+08 7.862E+08 7.470E+08 7.591E+08 7.767E+08 8.065E+08 8.092E+08 8.025E+08
ADS ON SOIL 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09
IN SOIL AIR 1.260E+07 1.209E+07 1.091E+07 1.095E+07 1.137E+07 1.171E+07 1.213E+07 1.173E+07 1.126E+07 1.064E+07 1.059E+07 1.079E+07
PURE PHASE  9.513E+09 9.259E+09 8.801E+09 8.380E+09 8.042E+09 7.749E+09 7.516E+09 7.244E+09 6.922E+09 6.432E+09 5.899E+09 5.383E+09

          SUBLAYER  2
IN SOIL MOI 7.226E+08 7.591E+08 8.241E+08 8.282E+08 8.065E+08 7.862E+08 7.470E+08 7.591E+08 7.767E+08 8.065E+08 8.092E+08 8.025E+08
ADS ON SOIL 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09
IN SOIL AIR 1.260E+07 1.209E+07 1.091E+07 1.095E+07 1.137E+07 1.171E+07 1.213E+07 1.173E+07 1.126E+07 1.064E+07 1.059E+07 1.079E+07
PURE PHASE  5.259E+09 5.349E+09 5.371E+09 5.461E+09 5.630E+09 5.873E+09 6.140E+09 6.409E+09 6.725E+09 7.063E+09 7.397E+09 7.677E+09
GWR. RUNOFF 0.000E+00 2.480E+07 7.620E+08 7.513E+08 4.786E+08 2.847E+08 0.000E+00 7.462E+07 2.926E+08 7.679E+08 8.149E+08 6.530E+08

     -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --
     ---------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
MOISTURE    5.144E-01 5.673E-01 5.605E-01 5.516E-01 5.486E-01 5.404E-01 5.609E-01 5.510E-01 5.085E-01 4.335E-01 3.785E-01 3.524E-01
%SOLUBILITY 1.715E+00 1.891E+00 1.868E+00 1.839E+00 1.829E+00 1.801E+00 1.870E+00 1.837E+00 1.695E+00 1.445E+00 1.262E+00 1.175E+00
ADSORBED    1.224E+00 1.350E+00 1.334E+00 1.313E+00 1.306E+00 1.286E+00 1.335E+00 1.311E+00 1.210E+00 1.032E+00 9.008E-01 8.387E-01
SOIL AIR    1.027E-02 1.154E-02 1.155E-02 1.149E-02 1.140E-02 1.115E-02 1.122E-02 1.087E-02 9.924E-03 8.429E-03 7.361E-03 6.897E-03

          SUBLAYER  2
MOISTURE    2.109E+00 2.223E+00 2.173E+00 2.127E+00 2.105E+00 2.076E+00 2.122E+00 2.094E+00 1.984E+00 1.776E+00 1.608E+00 1.515E+00
%SOLUBILITY 7.029E+00 7.409E+00 7.245E+00 7.089E+00 7.015E+00 6.922E+00 7.073E+00 6.981E+00 6.613E+00 5.919E+00 5.359E+00 5.050E+00
ADSORBED    5.019E+00 5.290E+00 5.173E+00 5.062E+00 5.009E+00 4.942E+00 5.050E+00 4.984E+00 4.721E+00 4.226E+00 3.826E+00 3.606E+00
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SOIL AIR    4.209E-02 4.520E-02 4.478E-02 4.431E-02 4.374E-02 4.285E-02 4.243E-02 4.131E-02 3.872E-02 3.453E-02 3.127E-02 2.965E-02

     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE    8.257E+00 8.342E+00 8.083E+00 7.865E+00 7.733E+00 7.618E+00 7.658E+00 7.568E+00 7.326E+00 6.864E+00 6.456E+00 6.190E+00
%SOLUBILITY 2.752E+01 2.781E+01 2.694E+01 2.622E+01 2.578E+01 2.539E+01 2.553E+01 2.523E+01 2.442E+01 2.288E+01 2.152E+01 2.063E+01
ADSORBED    1.965E+01 1.985E+01 1.924E+01 1.872E+01 1.840E+01 1.813E+01 1.823E+01 1.801E+01 1.744E+01 1.634E+01 1.537E+01 1.473E+01
SOIL AIR    1.648E-01 1.696E-01 1.665E-01 1.639E-01 1.607E-01 1.572E-01 1.531E-01 1.493E-01 1.430E-01 1.335E-01 1.256E-01 1.212E-01

          SUBLAYER  2
MOISTURE    2.143E+01 2.123E+01 2.046E+01 1.986E+01 1.952E+01 1.931E+01 1.938E+01 1.925E+01 1.890E+01 1.817E+01 1.751E+01 1.708E+01
%SOLUBILITY 7.144E+01 7.077E+01 6.818E+01 6.619E+01 6.508E+01 6.437E+01 6.459E+01 6.416E+01 6.301E+01 6.056E+01 5.837E+01 5.692E+01
ADSORBED    5.101E+01 5.053E+01 4.868E+01 4.726E+01 4.646E+01 4.596E+01 4.612E+01 4.581E+01 4.499E+01 4.324E+01 4.167E+01 4.064E+01
SOIL AIR    4.277E-01 4.317E-01 4.214E-01 4.137E-01 4.057E-01 3.985E-01 3.875E-01 3.797E-01 3.689E-01 3.532E-01 3.405E-01 3.342E-01

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE    3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01
%SOLUBILITY 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02
ADSORBED    7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01
SOIL AIR    5.988E-01 6.101E-01 6.181E-01 6.251E-01 6.235E-01 6.191E-01 5.999E-01 5.918E-01 5.855E-01 5.833E-01 5.835E-01 5.872E-01
PURE PHASE  9.908E+01 9.644E+01 9.167E+01 8.728E+01 8.376E+01 8.071E+01 7.828E+01 7.544E+01 7.210E+01 6.699E+01 6.144E+01 5.606E+01

          SUBLAYER  2
MOISTURE    3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01
%SOLUBILITY 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02
ADSORBED    7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01
SOIL AIR    5.988E-01 6.101E-01 6.181E-01 6.251E-01 6.235E-01 6.191E-01 5.999E-01 5.918E-01 5.855E-01 5.833E-01 5.835E-01 5.872E-01
PURE PHASE  5.477E+01 5.571E+01 5.594E+01 5.687E+01 5.864E+01 6.117E+01 6.395E+01 6.675E+01 7.004E+01 7.357E+01 7.704E+01 7.996E+01

POL DEP CM  1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02

                         YEAR -   6 ANNUAL SUMMARY REPORT
                          ==================================
       -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

         -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918

        -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
        ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
-------------------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED              1.594E+08
          SUBLAYER  2
               TOTAL DIFFUSED (UP)            4.698E+08
```

SOIL ZONE 2:
SUBLAYER 1
TOTAL DIFFUSED (UP) 1.162E+09
SUBLAYER 2
TOTAL DIFFUSED (UP) 2.492E+09
LOWER SOIL ZONE:
SUBLAYER 1
TOTAL DIFFUSED (UP) 3.228E+09
SUBLAYER 2
TOTAL IN GROUNDWATER RUNOFF 4.904E+09

-- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON-ZERO VALUES ARE PRINTED --

UPPER SOIL ZONE:
SUBLAYER 1
SOIL MOISTURE (UG/ML) 5.056E-01
ADSORBED SOIL (UG/G) 1.203E+00
SOIL AIR (UG/ML) 1.017E-02
SUBLAYER 2
SOIL MOISTURE (UG/ML) 1.993E+00
ADSORBED SOIL (UG/G) 4.742E+00
SOIL AIR (UG/ML) 4.007E-02
SOIL ZONE 2:
SUBLAYER 1
SOIL MOISTURE (UG/ML) 7.497E+00
ADSORBED SOIL (UG/G) 1.784E+01
SOIL AIR (UG/ML) 1.507E-01
SUBLAYER 2
SOIL MOISTURE (UG/ML) 1.934E+01
ADSORBED SOIL (UG/G) 4.603E+01
SOIL AIR (UG/ML) 3.886E-01
LOWER SOIL ZONE:
SUBLAYER 1
SOIL MOISTURE (UG/ML) 3.000E+01
ADSORBED SOIL (UG/G) 7.140E+01
SOIL AIR (UG/ML) 6.021E-01
PURE PHASE (UG/ML) 7.910E+01
SUBLAYER 2
SOIL MOISTURE (UG/ML) 3.000E+01
ADSORBED SOIL (UG/G) 7.140E+01
SOIL AIR (UG/ML) 6.021E-01
PURE PHASE (UG/ML) 6.453E+01

MAX. POLL. DEPTH (M) 1.067E+00

YEAR - 7 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671

PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:												
SUBLAYER 1												
VOLATILIZED	1.369E+07	1.272E+07	9.096E+06	8.849E+06	9.998E+06	1.109E+07	1.363E+07	1.268E+07	1.081E+07	8.018E+06	6.833E+06	6.489E+06
IN SOIL MOI	9.627E+06	1.113E+07	1.193E+07	1.180E+07	1.142E+07	1.098E+07	1.084E+07	1.085E+07	1.027E+07	9.116E+06	8.009E+06	7.420E+06
ADS ON SOIL	1.279E+08	1.407E+08	1.389E+08	1.367E+08	1.359E+08	1.340E+08	1.393E+08	1.372E+08	1.269E+08	1.085E+08	9.498E+07	8.874E+07
IN SOIL AIR	1.678E+05	1.773E+05	1.580E+05	1.560E+05	1.611E+05	1.635E+05	1.761E+05	1.676E+05	1.489E+05	1.203E+05	1.048E+05	9.977E+04
SUBLAYER 2												
DIFFUSED UP	4.349E+07	3.788E+07	2.621E+07	2.531E+07	2.846E+07	3.161E+07	3.856E+07	3.573E+07	3.122E+07	2.439E+07	2.201E+07	2.160E+07
IN SOIL MOI	3.920E+07	4.343E+07	4.615E+07	4.544E+07	4.388E+07	4.232E+07	4.126E+07	4.156E+07	4.046E+07	3.775E+07	3.442E+07	3.232E+07
ADS ON SOIL	5.207E+08	5.490E+08	5.374E+08	5.266E+08	5.221E+08	5.166E+08	5.301E+08	5.255E+08	4.999E+08	4.492E+08	4.083E+08	3.866E+08
IN SOIL AIR	6.835E+05	6.917E+05	6.110E+05	6.008E+05	6.188E+05	6.304E+05	6.702E+05	6.422E+05	5.866E+05	4.980E+05	4.505E+05	4.346E+05
SOIL ZONE 2:												
SUBLAYER 1												
DIFFUSED UP	1.140E+08	9.546E+07	6.482E+07	6.242E+07	7.005E+07	7.775E+07	9.432E+07	8.705E+07	7.714E+07	6.244E+07	5.889E+07	5.953E+07
IN SOIL MOI	2.297E+08	2.453E+08	2.593E+08	2.547E+08	2.453E+08	2.370E+08	2.283E+08	2.311E+08	2.304E+08	2.253E+08	2.138E+08	2.044E+08
ADS ON SOIL	3.051E+09	3.102E+09	3.020E+09	2.952E+09	2.919E+09	2.894E+09	2.934E+09	2.921E+09	2.847E+09	2.681E+09	2.535E+09	2.444E+09
IN SOIL AIR	4.005E+06	3.908E+06	3.433E+06	3.368E+06	3.459E+06	3.531E+06	3.709E+06	3.571E+06	3.341E+06	2.973E+06	2.798E+06	2.748E+06
SUBLAYER 2												
DIFFUSED UP	2.662E+08	2.231E+08	1.514E+08	1.461E+08	1.649E+08	1.848E+08	2.264E+08	2.106E+08	1.887E+08	1.554E+08	1.498E+08	1.544E+08
IN SOIL MOI	6.295E+08	6.662E+08	7.035E+08	6.923E+08	6.693E+08	6.519E+08	6.290E+08	6.410E+08	6.484E+08	6.496E+08	6.307E+08	6.116E+08
ADS ON SOIL	8.361E+09	8.422E+09	8.192E+09	8.022E+09	7.964E+09	7.958E+09	8.081E+09	8.103E+09	8.012E+09	7.730E+09	7.480E+09	7.314E+09
IN SOIL AIR	1.098E+07	1.061E+07	9.314E+06	9.154E+06	9.438E+06	9.711E+06	1.022E+07	9.904E+06	9.401E+06	8.570E+06	8.255E+06	8.224E+06
LOWER SOIL ZONE:												
SUBLAYER 1												
DIFFUSED UP	4.596E+08	3.794E+08	2.658E+08	2.695E+08	3.126E+08	3.522E+08	4.220E+08	3.858E+08	3.475E+08	2.990E+08	3.055E+08	3.072E+08
IN SOIL MOI	7.226E+08	7.591E+08	8.241E+08	8.282E+08	8.065E+08	7.862E+08	7.470E+08	7.591E+08	7.767E+08	8.065E+08	8.047E+08	7.550E+08
ADS ON SOIL	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.544E+09	9.030E+09
IN SOIL AIR	1.260E+07	1.209E+07	1.091E+07	1.095E+07	1.137E+07	1.171E+07	1.213E+07	1.173E+07	1.126E+07	1.064E+07	1.053E+07	1.015E+07
PURE PHASE	5.025E+09	4.620E+09	3.980E+09	3.390E+09	2.902E+09	2.467E+09	2.109E+09	1.714E+09	1.259E+09	6.159E+08	0.000E+00	0.000E+00
SUBLAYER 2												
DIFFUSED UP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.191E+05	2.291E+07
IN SOIL MOI	7.226E+08	7.591E+08	8.241E+08	8.282E+08	8.065E+08	7.862E+08	7.470E+08	7.591E+08	7.767E+08	8.065E+08	8.092E+08	8.025E+08
ADS ON SOIL	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09
IN SOIL AIR	1.260E+07	1.209E+07	1.091E+07	1.095E+07	1.137E+07	1.171E+07	1.213E+07	1.173E+07	1.126E+07	1.064E+07	1.059E+07	1.079E+07
PURE PHASE	7.939E+09	8.030E+09	8.052E+09	8.141E+09	8.311E+09	8.554E+09	8.821E+09	9.089E+09	9.406E+09	9.744E+09	1.008E+10	1.030E+10
GWR. RUNOFF	0.000E+00	2.480E+07	7.620E+08	7.513E+08	4.786E+08	2.847E+08	0.000E+00	7.462E+07	2.926E+08	7.679E+08	8.149E+08	6.530E+08

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --

UPPER SOIL ZONE:

SUBLAYER 1

MOISTURE	3.997E-01	4.399E-01	4.343E-01	4.273E-01	4.250E-01	4.188E-01	4.354E-01	4.287E-01	3.967E-01	3.391E-01	2.969E-01	2.774E-01
%SOLUBILITY	1.332E+00	1.466E+00	1.448E+00	1.424E+00	1.417E+00	1.396E+00	1.451E+00	1.429E+00	1.322E+00	1.130E+00	9.897E-01	9.246E-01
ADSORBED	9.512E-01	1.047E+00	1.034E+00	1.017E+00	1.011E+00	9.968E-01	1.036E+00	1.020E+00	9.440E-01	8.070E-01	7.066E-01	6.602E-01
SOIL AIR	7.977E-03	8.945E-03	8.947E-03	8.903E-03	8.832E-03	8.643E-03	8.707E-03	8.457E-03	7.741E-03	6.593E-03	5.775E-03	5.429E-03

SUBLAYER 2

MOISTURE	1.628E+00	1.716E+00	1.680E+00	1.646E+00	1.632E+00	1.615E+00	1.657E+00	1.643E+00	1.563E+00	1.404E+00	1.276E+00	1.208E+00
%SOLUBILITY	5.426E+00	5.721E+00	5.599E+00	5.487E+00	5.440E+00	5.383E+00	5.523E+00	5.475E+00	5.209E+00	4.680E+00	4.254E+00	4.028E+00
ADSORBED	3.874E+00	4.084E+00	3.998E+00	3.917E+00	3.884E+00	3.843E+00	3.944E+00	3.909E+00	3.719E+00	3.342E+00	3.037E+00	2.876E+00
SOIL AIR	3.249E-02	3.490E-02	3.461E-02	3.430E-02	3.392E-02	3.332E-02	3.313E-02	3.240E-02	3.050E-02	2.730E-02	2.482E-02	2.365E-02

SOIL ZONE 2:

SUBLAYER 1

MOISTURE	6.359E+00	6.464E+00	6.292E+00	6.151E+00	6.082E+00	6.030E+00	6.113E+00	6.088E+00	5.933E+00	5.588E+00	5.283E+00	5.094E+00
%SOLUBILITY	2.120E+01	2.155E+01	2.097E+01	2.050E+01	2.027E+01	2.010E+01	2.038E+01	2.029E+01	1.978E+01	1.863E+01	1.761E+01	1.698E+01
ADSORBED	1.513E+01	1.538E+01	1.498E+01	1.464E+01	1.447E+01	1.435E+01	1.455E+01	1.449E+01	1.412E+01	1.330E+01	1.257E+01	1.212E+01
SOIL AIR	1.269E-01	1.314E-01	1.296E-01	1.282E-01	1.264E-01	1.244E-01	1.222E-01	1.201E-01	1.158E-01	1.086E-01	1.028E-01	9.970E-02

SUBLAYER 2

MOISTURE	1.742E+01	1.755E+01	1.707E+01	1.672E+01	1.660E+01	1.658E+01	1.684E+01	1.689E+01	1.670E+01	1.611E+01	1.559E+01	1.524E+01
%SOLUBILITY	5.808E+01	5.850E+01	5.691E+01	5.573E+01	5.532E+01	5.528E+01	5.614E+01	5.629E+01	5.565E+01	5.370E+01	5.196E+01	5.081E+01
ADSORBED	4.147E+01	4.177E+01	4.063E+01	3.979E+01	3.950E+01	3.947E+01	4.008E+01	4.019E+01	3.974E+01	3.834E+01	3.710E+01	3.628E+01
SOIL AIR	3.478E-01	3.569E-01	3.517E-01	3.483E-01	3.449E-01	3.422E-01	3.368E-01	3.331E-01	3.258E-01	3.132E-01	3.032E-01	2.983E-01

LOWER SOIL ZONE:

SUBLAYER 1

MOISTURE	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	2.983E+01	2.823E+01
%SOLUBILITY	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	9.944E+01	9.409E+01
ADSORBED	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.100E+01	6.718E+01
SOIL AIR	5.988E-01	6.101E-01	6.181E-01	6.251E-01	6.235E-01	6.191E-01	5.999E-01	5.918E-01	5.855E-01	5.833E-01	5.802E-01	5.525E-01
PURE PHASE	5.234E+01	4.812E+01	4.145E+01	3.530E+01	3.023E+01	2.569E+01	2.197E+01	1.785E+01	1.312E+01	6.415E+00	0.000E+00	0.000E+00

SUBLAYER 2

MOISTURE	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01
%SOLUBILITY	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02
ADSORBED	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01
SOIL AIR	5.988E-01	6.101E-01	6.181E-01	6.251E-01	6.235E-01	6.191E-01	5.999E-01	5.918E-01	5.855E-01	5.833E-01	5.835E-01	5.872E-01
PURE PHASE	8.269E+01	8.363E+01	8.386E+01	8.479E+01	8.656E+01	8.909E+01	9.187E+01	9.467E+01	9.796E+01	1.015E+02	1.050E+02	1.073E+02

POL DEP CM	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02

YEAR - 7 ANNUAL SUMMARY REPORT

-- TOTAL INPUTS (UG) --

UPPER SOIL ZONE	0.000E+00
SOIL ZONE 2	0.000E+00
LOWER SOIL ZONE	0.000E+00

-- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)	27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)	27.276
TOTAL PRECIPITATION (CM)	126.201
TOTAL INFILTRATION (CM)	123.899
TOTAL EVAPOTRANSPIRATION (CM)	99.280
TOTAL SURFACE RUNOFF (CM)	2.302

```
TOTAL GRW RUNOFF (CM)                          24.616
TOTAL MOISTURE RETENTION (CM)                   0.003
TOTAL YIELD (CM)                               26.918

        -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
        ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
-------------------------------------------------------------------------------------------------------------------------------------
    UPPER SOIL ZONE:
        SUBLAYER  1
            TOTAL VOLATILIZED                  1.239E+08
        SUBLAYER  2
            TOTAL DIFFUSED (UP)                3.665E+08
    SOIL ZONE 2:
        SUBLAYER  1
            TOTAL DIFFUSED (UP)                9.239E+08
        SUBLAYER  2
            TOTAL DIFFUSED (UP)                2.222E+09
    LOWER SOIL ZONE:
        SUBLAYER  1
            TOTAL DIFFUSED (UP)                4.106E+09
        SUBLAYER  2
            TOTAL DIFFUSED (UP)                2.313E+07
            TOTAL IN GROUNDWATER RUNOFF        4.904E+09

                    -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                    ---------------------------------------------------------------------------------
    UPPER SOIL ZONE:
        SUBLAYER  1
                                SOIL MOISTURE (UG/ML)  3.933E-01
                                ADSORBED SOIL (UG/G)   9.359E-01
                                SOIL AIR (UG/ML)       7.912E-03
        SUBLAYER  2
                                SOIL MOISTURE (UG/ML)  1.556E+00
                                ADSORBED SOIL (UG/G)   3.702E+00
                                SOIL AIR (UG/ML)       3.128E-02
    SOIL ZONE 2:
        SUBLAYER  1
                                SOIL MOISTURE (UG/ML)  5.956E+00
                                ADSORBED SOIL (UG/G)   1.418E+01
                                SOIL AIR (UG/ML)       1.197E-01
        SUBLAYER  2
                                SOIL MOISTURE (UG/ML)  1.661E+01
                                ADSORBED SOIL (UG/G)   3.953E+01
                                SOIL AIR (UG/ML)       3.335E-01
    LOWER SOIL ZONE:
        SUBLAYER  1
                                SOIL MOISTURE (UG/ML)  2.984E+01
                                ADSORBED SOIL (UG/G)   7.102E+01
                                SOIL AIR (UG/ML)       5.990E-01
                                PURE PHASE (UG/ML)     2.437E+01
        SUBLAYER  2
                                SOIL MOISTURE (UG/ML)  3.000E+01
                                ADSORBED SOIL (UG/G)   7.140E+01
                                SOIL AIR (UG/ML)       6.021E-01
                                PURE PHASE (UG/ML)     9.241E+01

                                MAX. POLL. DEPTH (M)   1.067E+00
```

YEAR - 8 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
UPPER SOIL ZONE:												
SUBLAYER 1												
VOLATILIZED	1.081E+07	1.010E+07	7.259E+06	7.089E+06	8.043E+06	8.966E+06	1.107E+07	1.035E+07	8.871E+06	6.602E+06	5.643E+06	5.373E+06
IN SOIL MOI	7.624E+06	8.865E+06	9.538E+06	9.467E+06	9.210E+06	8.892E+06	8.832E+06	8.882E+06	8.442E+06	7.517E+06	6.623E+06	6.152E+06
ADS ON SOIL	1.013E+08	1.121E+08	1.111E+08	1.097E+08	1.096E+08	1.085E+08	1.135E+08	1.123E+08	1.043E+08	8.945E+07	7.854E+07	7.357E+07
IN SOIL AIR	1.329E+05	1.412E+05	1.263E+05	1.252E+05	1.299E+05	1.325E+05	1.435E+05	1.372E+05	1.224E+05	9.917E+04	8.668E+04	8.272E+04
SUBLAYER 2												
DIFFUSED UP	3.499E+07	3.073E+07	2.139E+07	2.074E+07	2.342E+07	2.613E+07	3.202E+07	2.979E+07	2.609E+07	2.041E+07	1.843E+07	1.810E+07
IN SOIL MOI	3.152E+07	3.516E+07	3.752E+07	3.709E+07	3.597E+07	3.485E+07	3.414E+07	3.453E+07	3.369E+07	3.148E+07	2.875E+07	2.702E+07
ADS ON SOIL	4.187E+08	4.445E+08	4.370E+08	4.298E+08	4.281E+08	4.254E+08	4.387E+08	4.365E+08	4.163E+08	3.746E+08	3.410E+08	3.232E+08
IN SOIL AIR	5.496E+05	5.600E+05	4.968E+05	4.905E+05	5.073E+05	5.192E+05	5.547E+05	5.335E+05	4.885E+05	4.153E+05	3.763E+05	3.634E+05
SOIL ZONE 2:												
SUBLAYER 1												
DIFFUSED UP	9.528E+07	8.051E+07	5.498E+07	5.311E+07	5.975E+07	6.642E+07	8.064E+07	7.439E+07	6.581E+07	5.314E+07	4.998E+07	5.039E+07
IN SOIL MOI	1.909E+08	2.053E+08	2.178E+08	2.146E+08	2.072E+08	2.006E+08	1.935E+08	1.959E+08	1.952E+08	1.906E+08	1.806E+08	1.723E+08
ADS ON SOIL	2.535E+09	2.595E+09	2.536E+09	2.487E+09	2.465E+09	2.449E+09	2.486E+09	2.476E+09	2.412E+09	2.269E+09	2.141E+09	2.060E+09
IN SOIL AIR	3.327E+06	3.270E+06	2.883E+06	2.837E+06	2.921E+06	2.989E+06	3.144E+06	3.027E+06	2.830E+06	2.515E+06	2.363E+06	2.317E+06
SUBLAYER 2												
DIFFUSED UP	2.482E+08	2.074E+08	1.398E+08	1.335E+08	1.487E+08	1.641E+08	1.975E+08	1.809E+08	1.600E+08	1.302E+08	1.241E+08	1.265E+08
IN SOIL MOI	5.633E+08	5.953E+08	6.259E+08	6.120E+08	5.867E+08	5.660E+08	5.403E+08	5.456E+08	5.475E+08	5.444E+08	5.241E+08	5.044E+08
ADS ON SOIL	7.481E+09	7.526E+09	7.290E+09	7.093E+09	6.982E+09	6.909E+09	6.942E+09	6.897E+09	6.765E+09	6.478E+09	6.216E+09	6.032E+09
IN SOIL AIR	9.820E+06	9.483E+06	8.288E+06	8.093E+06	8.274E+06	8.432E+06	8.777E+06	8.430E+06	7.938E+06	7.182E+06	6.859E+06	6.782E+06
LOWER SOIL ZONE:												
SUBLAYER 1												
DIFFUSED UP	4.490E+08	3.424E+08	2.184E+08	2.026E+08	2.214E+08	2.420E+08	2.890E+08	2.636E+08	2.352E+08	1.956E+08	1.913E+08	1.990E+08

IN SOIL MOI	6.599E+08	6.733E+08	6.961E+08	6.732E+08	6.408E+08	6.164E+08	5.846E+08	5.905E+08	5.969E+08	6.023E+08	5.876E+08	5.704E+08
ADS ON SOIL	8.765E+09	8.512E+09	8.106E+09	7.802E+09	7.625E+09	7.524E+09	7.511E+09	7.465E+09	7.375E+09	7.167E+09	6.969E+09	6.822E+09
IN SOIL AIR	1.151E+07	1.072E+07	9.217E+06	8.902E+06	9.036E+06	9.182E+06	9.497E+06	9.123E+06	8.654E+06	7.945E+06	7.690E+06	7.671E+06
SUBLAYER 2												
DIFFUSED UP	7.704E+07	9.285E+07	8.628E+07	1.062E+08	1.379E+08	1.659E+08	2.058E+08	1.940E+08	1.795E+08	1.605E+08	1.710E+08	1.913E+08
IN SOIL MOI	7.226E+08	7.591E+08	8.241E+08	8.282E+08	8.065E+08	7.862E+08	7.470E+08	7.591E+08	7.767E+08	8.065E+08	8.092E+08	8.025E+08
ADS ON SOIL	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09
IN SOIL AIR	1.260E+07	1.209E+07	1.091E+07	1.095E+07	1.137E+07	1.171E+07	1.213E+07	1.173E+07	1.126E+07	1.064E+07	1.059E+07	1.079E+07
PURE PHASE	1.048E+10	1.046E+10	1.028E+10	1.011E+10	1.002E+10	9.993E+09	1.000E+10	1.000E+10	9.995E+09	9.896E+09	9.755E+09	9.583E+09
GWR. RUNOFF	0.000E+00	2.480E+07	7.620E+08	7.513E+08	4.786E+08	2.847E+08	0.000E+00	7.462E+07	2.926E+08	7.679E+08	8.149E+08	6.530E+08

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --

UPPER SOIL ZONE:

SUBLAYER 1												
MOISTURE	3.165E-01	3.503E-01	3.472E-01	3.429E-01	3.426E-01	3.393E-01	3.547E-01	3.510E-01	3.261E-01	2.796E-01	2.455E-01	2.300E-01
%SOLUBILITY	1.055E+00	1.168E+00	1.157E+00	1.143E+00	1.142E+00	1.131E+00	1.182E+00	1.170E+00	1.087E+00	9.320E-01	8.184E-01	7.666E-01
ADSORBED	7.534E-01	8.338E-01	8.264E-01	8.162E-01	8.153E-01	8.075E-01	8.442E-01	8.354E-01	7.760E-01	6.655E-01	5.843E-01	5.473E-01
SOIL AIR	6.318E-03	7.124E-03	7.153E-03	7.146E-03	7.120E-03	7.001E-03	7.093E-03	6.924E-03	6.364E-03	5.437E-03	4.775E-03	4.501E-03
SUBLAYER 2												
MOISTURE	1.309E+00	1.389E+00	1.366E+00	1.344E+00	1.338E+00	1.330E+00	1.371E+00	1.364E+00	1.301E+00	1.171E+00	1.066E+00	1.010E+00
%SOLUBILITY	4.363E+00	4.631E+00	4.553E+00	4.479E+00	4.460E+00	4.433E+00	4.571E+00	4.548E+00	4.338E+00	3.904E+00	3.553E+00	3.368E+00
ADSORBED	3.115E+00	3.307E+00	3.251E+00	3.198E+00	3.185E+00	3.165E+00	3.264E+00	3.247E+00	3.097E+00	2.787E+00	2.537E+00	2.405E+00
SOIL AIR	2.612E-02	2.825E-02	2.814E-02	2.800E-02	2.781E-02	2.744E-02	2.742E-02	2.691E-02	2.540E-02	2.277E-02	2.073E-02	1.977E-02

SOIL ZONE 2:

SUBLAYER 1												
MOISTURE	5.282E+00	5.408E+00	5.285E+00	5.182E+00	5.137E+00	5.104E+00	5.181E+00	5.161E+00	5.026E+00	4.727E+00	4.462E+00	4.294E+00
%SOLUBILITY	1.761E+01	1.803E+01	1.762E+01	1.727E+01	1.712E+01	1.701E+01	1.727E+01	1.720E+01	1.675E+01	1.576E+01	1.487E+01	1.431E+01
ADSORBED	1.257E+01	1.287E+01	1.258E+01	1.233E+01	1.223E+01	1.215E+01	1.233E+01	1.228E+01	1.196E+01	1.125E+01	1.062E+01	1.022E+01
SOIL AIR	1.054E-01	1.100E-01	1.089E-01	1.080E-01	1.068E-01	1.053E-01	1.036E-01	1.018E-01	9.808E-02	9.191E-02	8.679E-02	8.404E-02
SUBLAYER 2												
MOISTURE	1.559E+01	1.568E+01	1.519E+01	1.478E+01	1.455E+01	1.440E+01	1.447E+01	1.437E+01	1.410E+01	1.350E+01	1.295E+01	1.257E+01
%SOLUBILITY	5.197E+01	5.228E+01	5.064E+01	4.927E+01	4.850E+01	4.799E+01	4.822E+01	4.791E+01	4.699E+01	4.500E+01	4.318E+01	4.190E+01
ADSORBED	3.711E+01	3.733E+01	3.615E+01	3.518E+01	3.463E+01	3.427E+01	3.443E+01	3.421E+01	3.355E+01	3.213E+01	3.083E+01	2.992E+01
SOIL AIR	3.112E-01	3.190E-01	3.130E-01	3.080E-01	3.024E-01	2.971E-01	2.893E-01	2.835E-01	2.751E-01	2.625E-01	2.519E-01	2.460E-01

LOWER SOIL ZONE:

SUBLAYER 1												
MOISTURE	2.740E+01	2.661E+01	2.534E+01	2.439E+01	2.383E+01	2.352E+01	2.348E+01	2.333E+01	2.305E+01	2.240E+01	2.178E+01	2.133E+01
%SOLUBILITY	9.133E+01	8.869E+01	8.447E+01	8.129E+01	7.945E+01	7.840E+01	7.826E+01	7.778E+01	7.684E+01	7.467E+01	7.261E+01	7.109E+01
ADSORBED	6.521E+01	6.332E+01	6.031E+01	5.804E+01	5.673E+01	5.598E+01	5.588E+01	5.554E+01	5.487E+01	5.332E+01	5.185E+01	5.076E+01
SOIL AIR	5.469E-01	5.411E-01	5.220E-01	5.081E-01	4.953E-01	4.853E-01	4.695E-01	4.603E-01	4.499E-01	4.356E-01	4.237E-01	4.174E-01
SUBLAYER 2												
MOISTURE	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01	3.000E+01
%SOLUBILITY	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02	1.000E+02
ADSORBED	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01	7.140E+01
SOIL AIR	5.988E-01	6.101E-01	6.181E-01	6.251E-01	6.235E-01	6.191E-01	5.999E-01	5.918E-01	5.855E-01	5.833E-01	5.835E-01	5.872E-01
PURE PHASE	1.091E+02	1.089E+02	1.070E+02	1.053E+02	1.044E+02	1.041E+02	1.042E+02	1.042E+02	1.041E+02	1.031E+02	1.016E+02	9.981E+01
POL DEP CM	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02

YEAR - 8 ANNUAL SUMMARY REPORT

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       -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

          -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918

         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED                1.002E+08
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              3.022E+08
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)              7.844E+08
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              1.961E+09
     LOWER SOIL ZONE:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)              3.050E+09
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              1.768E+09
               TOTAL IN GROUNDWATER RUNOFF      4.904E+09

                    -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
     UPPER SOIL ZONE:
          SUBLAYER  1
                                   SOIL MOISTURE (UG/ML)  3.188E-01
                                   ADSORBED SOIL (UG/G)   7.588E-01
                                   SOIL AIR (UG/ML)       6.413E-03
          SUBLAYER  2
                                   SOIL MOISTURE (UG/ML)  1.280E+00
                                   ADSORBED SOIL (UG/G)   3.046E+00
                                   SOIL AIR (UG/ML)       2.573E-02
     SOIL ZONE 2:
          SUBLAYER  1
                                   SOIL MOISTURE (UG/ML)  5.021E+00
                                   ADSORBED SOIL (UG/G)   1.195E+01
                                   SOIL AIR (UG/ML)       1.009E-01
          SUBLAYER  2
                                   SOIL MOISTURE (UG/ML)  1.435E+01
                                   ADSORBED SOIL (UG/G)   3.414E+01
                                   SOIL AIR (UG/ML)       2.882E-01
     LOWER SOIL ZONE:
          SUBLAYER  1
```

SOIL MOISTURE (UG/ML)	2.387E+01
ADSORBED SOIL (UG/G)	5.682E+01
SOIL AIR (UG/ML)	4.796E-01

SUBLAYER 2

SOIL MOISTURE (UG/ML)	3.000E+01
ADSORBED SOIL (UG/G)	7.140E+01
SOIL AIR (UG/ML)	6.021E-01
PURE PHASE (UG/ML)	1.047E+02
MAX. POLL. DEPTH (M)	1.067E+00

YEAR - 9 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:

SUBLAYER 1

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
VOLATILIZED	8.978E+06	8.414E+06	6.053E+06	5.917E+06	6.716E+06	7.490E+06	9.250E+06	8.648E+06	7.408E+06	5.512E+06	4.709E+06	4.483E+06
IN SOIL MOI	6.342E+06	7.389E+06	7.958E+06	7.904E+06	7.693E+06	7.428E+06	7.379E+06	7.419E+06	7.049E+06	6.275E+06	5.527E+06	5.132E+06
ADS ON SOIL	8.424E+07	9.341E+07	9.267E+07	9.159E+07	9.154E+07	9.068E+07	9.480E+07	9.379E+07	8.710E+07	7.467E+07	6.555E+07	6.138E+07
IN SOIL AIR	1.106E+05	1.177E+05	1.054E+05	1.045E+05	1.085E+05	1.107E+05	1.199E+05	1.146E+05	1.022E+05	8.278E+04	7.233E+04	6.901E+04

SUBLAYER 2

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DIFFUSED UP	2.934E+07	2.578E+07	1.794E+07	1.737E+07	1.961E+07	2.185E+07	2.675E+07	2.486E+07	2.176E+07	1.702E+07	1.537E+07	1.509E+07
IN SOIL MOI	2.639E+07	2.944E+07	3.141E+07	3.104E+07	3.009E+07	2.913E+07	2.851E+07	2.881E+07	2.810E+07	2.625E+07	2.397E+07	2.253E+07
ADS ON SOIL	3.505E+08	3.722E+08	3.658E+08	3.597E+08	3.580E+08	3.556E+08	3.663E+08	3.642E+08	3.472E+08	3.124E+08	2.843E+08	2.695E+08
IN SOIL AIR	4.601E+05	4.690E+05	4.159E+05	4.104E+05	4.243E+05	4.339E+05	4.632E+05	4.452E+05	4.074E+05	3.463E+05	3.137E+05	3.030E+05

SOIL ZONE 2:

SUBLAYER 1

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DIFFUSED UP	8.032E+07	6.757E+07	4.600E+07	4.434E+07	4.979E+07	5.527E+07	6.702E+07	6.180E+07	5.468E+07	4.419E+07	4.160E+07	4.199E+07
IN SOIL MOI	1.603E+08	1.719E+08	1.821E+08	1.791E+08	1.727E+08	1.671E+08	1.610E+08	1.629E+08	1.624E+08	1.587E+08	1.504E+08	1.437E+08
ADS ON SOIL	2.129E+09	2.174E+09	2.120E+09	2.076E+09	2.055E+09	2.039E+09	2.068E+09	2.060E+09	2.006E+09	1.888E+09	1.784E+09	1.718E+09
IN SOIL AIR	2.795E+06	2.739E+06	2.411E+06	2.369E+06	2.435E+06	2.489E+06	2.615E+06	2.517E+06	2.354E+06	2.093E+06	1.968E+06	1.932E+06

SUBLAYER 2												
DIFFUSED UP	2.013E+08	1.673E+08	1.128E+08	1.080E+08	1.207E+08	1.338E+08	1.622E+08	1.497E+08	1.334E+08	1.093E+08	1.047E+08	1.073E+08
IN SOIL MOI	4.613E+08	4.865E+08	5.117E+08	5.010E+08	4.814E+08	4.659E+08	4.468E+08	4.535E+08	4.572E+08	4.564E+08	4.410E+08	4.260E+08
ADS ON SOIL	6.127E+09	6.150E+09	5.959E+09	5.806E+09	5.728E+09	5.687E+09	5.741E+09	5.733E+09	5.650E+09	5.431E+09	5.230E+09	5.095E+09
IN SOIL AIR	8.042E+06	7.749E+06	6.775E+06	6.625E+06	6.788E+06	6.940E+06	7.259E+06	7.007E+06	6.629E+06	6.021E+06	5.772E+06	5.729E+06

LOWER SOIL ZONE:

SUBLAYER 1												
DIFFUSED UP	3.179E+08	2.626E+08	1.765E+08	1.698E+08	1.919E+08	2.164E+08	2.664E+08	2.492E+08	2.256E+08	1.885E+08	1.845E+08	1.924E+08
IN SOIL MOI	5.181E+08	5.430E+08	5.708E+08	5.599E+08	5.406E+08	5.273E+08	5.077E+08	5.186E+08	5.282E+08	5.349E+08	5.238E+08	5.109E+08
ADS ON SOIL	6.881E+09	6.865E+09	6.647E+09	6.489E+09	6.433E+09	6.437E+09	6.524E+09	6.557E+09	6.527E+09	6.366E+09	6.212E+09	6.111E+09
IN SOIL AIR	9.033E+06	8.649E+06	7.558E+06	7.404E+06	7.623E+06	7.855E+06	8.248E+06	8.013E+06	7.658E+06	7.057E+06	6.855E+06	6.870E+06
SUBLAYER 2												
DIFFUSED UP	3.084E+08	2.588E+08	1.867E+08	1.949E+08	2.296E+08	2.594E+08	3.089E+08	2.807E+08	2.514E+08	2.169E+08	2.235E+08	2.431E+08
IN SOIL MOI	7.226E+08	7.591E+08	8.241E+08	8.282E+08	8.065E+08	7.862E+08	7.470E+08	7.591E+08	7.767E+08	8.065E+08	8.092E+08	8.025E+08
ADS ON SOIL	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09
IN SOIL AIR	1.260E+07	1.209E+07	1.091E+07	1.095E+07	1.137E+07	1.171E+07	1.213E+07	1.173E+07	1.126E+07	1.064E+07	1.059E+07	1.079E+07
PURE PHASE	9.484E+09	9.273E+09	8.855E+09	8.483E+09	8.218E+09	8.035E+09	7.919E+09	7.794E+09	7.659E+09	7.406E+09	7.119E+09	6.824E+09
GWR. RUNOFF	0.000E+00	2.480E+07	7.620E+08	7.513E+08	4.786E+08	2.847E+08	0.000E+00	7.462E+07	2.926E+08	7.679E+08	8.149E+08	6.530E+08

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --

UPPER SOIL ZONE:

SUBLAYER 1												
MOISTURE	2.633E-01	2.920E-01	2.897E-01	2.863E-01	2.861E-01	2.835E-01	2.963E-01	2.932E-01	2.723E-01	2.334E-01	2.049E-01	1.919E-01
%SOLUBILITY	8.777E-01	9.733E-01	9.656E-01	9.543E-01	9.538E-01	9.448E-01	9.878E-01	9.772E-01	9.075E-01	7.780E-01	6.830E-01	6.396E-01
ADSORBED	6.267E-01	6.949E-01	6.894E-01	6.814E-01	6.810E-01	6.746E-01	7.053E-01	6.977E-01	6.480E-01	5.555E-01	4.876E-01	4.566E-01
SOIL AIR	5.255E-03	5.938E-03	5.968E-03	5.965E-03	5.947E-03	5.849E-03	5.926E-03	5.783E-03	5.313E-03	4.538E-03	3.985E-03	3.755E-03
SUBLAYER 2												
MOISTURE	1.096E+00	1.163E+00	1.143E+00	1.124E+00	1.119E+00	1.111E+00	1.145E+00	1.139E+00	1.085E+00	9.764E-01	8.886E-01	8.423E-01
%SOLUBILITY	3.653E+00	3.878E+00	3.811E+00	3.748E+00	3.730E+00	3.705E+00	3.817E+00	3.795E+00	3.618E+00	3.255E+00	2.962E+00	2.808E+00
ADSORBED	2.608E+00	2.769E+00	2.721E+00	2.676E+00	2.664E+00	2.645E+00	2.725E+00	2.710E+00	2.583E+00	2.324E+00	2.115E+00	2.005E+00
SOIL AIR	2.187E-02	2.366E-02	2.356E-02	2.343E-02	2.326E-02	2.294E-02	2.290E-02	2.246E-02	2.118E-02	1.898E-02	1.728E-02	1.649E-02

SOIL ZONE 2:

SUBLAYER 1												
MOISTURE	4.438E+00	4.530E+00	4.419E+00	4.326E+00	4.283E+00	4.250E+00	4.310E+00	4.292E+00	4.181E+00	3.935E+00	3.717E+00	3.580E+00
%SOLUBILITY	1.479E+01	1.510E+01	1.473E+01	1.442E+01	1.428E+01	1.417E+01	1.437E+01	1.431E+01	1.394E+01	1.312E+01	1.239E+01	1.193E+01
ADSORBED	1.056E+01	1.078E+01	1.052E+01	1.030E+01	1.019E+01	1.011E+01	1.026E+01	1.022E+01	9.951E+00	9.366E+00	8.847E+00	8.521E+00
SOIL AIR	8.857E-02	9.212E-02	9.103E-02	9.014E-02	8.900E-02	8.770E-02	8.619E-02	8.467E-02	8.160E-02	7.651E-02	7.230E-02	7.008E-02
SUBLAYER 2												
MOISTURE	1.277E+01	1.282E+01	1.242E+01	1.210E+01	1.194E+01	1.185E+01	1.196E+01	1.195E+01	1.177E+01	1.132E+01	1.090E+01	1.062E+01
%SOLUBILITY	4.256E+01	4.272E+01	4.140E+01	4.033E+01	3.979E+01	3.950E+01	3.988E+01	3.982E+01	3.924E+01	3.773E+01	3.633E+01	3.539E+01
ADSORBED	3.039E+01	3.050E+01	2.956E+01	2.880E+01	2.841E+01	2.821E+01	2.847E+01	2.843E+01	2.802E+01	2.694E+01	2.594E+01	2.527E+01
SOIL AIR	2.548E-01	2.606E-01	2.558E-01	2.521E-01	2.481E-01	2.446E-01	2.392E-01	2.357E-01	2.298E-01	2.201E-01	2.120E-01	2.078E-01

LOWER SOIL ZONE:

SUBLAYER 1												
MOISTURE	2.151E+01	2.146E+01	2.078E+01	2.028E+01	2.011E+01	2.012E+01	2.039E+01	2.050E+01	2.040E+01	1.990E+01	1.942E+01	1.910E+01
%SOLUBILITY	7.170E+01	7.153E+01	6.926E+01	6.761E+01	6.703E+01	6.707E+01	6.797E+01	6.832E+01	6.800E+01	6.633E+01	6.473E+01	6.367E+01
ADSORBED	5.119E+01	5.107E+01	4.945E+01	4.827E+01	4.786E+01	4.789E+01	4.853E+01	4.878E+01	4.855E+01	4.736E+01	4.622E+01	4.546E+01
SOIL AIR	4.293E-01	4.364E-01	4.281E-01	4.226E-01	4.179E-01	4.152E-01	4.078E-01	4.043E-01	3.982E-01	3.869E-01	3.777E-01	3.739E-01

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          SUBLAYER  2
MOISTURE     3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01
%SOLUBILITY 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02
ADSORBED     7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01
SOIL AIR     5.988E-01 6.101E-01 6.181E-01 6.251E-01 6.235E-01 6.191E-01 5.999E-01 5.918E-01 5.855E-01 5.833E-01 5.835E-01 5.872E-01
PURE PHASE   9.878E+01 9.658E+01 9.223E+01 8.835E+01 8.559E+01 8.368E+01 8.248E+01 8.117E+01 7.977E+01 7.714E+01 7.414E+01 7.108E+01

POL DEP CM   1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02

                          YEAR -   9 ANNUAL SUMMARY REPORT
                           ==================================
       -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

          -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918

         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
         ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
-------------------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED                8.358E+07
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              2.527E+08
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)              6.546E+08
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              1.611E+09
     LOWER SOIL ZONE:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)              2.642E+09
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              2.962E+09
               TOTAL IN GROUNDWATER RUNOFF      4.904E+09

                       -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                        ------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
                                    SOIL MOISTURE (UG/ML)  2.661E-01
                                    ADSORBED SOIL (UG/G)   6.332E-01
                                    SOIL AIR (UG/ML)       5.352E-03
          SUBLAYER  2
                                    SOIL MOISTURE (UG/ML)  1.069E+00
                                    ADSORBED SOIL (UG/G)   2.545E+00
                                    SOIL AIR (UG/ML)       2.150E-02
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SOIL ZONE 2:
SUBLAYER 1

SOIL MOISTURE (UG/ML)	4.188E+00
ADSORBED SOIL (UG/G)	9.968E+00
SOIL AIR (UG/ML)	8.416E-02

SUBLAYER 2

SOIL MOISTURE (UG/ML)	1.187E+01
ADSORBED SOIL (UG/G)	2.824E+01
SOIL AIR (UG/ML)	2.384E-01

LOWER SOIL ZONE:
SUBLAYER 1

SOIL MOISTURE (UG/ML)	2.033E+01
ADSORBED SOIL (UG/G)	4.839E+01
SOIL AIR (UG/ML)	4.082E-01

SUBLAYER 2

SOIL MOISTURE (UG/ML)	3.000E+01
ADSORBED SOIL (UG/G)	7.140E+01
SOIL AIR (UG/ML)	6.021E-01
PURE PHASE (UG/ML)	8.425E+01
MAX. POLL. DEPTH (M)	1.067E+00

YEAR - 10 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:
SUBLAYER 1

VOLATILIZED	7.489E+06	7.018E+06	5.050E+06	4.937E+06	5.606E+06	6.255E+06	7.731E+06	7.236E+06	6.206E+06	4.623E+06	3.955E+06	3.771E+06
IN SOIL MOI	5.290E+06	6.163E+06	6.639E+06	6.595E+06	6.422E+06	6.205E+06	6.170E+06	6.211E+06	5.909E+06	5.266E+06	4.645E+06	4.320E+06
ADS ON SOIL	7.026E+07	7.792E+07	7.731E+07	7.643E+07	7.642E+07	7.575E+07	7.928E+07	7.852E+07	7.301E+07	6.267E+07	5.508E+07	5.166E+07
IN SOIL AIR	9.223E+04	9.817E+04	8.790E+04	8.721E+04	9.056E+04	9.244E+04	1.002E+05	9.596E+04	8.567E+04	6.947E+04	6.079E+04	5.809E+04

SUBLAYER 2

```
DIFFUSED UP 2.446E+07 2.151E+07 1.497E+07 1.452E+07 1.640E+07 1.830E+07 2.244E+07 2.090E+07 1.833E+07 1.436E+07 1.299E+07 1.278E+07
IN SOIL MOI 2.201E+07 2.457E+07 2.623E+07 2.594E+07 2.516E+07 2.439E+07 2.392E+07 2.422E+07 2.366E+07 2.214E+07 2.025E+07 1.907E+07
ADS ON SOIL 2.923E+08 3.106E+08 3.054E+08 3.006E+08 2.994E+08 2.977E+08 3.073E+08 3.061E+08 2.924E+08 2.635E+08 2.402E+08 2.281E+08
IN SOIL AIR 3.837E+05 3.913E+05 3.473E+05 3.430E+05 3.548E+05 3.634E+05 3.886E+05 3.742E+05 3.431E+05 2.921E+05 2.650E+05 2.565E+05

     SOIL ZONE 2:
          SUBLAYER  1
DIFFUSED UP 6.706E+07 5.657E+07 3.860E+07 3.729E+07 4.196E+07 4.671E+07 5.683E+07 5.260E+07 4.669E+07 3.783E+07 3.570E+07 3.612E+07
IN SOIL MOI 1.340E+08 1.440E+08 1.527E+08 1.505E+08 1.454E+08 1.410E+08 1.363E+08 1.384E+08 1.383E+08 1.355E+08 1.287E+08 1.232E+08
ADS ON SOIL 1.779E+09 1.820E+09 1.778E+09 1.744E+09 1.730E+09 1.721E+09 1.751E+09 1.749E+09 1.709E+09 1.612E+09 1.526E+09 1.474E+09
IN SOIL AIR 2.335E+06 2.293E+06 2.022E+06 1.990E+06 2.050E+06 2.100E+06 2.214E+06 2.138E+06 2.005E+06 1.787E+06 1.684E+06 1.657E+06

          SUBLAYER  2
DIFFUSED UP 1.720E+08 1.443E+08 9.788E+07 9.414E+07 1.057E+08 1.179E+08 1.438E+08 1.336E+08 1.196E+08 9.832E+07 9.438E+07 9.690E+07
IN SOIL MOI 3.923E+08 4.163E+08 4.395E+08 4.318E+08 4.165E+08 4.049E+08 3.906E+08 3.983E+08 4.032E+08 4.035E+08 3.908E+08 3.786E+08
ADS ON SOIL 5.211E+09 5.263E+09 5.118E+09 5.004E+09 4.957E+09 4.943E+09 5.018E+09 5.036E+09 4.982E+09 4.802E+09 4.635E+09 4.528E+09
IN SOIL AIR 6.840E+06 6.630E+06 5.819E+06 5.710E+06 5.874E+06 6.032E+06 6.345E+06 6.155E+06 5.846E+06 5.323E+06 5.115E+06 5.091E+06

     LOWER SOIL ZONE:
          SUBLAYER  1
DIFFUSED UP 3.109E+08 2.606E+08 1.763E+08 1.698E+08 1.921E+08 2.172E+08 2.684E+08 2.518E+08 2.279E+08 1.897E+08 1.848E+08 1.922E+08
IN SOIL MOI 4.692E+08 4.957E+08 5.225E+08 5.138E+08 4.978E+08 4.877E+08 4.723E+08 4.843E+08 4.943E+08 5.005E+08 4.902E+08 4.789E+08
ADS ON SOIL 6.232E+09 6.267E+09 6.084E+09 5.954E+09 5.924E+09 5.953E+09 6.068E+09 6.123E+09 6.108E+09 5.956E+09 5.814E+09 5.728E+09
IN SOIL AIR 8.180E+06 7.897E+06 6.918E+06 6.794E+06 7.020E+06 7.265E+06 7.672E+06 7.484E+06 7.167E+06 6.603E+06 6.416E+06 6.440E+06

          SUBLAYER  2
DIFFUSED UP 3.856E+08 3.175E+08 2.244E+08 2.301E+08 2.678E+08 3.002E+08 3.557E+08 3.214E+08 2.863E+08 2.452E+08 2.507E+08 2.708E+08
IN SOIL MOI 7.226E+08 7.591E+08 8.241E+08 8.282E+08 8.065E+08 7.862E+08 7.470E+08 7.591E+08 7.767E+08 8.065E+08 8.092E+08 8.025E+08
ADS ON SOIL 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09 9.597E+09
IN SOIL AIR 1.260E+07 1.209E+07 1.091E+07 1.095E+07 1.137E+07 1.171E+07 1.213E+07 1.173E+07 1.126E+07 1.064E+07 1.059E+07 1.079E+07
PURE PHASE  6.635E+09 6.355E+09 5.849E+09 5.393E+09 5.056E+09 4.806E+09 4.632E+09 4.449E+09 4.252E+09 3.922E+09 3.559E+09 3.199E+09
GWR. RUNOFF 0.000E+00 2.480E+07 7.620E+08 7.513E+08 4.786E+08 2.847E+08 0.000E+00 7.462E+07 2.926E+08 7.679E+08 8.149E+08 6.530E+08


     -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --
     ------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
MOISTURE    2.196E-01 2.436E-01 2.417E-01 2.389E-01 2.389E-01 2.368E-01 2.478E-01 2.454E-01 2.282E-01 1.959E-01 1.722E-01 1.615E-01
%SOLUBILITY 7.321E-01 8.119E-01 8.056E-01 7.964E-01 7.962E-01 7.893E-01 8.260E-01 8.181E-01 7.607E-01 6.529E-01 5.739E-01 5.383E-01
ADSORBED    5.227E-01 5.797E-01 5.752E-01 5.686E-01 5.685E-01 5.635E-01 5.898E-01 5.841E-01 5.432E-01 4.662E-01 4.098E-01 3.844E-01
SOIL AIR    4.384E-03 4.953E-03 4.979E-03 4.978E-03 4.964E-03 4.886E-03 4.955E-03 4.842E-03 4.454E-03 3.809E-03 3.349E-03 3.161E-03

          SUBLAYER  2
MOISTURE    9.138E-01 9.709E-01 9.547E-01 9.395E-01 9.360E-01 9.307E-01 9.607E-01 9.569E-01 9.139E-01 8.235E-01 7.507E-01 7.131E-01
%SOLUBILITY 3.046E+00 3.236E+00 3.182E+00 3.132E+00 3.120E+00 3.102E+00 3.202E+00 3.190E+00 3.046E+00 2.745E+00 2.502E+00 2.377E+00
ADSORBED    2.175E+00 2.311E+00 2.272E+00 2.236E+00 2.228E+00 2.215E+00 2.286E+00 2.278E+00 2.175E+00 1.960E+00 1.787E+00 1.697E+00
SOIL AIR    1.824E-02 1.974E-02 1.967E-02 1.958E-02 1.945E-02 1.921E-02 1.921E-02 1.888E-02 1.784E-02 1.601E-02 1.460E-02 1.396E-02

     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE    3.708E+00 3.793E+00 3.706E+00 3.635E+00 3.605E+00 3.587E+00 3.650E+00 3.646E+00 3.561E+00 3.359E+00 3.181E+00 3.071E+00
%SOLUBILITY 1.236E+01 1.264E+01 1.235E+01 1.212E+01 1.202E+01 1.196E+01 1.217E+01 1.215E+01 1.187E+01 1.120E+01 1.060E+01 1.024E+01
ADSORBED    8.825E+00 9.028E+00 8.820E+00 8.650E+00 8.581E+00 8.536E+00 8.686E+00 8.677E+00 8.476E+00 7.995E+00 7.570E+00 7.310E+00
SOIL AIR    7.400E-02 7.713E-02 7.635E-02 7.573E-02 7.493E-02 7.401E-02 7.298E-02 7.192E-02 6.951E-02 6.532E-02 6.186E-02 6.012E-02

          SUBLAYER  2
MOISTURE    1.086E+01 1.097E+01 1.067E+01 1.043E+01 1.033E+01 1.030E+01 1.046E+01 1.049E+01 1.038E+01 1.001E+01 9.659E+00 9.436E+00
%SOLUBILITY 3.620E+01 3.656E+01 3.555E+01 3.476E+01 3.443E+01 3.433E+01 3.486E+01 3.498E+01 3.461E+01 3.335E+01 3.220E+01 3.145E+01
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ADSORBED     2.584E+01 2.610E+01 2.538E+01 2.482E+01 2.458E+01 2.451E+01 2.489E+01 2.498E+01 2.471E+01 2.381E+01 2.299E+01 2.246E+01
SOIL AIR     2.167E-01 2.230E-01 2.197E-01 2.173E-01 2.147E-01 2.126E-01 2.091E-01 2.070E-01 2.026E-01 1.945E-01 1.879E-01 1.847E-01

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE     1.948E+01 1.959E+01 1.902E+01 1.861E+01 1.852E+01 1.861E+01 1.897E+01 1.914E+01 1.909E+01 1.862E+01 1.817E+01 1.791E+01
%SOLUBILITY 6.494E+01 6.530E+01 6.340E+01 6.204E+01 6.173E+01 6.203E+01 6.323E+01 6.380E+01 6.364E+01 6.206E+01 6.058E+01 5.968E+01
ADSORBED     4.636E+01 4.663E+01 4.527E+01 4.429E+01 4.407E+01 4.429E+01 4.514E+01 4.555E+01 4.544E+01 4.431E+01 4.325E+01 4.261E+01
SOIL AIR     3.888E-01 3.984E-01 3.918E-01 3.878E-01 3.848E-01 3.840E-01 3.793E-01 3.776E-01 3.726E-01 3.620E-01 3.535E-01 3.504E-01

          SUBLAYER  2
MOISTURE     3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01
%SOLUBILITY 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02
ADSORBED     7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01
SOIL AIR     5.988E-01 6.101E-01 6.181E-01 6.251E-01 6.235E-01 6.191E-01 5.999E-01 5.918E-01 5.855E-01 5.833E-01 5.835E-01 5.872E-01
PURE PHASE   6.911E+01 6.619E+01 6.092E+01 5.617E+01 5.266E+01 5.005E+01 4.824E+01 4.634E+01 4.429E+01 4.085E+01 3.707E+01 3.332E+01

POL DEP CM   1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02
                          YEAR -  10 ANNUAL SUMMARY REPORT
                           ================================
       -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

          -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918

         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
         ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
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     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED              6.988E+07
          SUBLAYER  2
               TOTAL DIFFUSED (UP)            2.120E+08
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)            5.540E+08
          SUBLAYER  2
               TOTAL DIFFUSED (UP)            1.419E+09
     LOWER SOIL ZONE:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)            2.642E+09
          SUBLAYER  2
               TOTAL DIFFUSED (UP)            3.456E+09
               TOTAL IN GROUNDWATER RUNOFF    4.904E+09

                    -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                     ------------------------------------------------------------------------------
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UPPER SOIL ZONE:
SUBLAYER 1

SOIL MOISTURE (UG/ML)	2.225E-01
ADSORBED SOIL (UG/G)	5.296E-01
SOIL AIR (UG/ML)	4.476E-03

SUBLAYER 2

SOIL MOISTURE (UG/ML)	8.970E-01
ADSORBED SOIL (UG/G)	2.135E+00
SOIL AIR (UG/ML)	1.803E-02

SOIL ZONE 2:
SUBLAYER 1

SOIL MOISTURE (UG/ML)	3.542E+00
ADSORBED SOIL (UG/G)	8.430E+00
SOIL AIR (UG/ML)	7.116E-02

SUBLAYER 2

SOIL MOISTURE (UG/ML)	1.033E+01
ADSORBED SOIL (UG/G)	2.459E+01
SOIL AIR (UG/ML)	2.075E-01

LOWER SOIL ZONE:
SUBLAYER 1

SOIL MOISTURE (UG/ML)	1.881E+01
ADSORBED SOIL (UG/G)	4.477E+01
SOIL AIR (UG/ML)	3.776E-01

SUBLAYER 2

SOIL MOISTURE (UG/ML)	3.000E+01
ADSORBED SOIL (UG/G)	7.140E+01
SOIL AIR (UG/ML)	6.021E-01
PURE PHASE (UG/ML)	5.043E+01
MAX. POLL. DEPTH (M)	1.067E+00

YEAR - 11 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:

SUBLAYER 1

VOLATILIZED	6.313E+06	5.931E+06	4.277E+06	4.188E+06	4.765E+06	5.329E+06	6.605E+06	6.201E+06	5.334E+06	3.983E+06	3.416E+06	3.265E+06
IN SOIL MOI	4.465E+06	5.215E+06	5.627E+06	5.601E+06	5.465E+06	5.293E+06	5.279E+06	5.330E+06	5.085E+06	4.543E+06	4.016E+06	3.745E+06
ADS ON SOIL	5.930E+07	6.593E+07	6.553E+07	6.490E+07	6.503E+07	6.462E+07	6.783E+07	6.739E+07	6.283E+07	5.406E+07	4.763E+07	4.479E+07
IN SOIL AIR	7.784E+04	8.307E+04	7.451E+04	7.406E+04	7.706E+04	7.886E+04	8.577E+04	8.236E+04	7.372E+04	5.993E+04	5.256E+04	5.036E+04

SUBLAYER 2

DIFFUSED UP	2.079E+07	1.834E+07	1.281E+07	1.245E+07	1.409E+07	1.577E+07	1.940E+07	1.813E+07	1.595E+07	1.252E+07	1.135E+07	1.120E+07
IN SOIL MOI	1.870E+07	2.094E+07	2.240E+07	2.220E+07	2.159E+07	2.098E+07	2.065E+07	2.097E+07	2.055E+07	1.927E+07	1.767E+07	1.669E+07
ADS ON SOIL	2.484E+08	2.647E+08	2.609E+08	2.572E+08	2.569E+08	2.561E+08	2.653E+08	2.651E+08	2.539E+08	2.293E+08	2.096E+08	1.996E+08
IN SOIL AIR	3.260E+05	3.336E+05	2.966E+05	2.935E+05	3.044E+05	3.126E+05	3.354E+05	3.240E+05	2.980E+05	2.542E+05	2.312E+05	2.244E+05

SOIL ZONE 2:

SUBLAYER 1

DIFFUSED UP	5.792E+07	4.909E+07	3.362E+07	3.256E+07	3.675E+07	4.103E+07	5.012E+07	4.657E+07	4.148E+07	3.369E+07	3.185E+07	3.230E+07
IN SOIL MOI	1.155E+08	1.246E+08	1.325E+08	1.309E+08	1.268E+08	1.233E+08	1.197E+08	1.220E+08	1.223E+08	1.201E+08	1.143E+08	1.097E+08
ADS ON SOIL	1.533E+09	1.575E+09	1.543E+09	1.517E+09	1.509E+09	1.506E+09	1.538E+09	1.542E+09	1.511E+09	1.429E+09	1.356E+09	1.312E+09
IN SOIL AIR	2.013E+06	1.984E+06	1.754E+06	1.731E+06	1.788E+06	1.837E+06	1.945E+06	1.885E+06	1.773E+06	1.584E+06	1.496E+06	1.476E+06

SUBLAYER 2

DIFFUSED UP	1.561E+08	1.317E+08	8.976E+07	8.657E+07	9.749E+07	1.090E+08	1.335E+08	1.245E+08	1.118E+08	9.201E+07	8.837E+07	9.078E+07
IN SOIL MOI	3.507E+08	3.739E+08	3.958E+08	3.899E+08	3.772E+08	3.678E+08	3.563E+08	3.647E+08	3.701E+08	3.710E+08	3.598E+08	3.490E+08
ADS ON SOIL	4.657E+09	4.727E+09	4.610E+09	4.518E+09	4.488E+09	4.490E+09	4.578E+09	4.610E+09	4.573E+09	4.414E+09	4.267E+09	4.174E+09
IN SOIL AIR	6.113E+06	5.956E+06	5.241E+06	5.155E+06	5.319E+06	5.479E+06	5.788E+06	5.635E+06	5.366E+06	4.894E+06	4.709E+06	4.693E+06

LOWER SOIL ZONE:

SUBLAYER 1

DIFFUSED UP	3.116E+08	2.627E+08	1.780E+08	1.712E+08	1.937E+08	2.190E+08	2.710E+08	2.546E+08	2.302E+08	1.911E+08	1.850E+08	1.905E+08
IN SOIL MOI	4.425E+08	4.697E+08	4.955E+08	4.877E+08	4.734E+08	4.648E+08	4.517E+08	4.643E+08	4.744E+08	4.800E+08	4.688E+08	4.557E+08
ADS ON SOIL	5.878E+09	5.938E+09	5.770E+09	5.651E+09	5.634E+09	5.674E+09	5.804E+09	5.870E+09	5.861E+09	5.712E+09	5.560E+09	5.451E+09
IN SOIL AIR	7.715E+06	7.481E+06	6.560E+06	6.449E+06	6.676E+06	6.925E+06	7.338E+06	7.174E+06	6.877E+06	6.333E+06	6.136E+06	6.128E+06

SUBLAYER 2

DIFFUSED UP	4.274E+08	3.497E+08	2.453E+08	2.499E+08	2.896E+08	3.236E+08	3.828E+08	3.452E+08	3.068E+08	2.608E+08	2.485E+08	2.475E+08
IN SOIL MOI	7.226E+08	7.591E+08	8.241E+08	8.282E+08	8.065E+08	7.862E+08	7.470E+08	7.591E+08	7.767E+08	7.979E+08	7.720E+08	7.408E+08
ADS ON SOIL	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.597E+09	9.494E+09	9.156E+09	8.859E+09
IN SOIL AIR	1.260E+07	1.209E+07	1.091E+07	1.095E+07	1.137E+07	1.171E+07	1.213E+07	1.173E+07	1.126E+07	1.053E+07	1.010E+07	9.961E+06
PURE PHASE	2.962E+09	2.644E+09	2.088E+09	1.585E+09	1.207E+09	9.184E+08	7.111E+08	4.956E+08	2.612E+08	0.000E+00	0.000E+00	0.000E+00
GWR. RUNOFF	0.000E+00	2.480E+07	7.620E+08	7.513E+08	4.786E+08	2.847E+08	0.000E+00	7.462E+07	2.926E+08	7.664E+08	7.911E+08	6.126E+08

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --

UPPER SOIL ZONE:

SUBLAYER 1

MOISTURE	1.854E-01	2.061E-01	2.048E-01	2.029E-01	2.033E-01	2.020E-01	2.120E-01	2.106E-01	1.964E-01	1.690E-01	1.489E-01	1.400E-01
%SOLUBILITY	6.179E-01	6.869E-01	6.828E-01	6.762E-01	6.776E-01	6.733E-01	7.068E-01	7.021E-01	6.547E-01	5.632E-01	4.963E-01	4.667E-01
ADSORBED	4.412E-01	4.905E-01	4.875E-01	4.828E-01	4.838E-01	4.807E-01	5.047E-01	5.013E-01	4.674E-01	4.022E-01	3.543E-01	3.332E-01
SOIL AIR	3.700E-03	4.191E-03	4.220E-03	4.227E-03	4.224E-03	4.168E-03	4.240E-03	4.155E-03	3.833E-03	3.285E-03	2.896E-03	2.740E-03

SUBLAYER 2

MOISTURE	7.764E-01	8.275E-01	8.155E-01	8.041E-01	8.030E-01	8.007E-01	8.293E-01	8.288E-01	7.937E-01	7.169E-01	6.550E-01	6.239E 01
%SOLUBILITY	2.588E+00	2.758E+00	2.718E+00	2.680E+00	2.677E+00	2.669E+00	2.764E+00	2.763E+00	2.646E+00	2.390E+00	2.183E+00	2.080E+00
ADSORBED	1.848E+00	1.970E+00	1.941E+00	1.914E+00	1.911E+00	1.906E+00	1.974E+00	1.972E+00	1.889E+00	1.706E+00	1.559E+00	1.485E+00
SOIL AIR	1.550E-02	1.683E-02	1.680E-02	1.675E-02	1.669E-02	1.652E-02	1.658E-02	1.635E-02	1.549E-02	1.394E-02	1.274E-02	1.221E 02

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     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE     3.195E+00 3.282E+00 3.215E+00 3.161E+00 3.144E+00 3.138E+00 3.206E+00 3.214E+00 3.149E+00 2.977E+00 2.825E+00 2.735E+00
%SOLUBILITY 1.065E+01 1.094E+01 1.072E+01 1.054E+01 1.048E+01 1.046E+01 1.069E+01 1.071E+01 1.050E+01 9.924E+00 9.417E+00 9.116E+00
ADSORBED     7.605E+00 7.811E+00 7.652E+00 7.522E+00 7.483E+00 7.468E+00 7.629E+00 7.649E+00 7.494E+00 7.085E+00 6.724E+00 6.509E+00
SOIL AIR     6.378E-02 6.674E-02 6.623E-02 6.586E-02 6.535E-02 6.475E-02 6.410E-02 6.339E-02 6.145E-02 5.788E-02 5.495E-02 5.353E-02

          SUBLAYER  2
MOISTURE     9.706E+00 9.851E+00 9.606E+00 9.415E+00 9.353E+00 9.357E+00 9.540E+00 9.608E+00 9.530E+00 9.199E+00 8.892E+00 8.699E+00
%SOLUBILITY 3.235E+01 3.284E+01 3.202E+01 3.138E+01 3.118E+01 3.119E+01 3.180E+01 3.203E+01 3.177E+01 3.066E+01 2.964E+01 2.900E+01
ADSORBED     2.310E+01 2.344E+01 2.286E+01 2.241E+01 2.226E+01 2.227E+01 2.270E+01 2.287E+01 2.268E+01 2.189E+01 2.116E+01 2.070E+01
SOIL AIR     1.937E-01 2.003E-01 1.979E-01 1.962E-01 1.944E-01 1.931E-01 1.908E-01 1.895E-01 1.860E-01 1.789E-01 1.729E-01 1.703E-01

     LOWER SOIL ZONE:

          SUBLAYER  1
MOISTURE     1.837E+01 1.856E+01 1.804E+01 1.767E+01 1.761E+01 1.774E+01 1.814E+01 1.835E+01 1.832E+01 1.786E+01 1.738E+01 1.704E+01
%SOLUBILITY 6.124E+01 6.187E+01 6.012E+01 5.888E+01 5.870E+01 5.912E+01 6.047E+01 6.116E+01 6.107E+01 5.952E+01 5.793E+01 5.679E+01
ADSORBED     4.373E+01 4.418E+01 4.293E+01 4.204E+01 4.191E+01 4.221E+01 4.318E+01 4.367E+01 4.360E+01 4.250E+01 4.136E+01 4.055E+01
SOIL AIR     3.667E-01 3.774E-01 3.716E-01 3.681E-01 3.660E-01 3.660E-01 3.628E-01 3.619E-01 3.576E-01 3.472E-01 3.380E-01 3.335E-01

          SUBLAYER  2
MOISTURE     3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 3.000E+01 2.968E+01 2.862E+01 2.769E+01
%SOLUBILITY 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 1.000E+02 9.893E+01 9.541E+01 9.231E+01
ADSORBED     7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.140E+01 7.063E+01 6.812E+01 6.591E+01
SOIL AIR     5.988E-01 6.101E-01 6.181E-01 6.251E-01 6.235E-01 6.191E-01 5.999E-01 5.918E-01 5.855E-01 5.770E-01 5.567E-01 5.420E-01
PURE PHASE   3.085E+01 2.754E+01 2.175E+01 1.651E+01 1.258E+01 9.566E+00 7.407E+00 5.162E+00 2.720E+00 0.000E+00 0.000E+00 0.000E+00


POL DEP CM   1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02

                          YEAR -  11 ANNUAL SUMMARY REPORT
                           ==================================
       -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

         -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918

         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
         ------------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
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     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED              5.961E+07
          SUBLAYER  2
               TOTAL DIFFUSED (UP)            1.828E+08
     SOIL ZONE 2:
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     SUBLAYER  1
          TOTAL DIFFUSED (UP)                4.870E+08
     SUBLAYER  2
          TOTAL DIFFUSED (UP)                1.312E+09
LOWER SOIL ZONE:
     SUBLAYER  1
          TOTAL DIFFUSED (UP)                2.659E+09
     SUBLAYER  2
          TOTAL DIFFUSED (UP)                3.677E+09
          TOTAL IN GROUNDWATER RUNOFF        4.839E+09

                    -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                     ---------------------------------------------------------------------------------
UPPER SOIL ZONE:
     SUBLAYER  1
                                  SOIL MOISTURE (UG/ML)  1.901E-01
                                  ADSORBED SOIL (UG/G)   4.525E-01
                                  SOIL AIR (UG/ML)       3.823E-03
     SUBLAYER  2
                                  SOIL MOISTURE (UG/ML)  7.729E-01
                                  ADSORBED SOIL (UG/G)   1.839E+00
                                  SOIL AIR (UG/ML)       1.553E-02
SOIL ZONE 2:
     SUBLAYER  1
                                  SOIL MOISTURE (UG/ML)  3.103E+00
                                  ADSORBED SOIL (UG/G)   7.386E+00
                                  SOIL AIR (UG/ML)       6.233E-02
     SUBLAYER  2
                                  SOIL MOISTURE (UG/ML)  9.396E+00
                                  ADSORBED SOIL (UG/G)   2.236E+01
                                  SOIL AIR (UG/ML)       1.887E-01
LOWER SOIL ZONE:
     SUBLAYER  1
                                  SOIL MOISTURE (UG/ML)  1.792E+01
                                  ADSORBED SOIL (UG/G)   4.265E+01
                                  SOIL AIR (UG/ML)       3.597E-01
     SUBLAYER  2
                                  SOIL MOISTURE (UG/ML)  2.967E+01
                                  ADSORBED SOIL (UG/G)   7.061E+01
                                  SOIL AIR (UG/ML)       5.956E-01
                                  PURE PHASE (UG/ML)     1.117E+01

                                  MAX. POLL. DEPTH (M)   1.067E+00

     YEAR -  12    MONTHLY RESULTS (OUTPUT)
     ========    ========================
     -- HYDROLOGIC CYCLE COMPONENTS --
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	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:												
SUBLAYER 1												
VOLATILIZED	5.485E+06	5.173E+06	3.741E+06	3.672E+06	4.188E+06	4.696E+06	5.838E+06	5.497E+06	4.741E+06	3.548E+06	3.048E+06	2.918E+06
IN SOIL MOI	3.887E+06	4.556E+06	4.928E+06	4.916E+06	4.809E+06	4.671E+06	4.674E+06	4.732E+06	4.525E+06	4.050E+06	3.586E+06	3.349E+06
ADS ON SOIL	5.163E+07	5.760E+07	5.739E+07	5.696E+07	5.722E+07	5.702E+07	6.005E+07	5.982E+07	5.591E+07	4.819E+07	4.253E+07	4.006E+07
IN SOIL AIR	6.777E+04	7.257E+04	6.525E+04	6.500E+04	6.781E+04	6.958E+04	7.592E+04	7.311E+04	6.560E+04	5.343E+04	4.694E+04	4.504E+04
SUBLAYER 2												
DIFFUSED UP	1.828E+07	1.621E+07	1.135E+07	1.105E+07	1.254E+07	1.407E+07	1.735E+07	1.626E+07	1.432E+07	1.126E+07	1.021E+07	1.008E+07
IN SOIL MOI	1.644E+07	1.848E+07	1.981E+07	1.967E+07	1.918E+07	1.869E+07	1.844E+07	1.877E+07	1.842E+07	1.729E+07	1.587E+07	1.500E+07
ADS ON SOIL	2.183E+08	2.336E+08	2.307E+08	2.280E+08	2.282E+08	2.281E+08	2.369E+08	2.373E+08	2.276E+08	2.058E+08	1.882E+08	1.794E+08
IN SOIL AIR	2.866E+05	2.943E+05	2.623E+05	2.601E+05	2.704E+05	2.784E+05	2.996E+05	2.900E+05	2.671E+05	2.282E+05	2.077E+05	2.017E+05
SOIL ZONE 2:												
SUBLAYER 1												
DIFFUSED UP	5.197E+07	4.424E+07	3.038E+07	2.947E+07	3.332E+07	3.725E+07	4.555E+07	4.235E+07	3.770E+07	3.059E+07	2.889E+07	2.925E+07
IN SOIL MOI	1.033E+08	1.118E+08	1.191E+08	1.179E+08	1.144E+08	1.115E+08	1.084E+08	1.105E+08	1.107E+08	1.087E+08	1.034E+08	9.915E+07
ADS ON SOIL	1.371E+09	1.414E+09	1.387E+09	1.366E+09	1.362E+09	1.361E+09	1.392E+09	1.397E+09	1.368E+09	1.293E+09	1.226E+09	1.186E+09
IN SOIL AIR	1.800E+06	1.781E+06	1.577E+06	1.559E+06	1.613E+06	1.661E+06	1.760E+06	1.707E+06	1.606E+06	1.433E+06	1.353E+06	1.333E+06
SUBLAYER 2												
DIFFUSED UP	1.465E+08	1.238E+08	8.427E+07	8.113E+07	9.111E+07	1.014E+08	1.235E+08	1.142E+08	1.018E+08	8.317E+07	7.939E+07	8.105E+07
IN SOIL MOI	3.241E+08	3.460E+08	3.662E+08	3.603E+08	3.480E+08	3.384E+08	3.263E+08	3.323E+08	3.355E+08	3.348E+08	3.232E+08	3.122E+08
ADS ON SOIL	4.305E+09	4.374E+09	4.265E+09	4.176E+09	4.141E+09	4.131E+09	4.193E+09	4.201E+09	4.146E+09	3.984E+09	3.834E+09	3.733E+09
IN SOIL AIR	5.651E+06	5.511E+06	4.849E+06	4.765E+06	4.907E+06	5.041E+06	5.301E+06	5.134E+06	4.864E+06	4.416E+06	4.230E+06	4.198E+06
LOWER SOIL ZONE:												
SUBLAYER 1												
DIFFUSED UP	3.041E+08	2.515E+08	1.674E+08	1.579E+08	1.744E+08	1.917E+08	2.302E+08	2.104E+08	1.865E+08	1.529E+08	1.469E+08	1.504E+08
IN SOIL MOI	4.179E+08	4.398E+08	4.600E+08	4.480E+08	4.293E+08	4.153E+08	3.968E+08	4.023E+08	4.067E+08	4.086E+08	3.968E+08	3.838E+08
ADS ON SOIL	5.551E+09	5.560E+09	5.357E+09	5.192E+09	5.108E+09	5.069E+09	5.098E+09	5.086E+09	5.025E+09	4.862E+09	4.706E+09	4.590E+09
IN SOIL AIR	7.286E+06	7.005E+06	6.091E+06	5.925E+06	6.053E+06	6.186E+06	6.446E+06	6.216E+06	5.896E+06	5.390E+06	5.193E+06	5.161E+06
SUBLAYER 2												
DIFFUSED UP	3.709E+08	2.834E+08	1.816E+08	1.697E+08	1.847E+08	1.989E+08	2.315E+08	2.053E+08	1.805E+08	1.506E+08	1.489E+08	1.547E+08
IN SOIL MOI	6.535E+08	6.682E+08	6.930E+08	6.704E+08	6.363E+08	6.099E+08	5.737E+08	5.770E+08	5.840E+08	5.940E+08	5.827E+08	5.650E+08
ADS ON SOIL	8.680E+09	8.448E+09	8.071E+09	7.769E+09	7.572E+09	7.446E+09	7.371E+09	7.294E+09	7.215E+09	7.069E+09	6.911E+09	6.758E+09
IN SOIL AIR	1.139E+07	1.064E+07	9.176E+06	8.864E+06	8.973E+06	9.086E+06	9.320E+06	8.915E+06	8.467E+06	7.837E+06	7.627E+06	7.598E+06
GWR. RUNOFF	0.000E+00	2.208E+07	6.531E+08	6.193E+08	3.827E+08	2.228E+08	0.000E+00	5.696E+07	2.210E+08	5.705E+08	5.933E+08	4.650E+08

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --

UPPER SOIL ZONE:												
SUBLAYER 1												
MOISTURE	1.614E-01	1.800E-01	1.794E-01	1.781E-01	1.789E-01	1.782E-01	1.877E-01	1.870E-01	1.748E-01	1.506E-01	1.330E-01	1.252E-01

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%SOLUBILITY 5.379E-01 6.001E-01 5.980E-01 5.935E-01 5.962E-01 5.941E-01 6.257E-01 6.233E-01 5.825E-01 5.021E-01 4.432E-01 4.174E-01
ADSORBED    3.841E-01 4.285E-01 4.269E-01 4.238E-01 4.257E-01 4.242E-01 4.467E-01 4.450E-01 4.159E-01 3.585E-01 3.164E-01 2.980E-01
SOIL AIR    3.221E-03 3.661E-03 3.696E-03 3.710E-03 3.717E-03 3.678E-03 3.753E-03 3.689E-03 3.411E-03 2.929E-03 2.586E-03 2.451E-03

          SUBLAYER  2
MOISTURE    6.825E-01 7.301E-01 7.211E-01 7.126E-01 7.133E-01 7.130E-01 7.406E-01 7.418E-01 7.116E-01 6.433E-01 5.883E-01 5.608E-01
%SOLUBILITY 2.275E+00 2.434E+00 2.404E+00 2.375E+00 2.378E+00 2.377E+00 2.469E+00 2.473E+00 2.372E+00 2.144E+00 1.961E+00 1.869E+00
ADSORBED    1.624E+00 1.738E+00 1.716E+00 1.696E+00 1.698E+00 1.697E+00 1.763E+00 1.765E+00 1.694E+00 1.531E+00 1.400E+00 1.335E+00
SOIL AIR    1.362E-02 1.485E-02 1.486E-02 1.485E-02 1.482E-02 1.471E-02 1.481E-02 1.463E-02 1.389E-02 1.251E-02 1.144E-02 1.098E 02

     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE    2.858E+00 2.946E+00 2.891E+00 2.847E+00 2.837E+00 2.836E+00 2.901E+00 2.910E+00 2.852E+00 2.695E+00 2.555E+00 2.471E+00
%SOLUBILITY 9.527E+00 9.819E+00 9.637E+00 9.491E+00 9.458E+00 9.453E+00 9.671E+00 9.701E+00 9.505E+00 8.982E+00 8.517E+00 8.237E+00
ADSORBED    6.802E+00 7.011E+00 6.881E+00 6.776E+00 6.753E+00 6.749E+00 6.905E+00 6.927E+00 6.787E+00 6.413E+00 6.081E+00 5.881E+00
SOIL AIR    5.704E-02 5.990E-02 5.956E-02 5.933E-02 5.897E-02 5.852E-02 5.802E-02 5.741E-02 5.565E-02 5.239E-02 4.969E-02 4.837E-02

          SUBLAYER  2
MOISTURE    8.971E+00 9.116E+00 8.887E+00 8.702E+00 8.630E+00 8.608E+00 8.737E+00 8.754E+00 8.639E+00 8.302E+00 7.989E+00 7.780E+00
%SOLUBILITY 2.990E+01 3.039E+01 2.962E+01 2.901E+01 2.877E+01 2.869E+01 2.912E+01 2.918E+01 2.880E+01 2.767E+01 2.663E+01 2.593E+01
ADSORBED    2.135E+01 2.170E+01 2.115E+01 2.071E+01 2.054E+01 2.049E+01 2.080E+01 2.084E+01 2.056E+01 1.976E+01 1.901E+01 1.852E+01
SOIL AIR    1.791E-01 1.854E-01 1.831E-01 1.813E-01 1.793E-01 1.776E-01 1.747E-01 1.727E-01 1.686E-01 1.614E-01 1.554E-01 1.523E-01

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE    1.735E+01 1.738E+01 1.675E+01 1.623E+01 1.597E+01 1.585E+01 1.594E+01 1.590E+01 1.571E+01 1.520E+01 1.471E+01 1.435E+01
%SOLUBILITY 5.784E+01 5.793E+01 5.582E+01 5.410E+01 5.322E+01 5.282E+01 5.312E+01 5.299E+01 5.236E+01 5.066E+01 4.903E+01 4.782E+01
ADSORBED    4.130E+01 4.136E+01 3.985E+01 3.863E+01 3.800E+01 3.771E+01 3.793E+01 3.784E+01 3.738E+01 3.617E+01 3.501E+01 3.415E+01
SOIL AIR    3.463E-01 3.534E-01 3.450E-01 3.382E-01 3.318E-01 3.270E-01 3.187E-01 3.136E-01 3.065E-01 2.955E-01 2.861E-01 2.808E-01

          SUBLAYER  2
MOISTURE    2.713E+01 2.641E+01 2.523E+01 2.428E+01 2.367E+01 2.327E+01 2.304E+01 2.280E+01 2.255E+01 2.210E+01 2.160E+01 2.112E+01
%SOLUBILITY 9.044E+01 8.803E+01 8.409E+01 8.094E+01 7.889E+01 7.758E+01 7.680E+01 7.600E+01 7.518E+01 7.365E+01 7.201E+01 7.041E+01
ADSORBED    6.458E+01 6.285E+01 6.004E+01 5.779E+01 5.633E+01 5.539E+01 5.484E+01 5.427E+01 5.368E+01 5.259E+01 5.142E+01 5.028E+01
SOIL AIR    5.415E-01 5.370E-01 5.197E-01 5.060E-01 4.919E-01 4.803E-01 4.607E-01 4.498E-01 4.402E-01 4.296E-01 4.202E-01 4.135E-01

POL DEP CM  1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02
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YEAR - 12 ANNUAL SUMMARY REPORT

-- TOTAL INPUTS (UG) --

UPPER SOIL ZONE	0.000E+00
SOIL ZONE 2	0.000E+00
LOWER SOIL ZONE	0.000E+00

-- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)	27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)	27.276
TOTAL PRECIPITATION (CM)	126.201
TOTAL INFILTRATION (CM)	123.899
TOTAL EVAPOTRANSPIRATION (CM)	99.280
TOTAL SURFACE RUNOFF (CM)	2.302
TOTAL GRW RUNOFF (CM)	24.616
TOTAL MOISTURE RETENTION (CM)	0.003
TOTAL YIELD (CM)	26.918

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)

UPPER SOIL ZONE:
SUBLAYER 1
TOTAL VOLATILIZED 5.254E+07
SUBLAYER 2
TOTAL DIFFUSED (UP) 1.630E+08
SOIL ZONE 2:
SUBLAYER 1
TOTAL DIFFUSED (UP) 4.410E+08
SUBLAYER 2
TOTAL DIFFUSED (UP) 1.211E+09
LOWER SOIL ZONE:
SUBLAYER 1
TOTAL DIFFUSED (UP) 2.324E+09
SUBLAYER 2
TOTAL DIFFUSED (UP) 2.461E+09
TOTAL IN GROUNDWATER RUNOFF 3.807E+09

-- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON-ZERO VALUES ARE PRINTED --

UPPER SOIL ZONE:
SUBLAYER 1
SOIL MOISTURE (UG/ML) 1.679E-01
ADSORBED SOIL (UG/G) 3.995E-01
SOIL AIR (UG/ML) 3.375E-03
SUBLAYER 2
SOIL MOISTURE (UG/ML) 6.883E-01
ADSORBED SOIL (UG/G) 1.638E+00
SOIL AIR (UG/ML) 1.383E-02
SOIL ZONE 2:
SUBLAYER 1
SOIL MOISTURE (UG/ML) 2.800E+00
ADSORBED SOIL (UG/G) 6.664E+00
SOIL AIR (UG/ML) 5.624E-02
SUBLAYER 2
SOIL MOISTURE (UG/ML) 8.593E+00
ADSORBED SOIL (UG/G) 2.045E+01
SOIL AIR (UG/ML) 1.726E-01
LOWER SOIL ZONE:
SUBLAYER 1
SOIL MOISTURE (UG/ML) 1.594E+01
ADSORBED SOIL (UG/G) 3.794E+01
SOIL AIR (UG/ML) 3.202E-01
SUBLAYER 2
SOIL MOISTURE (UG/ML) 2.360E+01
ADSORBED SOIL (UG/G) 5.617E+01
SOIL AIR (UG/ML) 4.742E-01

MAX. POLL. DEPTH (M) 1.067E+00

YEAR - 13 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168

MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:												
SUBLAYER 1												
VOLATILIZED	4.911E+06	4.639E+06	3.358E+06	3.298E+06	3.762E+06	4.219E+06	5.244E+06	4.935E+06	4.252E+06	3.179E+06	2.728E+06	2.609E+06
IN SOIL MOI	3.483E+06	4.088E+06	4.424E+06	4.415E+06	4.320E+06	4.196E+06	4.197E+06	4.246E+06	4.056E+06	3.627E+06	3.208E+06	2.993E+06
ADS ON SOIL	4.627E+07	5.168E+07	5.152E+07	5.116E+07	5.140E+07	5.122E+07	5.392E+07	5.368E+07	5.012E+07	4.316E+07	3.805E+07	3.579E+07
IN SOIL AIR	6.073E+04	6.512E+04	5.858E+04	5.838E+04	6.092E+04	6.251E+04	6.817E+04	6.560E+04	5.881E+04	4.785E+04	4.199E+04	4.024E+04
SUBLAYER 2												
DIFFUSED UP	1.647E+07	1.460E+07	1.022E+07	9.947E+06	1.128E+07	1.263E+07	1.556E+07	1.455E+07	1.280E+07	1.004E+07	9.093E+06	8.956E+06
IN SOIL MOI	1.479E+07	1.662E+07	1.782E+07	1.769E+07	1.723E+07	1.677E+07	1.653E+07	1.680E+07	1.646E+07	1.543E+07	1.414E+07	1.334E+07
ADS ON SOIL	1.964E+08	2.102E+08	2.075E+08	2.050E+08	2.051E+08	2.048E+08	2.124E+08	2.124E+08	2.034E+08	1.836E+08	1.677E+08	1.595E+08
IN SOIL AIR	2.578E+05	2.648E+05	2.360E+05	2.339E+05	2.430E+05	2.499E+05	2.685E+05	2.596E+05	2.387E+05	2.036E+05	1.850E+05	1.794E+05
SOIL ZONE 2:												
SUBLAYER 1												
DIFFUSED UP	4.696E+07	3.986E+07	2.730E+07	2.643E+07	2.980E+07	3.323E+07	4.050E+07	3.751E+07	3.330E+07	2.695E+07	2.540E+07	2.567E+07
IN SOIL MOI	9.311E+07	1.006E+08	1.070E+08	1.057E+08	1.024E+08	9.949E+07	9.641E+07	9.800E+07	9.799E+07	9.596E+07	9.112E+07	8.721E+07
ADS ON SOIL	1.237E+09	1.272E+09	1.246E+09	1.225E+09	1.218E+09	1.215E+09	1.239E+09	1.239E+09	1.211E+09	1.142E+09	1.081E+09	1.043E+09
IN SOIL AIR	1.623E+06	1.602E+06	1.417E+06	1.398E+06	1.444E+06	1.482E+06	1.566E+06	1.514E+06	1.421E+06	1.266E+06	1.193E+06	1.173E+06
SUBLAYER 2												
DIFFUSED UP	1.297E+08	1.085E+08	7.339E+07	7.034E+07	7.864E+07	8.716E+07	1.055E+08	9.720E+07	8.631E+07	7.041E+07	6.715E+07	6.848E+07
IN SOIL MOI	2.877E+08	3.051E+08	3.217E+08	3.155E+08	3.035E+08	2.940E+08	2.823E+08	2.864E+08	2.884E+08	2.873E+08	2.770E+08	2.671E+08
ADS ON SOIL	3.821E+09	3.858E+09	3.746E+09	3.656E+09	3.612E+09	3.589E+09	3.627E+09	3.620E+09	3.563E+09	3.419E+09	3.285E+09	3.194E+09
IN SOIL AIR	5.015E+06	4.860E+06	4.259E+06	4.171E+06	4.280E+06	4.380E+06	4.585E+06	4.425E+06	4.181E+06	3.790E+06	3.625E+06	3.592E+06
LOWER SOIL ZONE:												
SUBLAYER 1												
DIFFUSED UP	2.376E+08	1.945E+08	1.290E+08	1.218E+08	1.348E+08	1.484E+08	1.784E+08	1.633E+08	1.453E+08	1.198E+08	1.158E+08	1.191E+08
IN SOIL MOI	3.485E+08	3.645E+08	3.809E+08	3.708E+08	3.549E+08	3.430E+08	3.271E+08	3.314E+08	3.351E+08	3.372E+08	3.280E+08	3.175E+08
ADS ON SOIL	4.629E+09	4.609E+09	4.436E+09	4.297E+09	4.223E+09	4.187E+09	4.203E+09	4.189E+09	4.140E+09	4.013E+09	3.890E+09	3.797E+09
IN SOIL AIR	6.077E+06	5.806E+06	5.043E+06	4.903E+06	5.005E+06	5.110E+06	5.314E+06	5.120E+06	4.858E+06	4.449E+06	4.293E+06	4.270E+06
SUBLAYER 2												
DIFFUSED UP	2.390E+08	1.864E+08	1.218E+08	1.160E+08	1.284E+08	1.402E+08	1.653E+08	1.483E+08	1.318E+08	1.114E+08	1.114E+08	1.169E+08
IN SOIL MOI	5.021E+08	5.161E+08	5.387E+08	5.241E+08	4.998E+08	4.811E+08	4.541E+08	4.582E+08	4.653E+08	4.752E+08	4.678E+08	4.550E+08
ADS ON SOIL	6.669E+09	6.525E+09	6.274E+09	6.074E+09	5.948E+09	5.873E+09	5.835E+09	5.793E+09	5.749E+09	5.654E+09	5.549E+09	5.442E+09
IN SOIL AIR	8.754E+06	8.221E+06	7.133E+06	6.930E+06	7.049E+06	7.168E+06	7.377E+06	7.080E+06	6.746E+06	6.269E+06	6.123E+06	6.118E+06
GWR. RUNOFF	0.000E+00	1.701E+07	5.062E+08	4.829E+08	2.999E+08	1.754E+08	0.000E+00	4.517E+07	1.758E+08	4.555E+08	4.755E+08	3.739E+08

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --

UPPER SOIL ZONE:

SUBLAYER 1

MOISTURE	1.446E-01	1.615E-01	1.611E-01	1.599E-01	1.607E-01	1.601E-01	1.685E-01	1.678E-01	1.567E-01	1.349E-01	1.189E-01	1.119E-01
%SOLUBILITY	4.821E-01	5.385E-01	5.369E-01	5.331E-01	5.356E-01	5.337E-01	5.618E-01	5.593E-01	5.222E-01	4.497E-01	3.965E-01	3.729E-01
ADSORBED	3.442E-01	3.845E-01	3.833E-01	3.806E-01	3.824E-01	3.810E-01	4.011E-01	3.993E-01	3.729E-01	3.211E-01	2.831E-01	2.663E-01
SOIL AIR	2.887E-03	3.285E-03	3.318E-03	3.332E-03	3.339E-03	3.304E-03	3.370E-03	3.310E-03	3.058E-03	2.623E-03	2.313E-03	2.190E-03

SUBLAYER 2

MOISTURE	6.140E-01	6.570E-01	6.487E-01	6.408E-01	6.410E-01	6.401E-01	6.639E-01	6.638E-01	6.358E-01	5.740E-01	5.241E-01	4.987E-01
%SOLUBILITY	2.047E+00	2.190E+00	2.162E+00	2.136E+00	2.137E+00	2.134E+00	2.213E+00	2.213E+00	2.119E+00	1.913E+00	1.747E+00	1.662E+00
ADSORBED	1.461E+00	1.564E+00	1.544E+00	1.525E+00	1.526E+00	1.523E+00	1.580E+00	1.580E+00	1.513E+00	1.366E+00	1.247E+00	1.187E+00
SOIL AIR	1.226E-02	1.336E-02	1.336E-02	1.335E-02	1.332E-02	1.321E-02	1.328E-02	1.309E-02	1.241E-02	1.116E-02	1.019E-02	9.761E-03

SOIL ZONE 2:

SUBLAYER 1

MOISTURE	2.577E+00	2.650E+00	2.597E+00	2.553E+00	2.539E+00	2.531E+00	2.581E+00	2.582E+00	2.523E+00	2.380E+00	2.252E+00	2.173E+00
%SOLUBILITY	8.591E+00	8.835E+00	8.656E+00	8.510E+00	8.462E+00	8.437E+00	8.605E+00	8.606E+00	8.411E+00	7.932E+00	7.507E+00	7.245E+00
ADSORBED	6.134E+00	6.308E+00	6.181E+00	6.076E+00	6.042E+00	6.024E+00	6.144E+00	6.145E+00	6.005E+00	5.663E+00	5.360E+00	5.173E+00
SOIL AIR	5.144E-02	5.390E-02	5.350E-02	5.319E-02	5.276E-02	5.223E-02	5.162E-02	5.093E-02	4.924E-02	4.627E-02	4.380E-02	4.254E-02

SUBLAYER 2

MOISTURE	7.962E+00	8.039E+00	7.807E+00	7.618E+00	7.527E+00	7.480E+00	7.558E+00	7.544E+00	7.425E+00	7.124E+00	6.846E+00	6.657E+00
%SOLUBILITY	2.654E+01	2.680E+01	2.602E+01	2.539E+01	2.509E+01	2.493E+01	2.519E+01	2.515E+01	2.475E+01	2.375E+01	2.282E+01	2.219E+01
ADSORBED	1.895E+01	1.913E+01	1.858E+01	1.813E+01	1.791E+01	1.780E+01	1.799E+01	1.796E+01	1.767E+01	1.695E+01	1.629E+01	1.584E+01
SOIL AIR	1.589E-01	1.635E-01	1.608E-01	1.587E-01	1.564E-01	1.544E-01	1.511E-01	1.488E-01	1.449E-01	1.385E-01	1.332E-01	1.303E-01

LOWER SOIL ZONE:

SUBLAYER 1

MOISTURE	1.447E+01	1.441E+01	1.386E+01	1.343E+01	1.320E+01	1.309E+01	1.314E+01	1.309E+01	1.294E+01	1.254E+01	1.216E+01	1.187E+01
%SOLUBILITY	4.824E+01	4.802E+01	4.622E+01	4.477E+01	4.401E+01	4.363E+01	4.379E+01	4.365E+01	4.314E+01	4.181E+01	4.054E+01	3.957E+01
ADSORBED	3.444E+01	3.429E+01	3.300E+01	3.197E+01	3.142E+01	3.115E+01	3.127E+01	3.116E+01	3.080E+01	2.986E+01	2.894E+01	2.825E+01
SOIL AIR	2.888E-01	2.929E-01	2.856E-01	2.799E-01	2.744E-01	2.701E-01	2.627E-01	2.583E-01	2.526E-01	2.439E-01	2.365E-01	2.323E-01

SUBLAYER 2

MOISTURE	2.085E+01	2.040E+01	1.961E+01	1.899E+01	1.859E+01	1.836E+01	1.824E+01	1.811E+01	1.797E+01	1.768E+01	1.734E+01	1.701E+01
%SOLUBILITY	6.949E+01	6.799E+01	6.537E+01	6.328E+01	6.197E+01	6.120E+01	6.079E+01	6.036E+01	5.991E+01	5.892E+01	5.781E+01	5.670E+01
ADSORBED	4.962E+01	4.854E+01	4.667E+01	4.518E+01	4.425E+01	4.370E+01	4.341E+01	4.309E+01	4.277E+01	4.207E+01	4.128E+01	4.048E+01
SOIL AIR	4.161E-01	4.148E-01	4.040E-01	3.956E-01	3.864E-01	3.789E-01	3.647E-01	3.572E-01	3.507E-01	3.437E-01	3.373E-01	3.329E-01

POL DEP CM	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02

YEAR - 13 ANNUAL SUMMARY REPORT

-- TOTAL INPUTS (UG) --

UPPER SOIL ZONE	0.000E+00
SOIL ZONE 2	0.000E+00
LOWER SOIL ZONE	0.000E+00

-- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)	27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)	27.276
TOTAL PRECIPITATION (CM)	126.201
TOTAL INFILTRATION (CM)	123.899
TOTAL EVAPOTRANSPIRATION (CM)	99.280
TOTAL SURFACE RUNOFF (CM)	2.302
TOTAL GRW RUNOFF (CM)	24.616

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TOTAL MOISTURE RETENTION (CM)                    0.003
TOTAL YIELD (CM)                                26.918

        -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
         ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
-------------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED                  4.713E+07
          SUBLAYER  2
               TOTAL DIFFUSED (UP)                1.461E+08
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)                3.929E+08
          SUBLAYER  2
               TOTAL DIFFUSED (UP)                1.043E+09
     LOWER SOIL ZONE:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)                1.808E+09
          SUBLAYER  2
               TOTAL DIFFUSED (UP)                1.717E+09
               TOTAL IN GROUNDWATER RUNOFF        3.007E+09

                       -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                        ------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
                                    SOIL MOISTURE (UG/ML)  1.506E-01
                                    ADSORBED SOIL (UG/G)   3.583E-01
                                    SOIL AIR (UG/ML)       3.027E-03
          SUBLAYER  2
                                    SOIL MOISTURE (UG/ML)  6.168E-01
                                    ADSORBED SOIL (UG/G)   1.468E+00
                                    SOIL AIR (UG/ML)       1.240E-02
     SOIL ZONE 2:
          SUBLAYER  1
                                    SOIL MOISTURE (UG/ML)  2.495E+00
                                    ADSORBED SOIL (UG/G)   5.938E+00
                                    SOIL AIR (UG/ML)       5.012E-02
          SUBLAYER  2
                                    SOIL MOISTURE (UG/ML)  7.466E+00
                                    ADSORBED SOIL (UG/G)   1.777E+01
                                    SOIL AIR (UG/ML)       1.500E-01
     LOWER SOIL ZONE:
          SUBLAYER  1
                                    SOIL MOISTURE (UG/ML)  1.318E+01
                                    ADSORBED SOIL (UG/G)   3.138E+01
                                    SOIL AIR (UG/ML)       2.648E-01
          SUBLAYER  2
                                    SOIL MOISTURE (UG/ML)  1.859E+01
                                    ADSORBED SOIL (UG/G)   4.426E+01
                                    SOIL AIR (UG/ML)       3.735E-01

                                    MAX. POLL. DEPTH (M)   1.067E+00

     YEAR -  14    MONTHLY RESULTS (OUTPUT)
     ========    ========================
     -- HYDROLOGIC CYCLE COMPONENTS --
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	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
UPPER SOIL ZONE:												
SUBLAYER 1												
VOLATILIZED	4.383E+06	4.131E+06	2.985E+06	2.927E+06	3.334E+06	3.732E+06	4.628E+06	4.346E+06	3.736E+06	2.789E+06	2.389E+06	2.281E+06
IN SOIL MOI	3.105E+06	3.637E+06	3.930E+06	3.916E+06	3.825E+06	3.708E+06	3.700E+06	3.735E+06	3.561E+06	3.179E+06	2.807E+06	2.614E+06
ADS ON SOIL	4.125E+07	4.598E+07	4.577E+07	4.538E+07	4.552E+07	4.526E+07	4.754E+07	4.722E+07	4.400E+07	3.783E+07	3.330E+07	3.126E+07
IN SOIL AIR	5.414E+04	5.793E+04	5.204E+04	5.178E+04	5.394E+04	5.524E+04	6.011E+04	5.771E+04	5.163E+04	4.194E+04	3.674E+04	3.515E+04
SUBLAYER 2												
DIFFUSED UP	1.460E+07	1.290E+07	9.013E+06	8.756E+06	9.911E+06	1.108E+07	1.361E+07	1.270E+07	1.115E+07	8.733E+06	7.898E+06	7.768E+06
IN SOIL MOI	1.311E+07	1.470E+07	1.573E+07	1.559E+07	1.516E+07	1.473E+07	1.448E+07	1.468E+07	1.436E+07	1.344E+07	1.230E+07	1.158E+07
ADS ON SOIL	1.742E+08	1.859E+08	1.832E+08	1.807E+08	1.804E+08	1.798E+08	1.860E+08	1.856E+08	1.774E+08	1.599E+08	1.458E+08	1.385E+08
IN SOIL AIR	2.286E+05	2.342E+05	2.083E+05	2.062E+05	2.138E+05	2.194E+05	2.352E+05	2.268E+05	2.082E+05	1.773E+05	1.609E+05	1.557E+05
SOIL ZONE 2:												
SUBLAYER 1												
DIFFUSED UP	4.109E+07	3.475E+07	2.374E+07	2.294E+07	2.582E+07	2.873E+07	3.493E+07	3.229E+07	2.861E+07	2.313E+07	2.178E+07	2.198E+07
IN SOIL MOI	8.160E+07	8.790E+07	9.333E+07	9.205E+07	8.897E+07	8.630E+07	8.341E+07	8.461E+07	8.447E+07	8.262E+07	7.836E+07	7.490E+07
ADS ON SOIL	1.084E+09	1.111E+09	1.087E+09	1.067E+09	1.059E+09	1.053E+09	1.072E+09	1.070E+09	1.044E+09	9.831E+08	9.293E+08	8.958E+08
IN SOIL AIR	1.423E+06	1.400E+06	1.236E+06	1.217E+06	1.255E+06	1.286E+06	1.355E+06	1.307E+06	1.225E+06	1.090E+06	1.026E+06	1.007E+06
SUBLAYER 2												
DIFFUSED UP	1.093E+08	9.119E+07	6.156E+07	5.894E+07	6.584E+07	7.291E+07	8.818E+07	8.113E+07	7.201E+07	5.875E+07	5.606E+07	5.720E+07
IN SOIL MOI	2.453E+08	2.596E+08	2.733E+08	2.677E+08	2.573E+08	2.490E+08	2.386E+08	2.418E+08	2.433E+08	2.423E+08	2.336E+08	2.251E+08
ADS ON SOIL	3.259E+09	3.281E+09	3.183E+09	3.103E+09	3.062E+09	3.039E+09	3.066E+09	3.057E+09	3.006E+09	2.883E+09	2.770E+09	2.693E+09
IN SOIL AIR	4.277E+06	4.134E+06	3.619E+06	3.540E+06	3.629E+06	3.709E+06	3.876E+06	3.736E+06	3.527E+06	3.197E+06	3.057E+06	3.028E+06
LOWER SOIL ZONE:												
SUBLAYER 1												
DIFFUSED UP	1.886E+08	1.544E+08	1.026E+08	9.712E+07	1.077E+08	1.188E+08	1.431E+08	1.312E+08	1.170E+08	9.675E+07	9.384E+07	9.679E+07
IN SOIL MOI	2.880E+08	3.010E+08	3.147E+08	3.066E+08	2.936E+08	2.838E+08	2.706E+08	2.741E+08	2.774E+08	2.794E+08	2.721E+08	2.635E+08
ADS ON SOIL	3.825E+09	3.805E+09	3.665E+09	3.553E+09	3.493E+09	3.464E+09	3.476E+09	3.465E+09	3.427E+09	3.325E+09	3.227E+09	3.151E+09
IN SOIL AIR	5.021E+06	4.794E+06	4.167E+06	4.054E+06	4.140E+06	4.227E+06	4.395E+06	4.235E+06	4.021E+06	3.687E+06	3.561E+06	3.543E+06

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          SUBLAYER  2
DIFFUSED UP 1.818E+08 1.426E+08 9.366E+07 8.964E+07 9.966E+07 1.093E+08 1.294E+08 1.165E+08 1.040E+08 8.821E+07 8.858E+07 9.329E+07
IN SOIL MOI 4.052E+08 4.172E+08 4.363E+08 4.253E+08 4.063E+08 3.917E+08 3.701E+08 3.739E+08 3.802E+08 3.889E+08 3.835E+08 3.734E+08
ADS ON SOIL 5.382E+09 5.274E+09 5.081E+09 4.929E+09 4.835E+09 4.781E+09 4.756E+09 4.727E+09 4.698E+09 4.628E+09 4.548E+09 4.466E+09
IN SOIL AIR 7.065E+06 6.645E+06 5.777E+06 5.624E+06 5.729E+06 5.835E+06 6.013E+06 5.778E+06 5.513E+06 5.131E+06 5.019E+06 5.021E+06
GWR. RUNOFF 0.000E+00 1.374E+07 4.096E+08 3.915E+08 2.436E+08 1.427E+08 0.000E+00 3.684E+07 1.435E+08 3.725E+08 3.894E+08 3.067E+08

     -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED -
     ------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
MOISTURE    1.289E-01 1.437E-01 1.431E-01 1.419E-01 1.423E-01 1.415E-01 1.486E-01 1.476E-01 1.375E-01 1.182E-01 1.041E-01 9.773E-02
%SOLUBILITY 4.298E-01 4.790E-01 4.769E-01 4.728E-01 4.743E-01 4.716E-01 4.953E-01 4.920E-01 4.585E-01 3.942E-01 3.469E-01 3.258E-01
ADSORBED    3.068E-01 3.420E-01 3.405E-01 3.376E-01 3.386E-01 3.367E-01 3.537E-01 3.513E-01 3.274E-01 2.814E-01 2.477E-01 2.326E-01
SOIL AIR    2.573E-03 2.922E-03 2.947E-03 2.956E-03 2.957E-03 2.920E-03 2.972E-03 2.912E-03 2.684E-03 2.299E-03 2.024E-03 1.913E-03

          SUBLAYER  2
MOISTURE    5.444E-01 5.810E-01 5.727E-01 5.648E-01 5.639E-01 5.620E-01 5.814E-01 5.801E-01 5.545E-01 4.999E-01 4.558E-01 4.330E-01
%SOLUBILITY 1.815E+00 1.937E+00 1.909E+00 1.883E+00 1.880E+00 1.873E+00 1.938E+00 1.934E+00 1.848E+00 1.666E+00 1.519E+00 1.443E+00
ADSORBED    1.296E+00 1.383E+00 1.363E+00 1.344E+00 1.342E+00 1.338E+00 1.384E+00 1.381E+00 1.320E+00 1.190E+00 1.085E+00 1.031E+00
SOIL AIR    1.087E-02 1.181E-02 1.180E-02 1.177E-02 1.172E-02 1.160E-02 1.163E-02 1.144E-02 1.082E-02 9.719E-03 8.865E-03 8.475E-03

     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE    2.259E+00 2.316E+00 2.265E+00 2.223E+00 2.206E+00 2.195E+00 2.233E+00 2.229E+00 2.175E+00 2.049E+00 1.937E+00 1.867E+00
%SOLUBILITY 7.529E+00 7.720E+00 7.550E+00 7.410E+00 7.354E+00 7.317E+00 7.445E+00 7.431E+00 7.250E+00 6.829E+00 6.456E+00 6.222E+00
ADSORBED    5.376E+00 5.512E+00 5.391E+00 5.290E+00 5.251E+00 5.225E+00 5.316E+00 5.306E+00 5.176E+00 4.876E+00 4.609E+00 4.443E+00
SOIL AIR    4.508E-02 4.710E-02 4.666E-02 4.632E-02 4.585E-02 4.530E-02 4.466E-02 4.397E-02 4.245E-02 3.983E-02 3.767E-02 3.654E-02

          SUBLAYER  2
MOISTURE    6.791E+00 6.838E+00 6.633E+00 6.466E+00 6.381E+00 6.333E+00 6.389E+00 6.370E+00 6.264E+00 6.009E+00 5.773E+00 5.611E+00
%SOLUBILITY 2.264E+01 2.279E+01 2.211E+01 2.155E+01 2.127E+01 2.111E+01 2.130E+01 2.123E+01 2.088E+01 2.003E+01 1.924E+01 1.870E+01
ADSORBED    1.616E+01 1.627E+01 1.579E+01 1.539E+01 1.519E+01 1.507E+01 1.521E+01 1.516E+01 1.491E+01 1.430E+01 1.374E+01 1.336E+01
SOIL AIR    1.355E-01 1.391E-01 1.366E-01 1.347E-01 1.326E-01 1.307E-01 1.278E-01 1.256E-01 1.223E-01 1.168E-01 1.123E-01 1.098E-01

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE    1.196E+01 1.189E+01 1.146E+01 1.111E+01 1.092E+01 1.083E+01 1.087E+01 1.083E+01 1.071E+01 1.039E+01 1.009E+01 9.851E+00
%SOLUBILITY 3.986E+01 3.965E+01 3.818E+01 3.702E+01 3.640E+01 3.609E+01 3.622E+01 3.611E+01 3.571E+01 3.465E+01 3.362E+01 3.284E+01
ADSORBED    2.846E+01 2.831E+01 2.726E+01 2.643E+01 2.599E+01 2.577E+01 2.586E+01 2.578E+01 2.550E+01 2.474E+01 2.400E+01 2.344E+01
SOIL AIR    2.387E-01 2.419E-01 2.360E-01 2.314E-01 2.269E-01 2.234E-01 2.173E-01 2.137E-01 2.091E-01 2.021E-01 1.962E-01 1.928E-01

          SUBLAYER  2
MOISTURE    1.682E+01 1.649E+01 1.588E+01 1.541E+01 1.511E+01 1.495E+01 1.487E+01 1.478E+01 1.469E+01 1.447E+01 1.422E+01 1.396E+01
%SOLUBILITY 5.608E+01 5.496E+01 5.295E+01 5.136E+01 5.038E+01 4.982E+01 4.955E+01 4.926E+01 4.895E+01 4.822E+01 4.739E+01 4.653E+01
ADSORBED    4.004E+01 3.924E+01 3.780E+01 3.667E+01 3.597E+01 3.557E+01 3.538E+01 3.517E+01 3.495E+01 3.443E+01 3.383E+01 3.322E+01
SOIL AIR    3.358E-01 3.353E-01 3.272E-01 3.210E-01 3.141E-01 3.084E-01 2.973E-01 2.915E-01 2.866E-01 2.813E-01 2.765E-01 2.732E-01

POL DEP CM  1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02

                         YEAR -  14 ANNUAL SUMMARY REPORT
                         ================================
      -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

        -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
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AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)          27.276
TOTAL PRECIPITATION (CM)                       126.201
TOTAL INFILTRATION (CM)                        123.899
TOTAL EVAPOTRANSPIRATION (CM)                   99.280
TOTAL SURFACE RUNOFF (CM)                        2.302
TOTAL GRW RUNOFF (CM)                           24.616
TOTAL MOISTURE RETENTION (CM)                    0.003
TOTAL YIELD (CM)                                26.918

        -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
        ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
-----------------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED                  4.166E+07
          SUBLAYER  2
               TOTAL DIFFUSED (UP)                1.281E+08
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)                3.398E+08
          SUBLAYER  2
               TOTAL DIFFUSED (UP)                8.731E+08
     LOWER SOIL ZONE:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)                1.448E+09
          SUBLAYER  2
               TOTAL DIFFUSED (UP)                1.337E+09
               TOTAL IN GROUNDWATER RUNOFF        2.450E+09

                       -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                        ---------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
                                    SOIL MOISTURE (UG/ML)  1.329E-01
                                    ADSORBED SOIL (UG/G)   3.164E-01
                                    SOIL AIR (UG/ML)       2.673E-03
          SUBLAYER  2
                                    SOIL MOISTURE (UG/ML)  5.411E-01
                                    ADSORBED SOIL (UG/G)   1.288E+00
                                    SOIL AIR (UG/ML)       1.088E-02
     SOIL ZONE 2:
          SUBLAYER  1
                                    SOIL MOISTURE (UG/ML)  2.163E+00
                                    ADSORBED SOIL (UG/G)   5.147E+00
                                    SOIL AIR (UG/ML)       4.345E-02
          SUBLAYER  2
                                    SOIL MOISTURE (UG/ML)  6.321E+00
                                    ADSORBED SOIL (UG/G)   1.505E+01
                                    SOIL AIR (UG/ML)       1.270E-01
     LOWER SOIL ZONE:
          SUBLAYER  1
                                    SOIL MOISTURE (UG/ML)  1.091E+01
                                    ADSORBED SOIL (UG/G)   2.596E+01
                                    SOIL AIR (UG/ML)       2.191E-01
          SUBLAYER  2
                                    SOIL MOISTURE (UG/ML)  1.514E+01
                                    ADSORBED SOIL (UG/G)   3.602E+01
                                    SOIL AIR (UG/ML)       3.040E-01
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MAX. POLL. DEPTH (M) 1.067E+00

YEAR - 15 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
UPPER SOIL ZONE:												
SUBLAYER 1												
VOLATILIZED	3.823E+06	3.594E+06	2.592E+06	2.539E+06	2.887E+06	3.227E+06	3.995E+06	3.744E+06	3.214E+06	2.396E+06	2.050E+06	1.955E+06
IN SOIL MOI	2.705E+06	3.161E+06	3.411E+06	3.394E+06	3.310E+06	3.204E+06	3.191E+06	3.216E+06	3.062E+06	2.730E+06	2.408E+06	2.239E+06
ADS ON SOIL	3.593E+07	3.996E+07	3.972E+07	3.933E+07	3.939E+07	3.911E+07	4.100E+07	4.065E+07	3.783E+07	3.248E+07	2.856E+07	2.678E+07
IN SOIL AIR	4.716E+04	5.035E+04	4.517E+04	4.488E+04	4.668E+04	4.773E+04	5.183E+04	4.968E+04	4.439E+04	3.601E+04	3.151E+04	3.011E+04
SUBLAYER 2												
DIFFUSED UP	1.263E+07	1.114E+07	7.766E+06	7.535E+06	8.518E+06	9.510E+06	1.167E+07	1.087E+07	9.526E+06	7.457E+06	6.740E+06	6.623E+06
IN SOIL MOI	1.135E+07	1.270E+07	1.357E+07	1.344E+07	1.305E+07	1.266E+07	1.242E+07	1.257E+07	1.228E+07	1.149E+07	1.050E+07	9.881E+06
ADS ON SOIL	1.508E+08	1.606E+08	1.581E+08	1.557E+08	1.553E+08	1.545E+08	1.596E+08	1.590E+08	1.518E+08	1.367E+08	1.245E+08	1.182E+08
IN SOIL AIR	1.979E+05	2.023E+05	1.797E+05	1.777E+05	1.840E+05	1.886E+05	2.018E+05	1.943E+05	1.781E+05	1.516E+05	1.374E+05	1.329E+05
SOIL ZONE 2:												
SUBLAYER 1												
DIFFUSED UP	3.513E+07	2.965E+07	2.023E+07	1.953E+07	2.196E+07	2.441E+07	2.964E+07	2.737E+07	2.423E+07	1.958E+07	1.843E+07	1.859E+07
IN SOIL MOI	6.993E+07	7.519E+07	7.975E+07	7.858E+07	7.587E+07	7.350E+07	7.095E+07	7.189E+07	7.170E+07	7.009E+07	6.644E+07	6.346E+07
ADS ON SOIL	9.288E+08	9.506E+08	9.287E+08	9.106E+08	9.028E+08	8.973E+08	9.117E+08	9.089E+08	8.860E+08	8.340E+08	7.880E+08	7.590E+08
IN SOIL AIR	1.219E+06	1.198E+06	1.056E+06	1.039E+06	1.070E+06	1.095E+06	1.153E+06	1.111E+06	1.040E+06	9.247E+05	8.695E+05	8.534E+05
SUBLAYER 2												
DIFFUSED UP	9.125E+07	7.605E+07	5.131E+07	4.912E+07	5.487E+07	6.075E+07	7.346E+07	6.757E+07	5.997E+07	4.895E+07	4.673E+07	4.769E+07
IN SOIL MOI	2.065E+08	2.183E+08	2.298E+08	2.250E+08	2.162E+08	2.090E+08	2.002E+08	2.028E+08	2.040E+08	2.032E+08	1.959E+08	1.888E+08
ADS ON SOIL	2.743E+09	2.760E+09	2.676E+09	2.607E+09	2.572E+09	2.552E+09	2.572E+09	2.564E+09	2.520E+09	2.418E+09	2.323E+09	2.258E+09
IN SOIL AIR	3.601E+06	3.477E+06	3.042E+06	2.975E+06	3.048E+06	3.114E+06	3.252E+06	3.133E+06	2.958E+06	2.680E+06	2.564E+06	2.538E+06
LOWER SOIL ZONE:												

```
          SUBLAYER  1
DIFFUSED UP 1.534E+08 1.256E+08 8.351E+07 7.919E+07 8.789E+07 9.711E+07 1.170E+08 1.074E+08 9.588E+07 7.942E+07 7.715E+07 7.967E+07
IN SOIL MOI 2.389E+08 2.496E+08 2.611E+08 2.545E+08 2.438E+08 2.357E+08 2.247E+08 2.277E+08 2.304E+08 2.323E+08 2.263E+08 2.192E+08
ADS ON SOIL 3.173E+09 3.156E+09 3.041E+09 2.949E+09 2.901E+09 2.877E+09 2.887E+09 2.878E+09 2.847E+09 2.764E+09 2.684E+09 2.622E+09
IN SOIL AIR 4.166E+06 3.976E+06 3.457E+06 3.365E+06 3.437E+06 3.511E+06 3.650E+06 3.518E+06 3.341E+06 3.065E+06 2.962E+06 2.948E+06

          SUBLAYER  2
DIFFUSED UP 1.455E+08 1.144E+08 7.526E+07 7.218E+07 8.041E+07 8.837E+07 1.047E+08 9.443E+07 8.443E+07 7.177E+07 7.221E+07 7.618E+07
IN SOIL MOI 3.329E+08 3.429E+08 3.590E+08 3.502E+08 3.348E+08 3.230E+08 3.054E+08 3.087E+08 3.141E+08 3.215E+08 3.172E+08 3.090E+08
ADS ON SOIL 4.421E+09 4.335E+09 4.180E+09 4.058E+09 3.984E+09 3.942E+09 3.924E+09 3.902E+09 3.881E+09 3.825E+09 3.762E+09 3.696E+09
IN SOIL AIR 5.803E+06 5.462E+06 4.753E+06 4.631E+06 4.721E+06 4.811E+06 4.961E+06 4.769E+06 4.554E+06 4.241E+06 4.151E+06 4.156E+06
GWR. RUNOFF 0.000E+00 1.129E+07 3.368E+08 3.222E+08 2.007E+08 1.176E+08 0.000E+00 3.040E+07 1.185E+08 3.078E+08 3.220E+08 2.537E+08

     -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --
     ---------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
MOISTURE    1.123E-01 1.249E-01 1.242E-01 1.230E-01 1.231E-01 1.223E-01 1.282E-01 1.271E-01 1.182E-01 1.015E-01 8.926E-02 8.372E-02
%SOLUBILITY 3.744E-01 4.164E-01 4.139E-01 4.098E-01 4.105E-01 4.075E-01 4.272E-01 4.236E-01 3.942E-01 3.384E-01 2.975E-01 2.791E-01
ADSORBED    2.673E-01 2.973E-01 2.955E-01 2.926E-01 2.931E-01 2.910E-01 3.050E-01 3.024E-01 2.814E-01 2.416E-01 2.124E-01 1.993E-01
SOIL AIR    2.242E-03 2.540E-03 2.558E-03 2.562E-03 2.559E-03 2.523E-03 2.563E-03 2.507E-03 2.308E-03 1.974E-03 1.736E-03 1.639E-03

          SUBLAYER  2
MOISTURE    4.713E-01 5.019E-01 4.941E-01 4.867E-01 4.853E-01 4.830E-01 4.988E-01 4.969E-01 4.744E-01 4.273E-01 3.893E-01 3.694E-01
%SOLUBILITY 1.571E+00 1.673E+00 1.647E+00 1.622E+00 1.618E+00 1.610E+00 1.663E+00 1.656E+00 1.581E+00 1.424E+00 1.298E+00 1.231E+00
ADSORBED    1.122E+00 1.195E+00 1.176E+00 1.158E+00 1.155E+00 1.149E+00 1.187E+00 1.183E+00 1.129E+00 1.017E+00 9.265E-01 8.792E-01
SOIL AIR    9.407E-03 1.021E-02 1.018E-02 1.014E-02 1.009E-02 9.967E-03 9.974E-03 9.802E-03 9.259E-03 8.308E-03 7.571E-03 7.230E-03

     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE    1.936E+00 1.981E+00 1.935E+00 1.898E+00 1.881E+00 1.870E+00 1.900E+00 1.894E+00 1.846E+00 1.738E+00 1.642E+00 1.582E+00
%SOLUBILITY 6.452E+00 6.603E+00 6.451E+00 6.325E+00 6.271E+00 6.233E+00 6.333E+00 6.314E+00 6.154E+00 5.794E+00 5.474E+00 5.272E+00
ADSORBED    4.606E+00 4.715E+00 4.606E+00 4.516E+00 4.478E+00 4.450E+00 4.522E+00 4.508E+00 4.394E+00 4.137E+00 3.908E+00 3.764E+00
SOIL AIR    3.863E-02 4.028E-02 3.987E-02 3.954E-02 3.910E-02 3.859E-02 3.799E-02 3.736E-02 3.603E-02 3.379E-02 3.194E-02 3.096E-02

          SUBLAYER  2
MOISTURE    5.717E+00 5.751E+00 5.576E+00 5.434E+00 5.360E+00 5.318E+00 5.361E+00 5.342E+00 5.252E+00 5.038E+00 4.841E+00 4.705E+00
%SOLUBILITY 1.906E+01 1.917E+01 1.859E+01 1.811E+01 1.787E+01 1.773E+01 1.787E+01 1.781E+01 1.751E+01 1.679E+01 1.614E+01 1.568E+01
ADSORBED    1.361E+01 1.369E+01 1.327E+01 1.293E+01 1.276E+01 1.266E+01 1.276E+01 1.271E+01 1.250E+01 1.199E+01 1.152E+01 1.120E+01
SOIL AIR    1.141E-01 1.169E-01 1.149E-01 1.132E-01 1.114E-01 1.097E-01 1.072E-01 1.054E-01 1.025E-01 9.796E-02 9.415E-02 9.208E-02

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE    9.920E+00 9.865E+00 9.505E+00 9.219E+00 9.067E+00 8.992E+00 9.025E+00 8.998E+00 8.901E+00 8.641E+00 8.389E+00 8.196E+00
%SOLUBILITY 3.307E+01 3.288E+01 3.168E+01 3.073E+01 3.022E+01 2.997E+01 3.008E+01 2.999E+01 2.967E+01 2.880E+01 2.796E+01 2.732E+01
ADSORBED    2.361E+01 2.348E+01 2.262E+01 2.194E+01 2.158E+01 2.140E+01 2.148E+01 2.141E+01 2.118E+01 2.057E+01 1.997E+01 1.951E+01
SOIL AIR    1.980E-01 2.006E-01 1.958E-01 1.921E-01 1.884E-01 1.856E-01 1.805E-01 1.775E-01 1.737E-01 1.680E-01 1.632E-01 1.604E-01

          SUBLAYER  2
MOISTURE    1.382E+01 1.355E+01 1.307E+01 1.269E+01 1.245E+01 1.232E+01 1.226E+01 1.220E+01 1.213E+01 1.196E+01 1.176E+01 1.155E+01
%SOLUBILITY 4.606E+01 4.517E+01 4.356E+01 4.229E+01 4.151E+01 4.108E+01 4.088E+01 4.066E+01 4.043E+01 3.986E+01 3.920E+01 3.851E+01
ADSORBED    3.289E+01 3.225E+01 3.110E+01 3.019E+01 2.964E+01 2.933E+01 2.919E+01 2.903E+01 2.887E+01 2.846E+01 2.799E+01 2.750E+01
SOIL AIR    2.758E-01 2.756E-01 2.692E-01 2.643E-01 2.588E-01 2.543E-01 2.453E-01 2.406E-01 2.367E-01 2.325E-01 2.287E-01 2.261E-01

POL DEP CM  1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02

                         YEAR -  15 ANNUAL SUMMARY REPORT
                         ================================
       -- TOTAL INPUTS (UG) --
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UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

          -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918

         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
         ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
-------------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED                3.602E+07
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              1.100E+08
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)              2.887E+08
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              7.277E+08
     LOWER SOIL ZONE:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)              1.183E+09
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              1.080E+09
               TOTAL IN GROUNDWATER RUNOFF      2.021E+09

                    -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                     ---------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
                                   SOIL MOISTURE (UG/ML)  1.148E-01
                                   ADSORBED SOIL (UG/G)   2.733E-01
                                   SOIL AIR (UG/ML)       2.309E-03
          SUBLAYER  2
                                   SOIL MOISTURE (UG/ML)  4.649E-01
                                   ADSORBED SOIL (UG/G)   1.106E+00
                                   SOIL AIR (UG/ML)       9.345E-03
     SOIL ZONE 2:
          SUBLAYER  1
                                   SOIL MOISTURE (UG/ML)  1.842E+00
                                   ADSORBED SOIL (UG/G)   4.384E+00
                                   SOIL AIR (UG/ML)       3.701E-02
          SUBLAYER  2
                                   SOIL MOISTURE (UG/ML)  5.308E+00
                                   ADSORBED SOIL (UG/G)   1.263E+01
                                   SOIL AIR (UG/ML)       1.066E-01
     LOWER SOIL ZONE:
          SUBLAYER  1
                                   SOIL MOISTURE (UG/ML)  9.060E+00
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ADSORBED SOIL (UG/G)	2.156E+01
SOIL AIR (UG/ML)	1.820E-01

SUBLAYER 2

SOIL MOISTURE (UG/ML)	1.248E+01
ADSORBED SOIL (UG/G)	2.970E+01
SOIL AIR (UG/ML)	2.507E-01
MAX. POLL. DEPTH (M)	1.067E+00

YEAR - 16 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:

SUBLAYER 1

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
VOLATILIZED	3.272E+06	3.071E+06	2.213E+06	2.165E+06	2.460E+06	2.747E+06	3.397E+06	3.180E+06	2.728E+06	2.031E+06	1.737E+06	1.655E+06
IN SOIL MOI	2.313E+06	2.699E+06	2.910E+06	2.893E+06	2.819E+06	2.726E+06	2.711E+06	2.730E+06	2.597E+06	2.314E+06	2.039E+06	1.896E+06
ADS ON SOIL	3.072E+07	3.412E+07	3.389E+07	3.353E+07	3.355E+07	3.327E+07	3.484E+07	3.451E+07	3.208E+07	2.753E+07	2.419E+07	2.267E+07
IN SOIL AIR	4.033E+04	4.299E+04	3.853E+04	3.826E+04	3.975E+04	4.060E+04	4.405E+04	4.218E+04	3.765E+04	3.052E+04	2.669E+04	2.549E+04

SUBLAYER 2

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DIFFUSED UP	1.075E+07	9.465E+06	6.594E+06	6.394E+06	7.223E+06	8.058E+06	9.877E+06	9.190E+06	8.052E+06	6.300E+06	5.692E+06	5.590E+06
IN SOIL MOI	9.669E+06	1.080E+07	1.154E+07	1.141E+07	1.107E+07	1.073E+07	1.052E+07	1.064E+07	1.039E+07	9.712E+06	8.872E+06	8.344E+06
ADS ON SOIL	1.284E+08	1.366E+08	1.344E+08	1.322E+08	1.318E+08	1.310E+08	1.352E+08	1.346E+08	1.284E+08	1.156E+08	1.052E+08	9.980E+07
IN SOIL AIR	1.686E+05	1.721E+05	1.528E+05	1.509E+05	1.562E+05	1.599E+05	1.709E+05	1.644E+05	1.506E+05	1.281E+05	1.161E+05	1.122E+05

SOIL ZONE 2:

SUBLAYER 1

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DIFFUSED UP	2.969E+07	2.503E+07	1.706E+07	1.646E+07	1.850E+07	2.056E+07	2.495E+07	2.302E+07	2.037E+07	1.646E+07	1.549E+07	1.563E+07
IN SOIL MOI	5.918E+07	6.357E+07	6.739E+07	6.636E+07	6.404E+07	6.201E+07	5.981E+07	6.056E+07	6.038E+07	5.900E+07	5.591E+07	5.339E+07
ADS ON SOIL	7.860E+08	8.037E+08	7.847E+08	7.690E+08	7.621E+08	7.569E+08	7.685E+08	7.657E+08	7.460E+08	7.021E+08	6.631E+08	6.385E+08
IN SOIL AIR	1.032E+06	1.013E+06	8.922E+05	8.775E+05	9.031E+05	9.237E+05	9.716E+05	9.358E+05	8.754E+05	7.784E+05	7.317E+05	7.179E+05

SUBLAYER 2

DIFFUSED UP	7.608E+07	6.338E+07	4.276E+07	4.094E+07	4.573E+07	5.063E+07	6.122E+07	5.631E+07	4.998E+07	4.081E+07	3.897E+07	3.978E+07
IN SOIL MOI	1.731E+08	1.828E+08	1.924E+08	1.884E+08	1.810E+08	1.750E+08	1.675E+08	1.696E+08	1.706E+08	1.700E+08	1.639E+08	1.579E+08
ADS ON SOIL	2.299E+09	2.311E+09	2.241E+09	2.183E+09	2.153E+09	2.136E+09	2.152E+09	2.145E+09	2.108E+09	2.022E+09	1.943E+09	1.888E+09
IN SOIL AIR	3.017E+06	2.912E+06	2.547E+06	2.491E+06	2.552E+06	2.606E+06	2.721E+06	2.621E+06	2.474E+06	2.242E+06	2.144E+06	2.123E+06

LOWER SOIL ZONE:

SUBLAYER 1

DIFFUSED UP	1.264E+08	1.035E+08	6.883E+07	6.531E+07	7.253E+07	8.018E+07	9.668E+07	8.874E+07	7.928E+07	6.572E+07	6.389E+07	6.602E+07
IN SOIL MOI	1.988E+08	2.077E+08	2.173E+08	2.118E+08	2.029E+08	1.962E+08	1.871E+08	1.895E+08	1.919E+08	1.935E+08	1.885E+08	1.827E+08
ADS ON SOIL	2.640E+09	2.625E+09	2.530E+09	2.454E+09	2.414E+09	2.395E+09	2.403E+09	2.396E+09	2.371E+09	2.302E+09	2.236E+09	2.185E+09
IN SOIL AIR	3.465E+06	3.308E+06	2.877E+06	2.801E+06	2.861E+06	2.922E+06	3.039E+06	2.929E+06	2.782E+06	2.553E+06	2.467E+06	2.456E+06

SUBLAYER 2

DIFFUSED UP	1.190E+08	9.361E+07	6.165E+07	5.919E+07	6.599E+07	7.258E+07	8.610E+07	7.768E+07	6.951E+07	5.914E+07	5.956E+07	6.288E+07
IN SOIL MOI	2.756E+08	2.840E+08	2.975E+08	2.903E+08	2.776E+08	2.679E+08	2.534E+08	2.562E+08	2.608E+08	2.670E+08	2.635E+08	2.568E+08
ADS ON SOIL	3.661E+09	3.591E+09	3.464E+09	3.364E+09	3.364E+09	3.304E+09	3.270E+09	3.256E+09	3.239E+09	3.222E+09	3.177E+09	3.125E+09	3.072E+09
IN SOIL AIR	4.805E+06	4.524E+06	3.939E+06	3.839E+06	3.915E+06	3.991E+06	4.116E+06	3.959E+06	3.780E+06	3.522E+06	3.449E+06	3.454E+06
GWR. RUNOFF	0.000E+00	9.349E+06	2.790E+08	2.671E+08	1.664E+08	9.757E+07	0.000E+00	2.523E+07	9.840E+07	2.556E+08	2.675E+08	2.108E+08

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --

UPPER SOIL ZONE:

SUBLAYER 1

MOISTURE	9.604E-02	1.067E-01	1.059E-01	1.048E-01	1.049E-01	1.040E-01	1.089E-01	1.079E-01	1.003E-01	8.606E-02	7.561E-02	7.086E-02
%SOLUBILITY	3.201E-01	3.556E-01	3.531E-01	3.493E-01	3.495E-01	3.467E-01	3.630E-01	3.596E-01	3.343E-01	2.869E-01	2.520E-01	2.362E-01
ADSORBED	2.286E-01	2.539E-01	2.521E-01	2.494E-01	2.496E-01	2.475E-01	2.592E-01	2.567E-01	2.387E-01	2.048E-01	1.799E-01	1.687E-01
SOIL AIR	1.917E-03	2.169E-03	2.182E-03	2.184E-03	2.179E-03	2.146E-03	2.178E-03	2.128E-03	1.957E-03	1.673E-03	1.471E-03	1.387E-03

SUBLAYER 2

MOISTURE	4.014E-01	4.269E-01	4.200E-01	4.134E-01	4.119E-01	4.095E-01	4.225E-01	4.206E-01	4.013E-01	3.613E-01	3.289E-01	3.120E-01
%SOLUBILITY	1.338E+00	1.423E+00	1.400E+00	1.378E+00	1.373E+00	1.365E+00	1.408E+00	1.402E+00	1.338E+00	1.204E+00	1.096E+00	1.040E+00
ADSORBED	9.554E-01	1.016E+00	9.995E-01	9.838E-01	9.803E-01	9.747E-01	1.006E+00	1.001E+00	9.551E-01	8.598E-01	7.828E-01	7.424E-01
SOIL AIR	8.012E-03	8.681E-03	8.652E-03	8.613E-03	8.560E-03	8.451E-03	8.449E-03	8.297E-03	7.832E-03	7.024E-03	6.397E-03	6.106E-03

SOIL ZONE 2:

SUBLAYER 1

MOISTURE	1.638E+00	1.675E+00	1.635E+00	1.603E+00	1.588E+00	1.577E+00	1.601E+00	1.596E+00	1.555E+00	1.463E+00	1.382E+00	1.331E+00
%SOLUBILITY	5.460E+00	5.583E+00	5.451E+00	5.342E+00	5.293E+00	5.258E+00	5.338E+00	5.319E+00	5.182E+00	4.877E+00	4.606E+00	4.435E+00
ADSORBED	3.898E+00	3.986E+00	3.892E+00	3.814E+00	3.780E+00	3.754E+00	3.811E+00	3.798E+00	3.700E+00	3.482E+00	3.289E+00	3.167E+00
SOIL AIR	3.269E-02	3.406E-02	3.369E-02	3.339E-02	3.300E-02	3.255E-02	3.202E-02	3.148E-02	3.034E-02	2.845E-02	2.688E-02	2.604E-02

SUBLAYER 2

MOISTURE	4.790E+00	4.816E+00	4.669E+00	4.549E+00	4.487E+00	4.451E+00	4.486E+00	4.469E+00	4.394E+00	4.215E+00	4.050E+00	3.935E+00
%SOLUBILITY	1.597E+01	1.605E+01	1.556E+01	1.516E+01	1.496E+01	1.484E+01	1.495E+01	1.490E+01	1.465E+01	1.405E+01	1.350E+01	1.312E+01
ADSORBED	1.140E+01	1.146E+01	1.111E+01	1.083E+01	1.068E+01	1.059E+01	1.068E+01	1.064E+01	1.046E+01	1.003E+01	9.638E+00	9.366E+00
SOIL AIR	9.560E-02	9.794E-02	9.619E-02	9.479E-02	9.326E-02	9.185E-02	8.970E-02	8.816E-02	8.575E-02	8.195E-02	7.876E-02	7.703E-02

LOWER SOIL ZONE:

SUBLAYER 1

MOISTURE	8.252E+00	8.206E+00	7.909E+00	7.672E+00	7.547E+00	7.486E+00	7.513E+00	7.491E+00	7.411E+00	7.197E+00	6.989E+00	6.829E+00
%SOLUBILITY	2.751E+01	2.735E+01	2.636E+01	2.557E+01	2.516E+01	2.495E+01	2.504E+01	2.497E+01	2.470E+01	2.399E+01	2.330E+01	2.276E+01
ADSORBED	1.964E+01	1.953E+01	1.882E+01	1.826E+01	1.796E+01	1.782E+01	1.788E+01	1.783E+01	1.764E+01	1.713E+01	1.663E+01	1.625E+01
SOIL AIR	1.647E-01	1.669E-01	1.629E-01	1.599E-01	1.568E-01	1.545E-01	1.502E-01	1.478E-01	1.446E-01	1.399E-01	1.359E-01	1.337E-01

SUBLAYER 2

MOISTURE	1.144E+01	1.122E+01	1.083E+01	1.052E+01	1.033E+01	1.022E+01	1.018E+01	1.012E+01	1.007E+01	9.931E+00	9.770E+00	9.602E+00
%SOLUBILITY	3.814E+01	3.741E+01	3.609E+01	3.505E+01	3.442E+01	3.408E+01	3.392E+01	3.375E+01	3.357E+01	3.310E+01	3.257E+01	3.201E+01
ADSORBED	2.723E+01	2.671E+01	2.577E+01	2.503E+01	2.458E+01	2.433E+01	2.422E+01	2.410E+01	2.397E+01	2.364E+01	2.325E+01	2.285E+01
SOIL AIR	2.284E-01	2.283E-01	2.231E-01	2.191E-01	2.146E-01	2.110E-01	2.035E-01	1.997E-01	1.965E-01	1.931E-01	1.900E-01	1.879E-01

POL DEP CM 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02

YEAR - 16 ANNUAL SUMMARY REPORT

-- TOTAL INPUTS (UG) --

UPPER SOIL ZONE	0.000E+00
SOIL ZONE 2	0.000E+00
LOWER SOIL ZONE	0.000E+00

-- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)	27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)	27.276
TOTAL PRECIPITATION (CM)	126.201
TOTAL INFILTRATION (CM)	123.899
TOTAL EVAPOTRANSPIRATION (CM)	99.280
TOTAL SURFACE RUNOFF (CM)	2.302
TOTAL GRW RUNOFF (CM)	24.616
TOTAL MOISTURE RETENTION (CM)	0.003
TOTAL YIELD (CM)	26.918

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)

UPPER SOIL ZONE:		
SUBLAYER 1		
	TOTAL VOLATILIZED	3.065E+07
SUBLAYER 2		
	TOTAL DIFFUSED (UP)	9.319E+07
SOIL ZONE 2:		
SUBLAYER 1		
	TOTAL DIFFUSED (UP)	2.432E+08
SUBLAYER 2		
	TOTAL DIFFUSED (UP)	6.066E+08
LOWER SOIL ZONE:		
SUBLAYER 1		
	TOTAL DIFFUSED (UP)	9.770E+08
SUBLAYER 2		
	TOTAL DIFFUSED (UP)	8.869E+08
	TOTAL IN GROUNDWATER RUNOFF	1.677E+09

-- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON-ZERO VALUES ARE PRINTED --

UPPER SOIL ZONE:		
SUBLAYER 1		
	SOIL MOISTURE (UG/ML)	9.766E-02
	ADSORBED SOIL (UG/G)	2.324E-01
	SOIL AIR (UG/ML)	1.964E-03
SUBLAYER 2		
	SOIL MOISTURE (UG/ML)	3.941E-01
	ADSORBED SOIL (UG/G)	9.380E-01
	SOIL AIR (UG/ML)	7.923E-03
SOIL ZONE 2:		
SUBLAYER 1		
	SOIL MOISTURE (UG/ML)	1.554E+00
	ADSORBED SOIL (UG/G)	3.698E+00
	SOIL AIR (UG/ML)	3.122E-02

SUBLAYER 2

SOIL MOISTURE (UG/ML)	4.443E+00
ADSORBED SOIL (UG/G)	1.057E+01
SOIL AIR (UG/ML)	8.925E-02

LOWER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	7.542E+00
ADSORBED SOIL (UG/G)	1.795E+01
SOIL AIR (UG/ML)	1.515E-01

SUBLAYER 2

SOIL MOISTURE (UG/ML)	1.035E+01
ADSORBED SOIL (UG/G)	2.464E+01
SOIL AIR (UG/ML)	2.079E-01
MAX. POLL. DEPTH (M)	1.067E+00

YEAR - 17 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
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GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:

SUBLAYER 1

VOLATILIZED	2.768E+06	2.596E+06	1.869E+06	1.828E+06	2.076E+06	2.317E+06	2.863E+06	2.679E+06	2.297E+06	1.710E+06	1.462E+06	1.392E+06
IN SOIL MOI	1.956E+06	2.281E+06	2.458E+06	2.442E+06	2.378E+06	2.298E+06	2.285E+06	2.299E+06	2.186E+06	1.947E+06	1.716E+06	1.594E+06
ADS ON SOIL	2.598E+07	2.883E+07	2.862E+07	2.830E+07	2.830E+07	2.806E+07	2.936E+07	2.907E+07	2.701E+07	2.317E+07	2.035E+07	1.906E+07
IN SOIL AIR	3.410E+04	3.633E+04	3.254E+04	3.229E+04	3.354E+04	3.424E+04	3.712E+04	3.552E+04	3.169E+04	2.568E+04	2.245E+04	2.143E+04

SUBLAYER 2

DIFFUSED UP	9.070E+06	7.977E+06	5.554E+06	5.384E+06	6.079E+06	6.779E+06	8.306E+06	7.725E+06	6.766E+06	5.292E+06	4.780E+06	4.694E+06
IN SOIL MOI	8.157E+06	9.108E+06	9.722E+06	9.613E+06	9.324E+06	9.033E+06	8.850E+06	8.949E+06	8.733E+06	8.161E+06	7.453E+06	7.008E+06
ADS ON SOIL	1.083E+08	1.151E+08	1.132E+08	1.114E+08	1.110E+08	1.103E+08	1.137E+08	1.131E+08	1.079E+08	9.711E+07	8.839E+07	8.381E+07
IN SOIL AIR	1.422E+05	1.451E+05	1.287E+05	1.271E+05	1.315E+05	1.346E+05	1.438E+05	1.383E+05	1.266E+05	1.077E+05	9.754E+04	9.423E+04

SOIL ZONE 2:

SUBLAYER 1												
DIFFUSED UP	2.494E+07	2.101E+07	1.432E+07	1.381E+07	1.552E+07	1.724E+07	2.092E+07	1.929E+07	1.707E+07	1.379E+07	1.298E+07	1.309E+07
IN SOIL MOI	4.975E+07	5.342E+07	5.660E+07	5.573E+07	5.376E+07	5.204E+07	5.018E+07	5.080E+07	5.063E+07	4.946E+07	4.687E+07	4.474E+07
ADS ON SOIL	6.608E+08	6.753E+08	6.592E+08	6.458E+08	6.398E+08	6.353E+08	6.447E+08	6.422E+08	6.256E+08	5.886E+08	5.558E+08	5.351E+08
IN SOIL AIR	8.673E+05	8.508E+05	7.495E+05	7.369E+05	7.582E+05	7.752E+05	8.152E+05	7.849E+05	7.340E+05	6.526E+05	6.134E+05	6.016E+05
SUBLAYER 2												
DIFFUSED UP	6.345E+07	5.285E+07	3.565E+07	3.413E+07	3.813E+07	4.222E+07	5.105E+07	4.695E+07	4.168E+07	3.403E+07	3.251E+07	3.319E+07
IN SOIL MOI	1.447E+08	1.528E+08	1.608E+08	1.575E+08	1.513E+08	1.462E+08	1.400E+08	1.417E+08	1.426E+08	1.420E+08	1.369E+08	1.319E+08
ADS ON SOIL	1.922E+09	1.932E+09	1.873E+09	1.825E+09	1.800E+09	1.785E+09	1.799E+09	1.792E+09	1.762E+09	1.690E+09	1.624E+09	1.578E+09
IN SOIL AIR	2.523E+06	2.435E+06	2.130E+06	2.082E+06	2.133E+06	2.179E+06	2.274E+06	2.190E+06	2.067E+06	1.874E+06	1.792E+06	1.774E+06
LOWER SOIL ZONE:												
SUBLAYER 1												
DIFFUSED UP	1.047E+08	8.580E+07	5.708E+07	5.417E+07	6.018E+07	6.655E+07	8.026E+07	7.369E+07	6.585E+07	5.461E+07	5.311E+07	5.490E+07
IN SOIL MOI	1.656E+08	1.730E+08	1.810E+08	1.765E+08	1.691E+08	1.635E+08	1.559E+08	1.580E+08	1.600E+08	1.613E+08	1.572E+08	1.523E+08
ADS ON SOIL	2.200E+09	2.187E+09	2.108E+09	2.045E+09	2.012E+09	1.996E+09	2.003E+09	1.997E+09	1.976E+09	1.920E+09	1.864E+09	1.822E+09
IN SOIL AIR	2.887E+06	2.756E+06	2.397E+06	2.334E+06	2.385E+06	2.436E+06	2.533E+06	2.441E+06	2.319E+06	2.128E+06	2.057E+06	2.049E+06
SUBLAYER 2												
DIFFUSED UP	9.830E+07	7.737E+07	5.098E+07	4.897E+07	5.462E+07	6.010E+07	7.133E+07	6.438E+07	5.762E+07	4.905E+07	4.942E+07	5.220E+07
IN SOIL MOI	2.291E+08	2.361E+08	2.474E+08	2.415E+08	2.310E+08	2.229E+08	2.109E+08	2.132E+08	2.171E+08	2.223E+08	2.195E+08	2.139E+08
ADS ON SOIL	3.043E+09	2.985E+09	2.881E+09	2.798E+09	2.748E+09	2.721E+09	2.709E+09	2.696E+09	2.682E+09	2.645E+09	2.603E+09	2.558E+09
IN SOIL AIR	3.994E+06	3.762E+06	3.275E+06	3.193E+06	3.257E+06	3.321E+06	3.426E+06	3.295E+06	3.147E+06	2.933E+06	2.872E+06	2.877E+06
GWR. RUNOFF	0.000E+00	7.772E+06	2.320E+08	2.221E+08	1.384E+08	8.118E+07	0.000E+00	2.100E+07	8.191E+07	2.128E+08	2.227E+08	1.756E+08

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --

UPPER SOIL ZONE:												
SUBLAYER 1												
MOISTURE	8.121E-02	9.013E-02	8.946E-02	8.846E-02	8.847E-02	8.770E-02	9.177E-02	9.085E-02	8.443E-02	7.242E-02	6.360E-02	5.959E-02
%SOLUBILITY	2.707E-01	3.004E-01	2.982E-01	2.949E-01	2.949E-01	2.923E-01	3.059E-01	3.028E-01	2.814E-01	2.414E-01	2.120E-01	1.986E-01
ADSORBED	1.933E-01	2.145E-01	2.129E-01	2.105E-01	2.106E-01	2.087E-01	2.184E-01	2.162E-01	2.009E-01	1.724E-01	1.514E-01	1.418E-01
SOIL AIR	1.621E-03	1.833E-03	1.843E-03	1.843E-03	1.839E-03	1.810E-03	1.835E-03	1.792E-03	1.648E-03	1.408E-03	1.237E-03	1.166E-03
SUBLAYER 2												
MOISTURE	3.387E-01	3.599E-01	3.539E-01	3.482E-01	3.468E-01	3.447E-01	3.554E-01	3.536E-01	3.373E-01	3.036E-01	2.763E-01	2.620E-01
%SOLUBILITY	1.129E+00	1.200E+00	1.180E+00	1.161E+00	1.156E+00	1.149E+00	1.185E+00	1.179E+00	1.124E+00	1.012E+00	9.210E-01	8.733E-01
ADSORBED	8.060E-01	8.566E-01	8.423E-01	8.288E-01	8.254E-01	8.203E-01	8.459E-01	8.417E-01	8.028E-01	7.225E-01	6.576E-01	6.235E-01
SOIL AIR	6.759E-03	7.319E-03	7.291E-03	7.255E-03	7.208E-03	7.113E-03	7.108E-03	6.976E-03	6.583E-03	5.902E-03	5.374E-03	5.128E-03
SOIL ZONE 2:												
SUBLAYER 1												
MOISTURE	1.377E+00	1.407E+00	1.374E+00	1.346E+00	1.333E+00	1.324E+00	1.344E+00	1.338E+00	1.304E+00	1.227E+00	1.158E+00	1.115E+00
%SOLUBILITY	4.590E+00	4.691E+00	4.579E+00	4.486E+00	4.444E+00	4.413E+00	4.479E+00	4.461E+00	4.345E+00	4.089E+00	3.861E+00	3.717E+00
ADSORBED	3.277E+00	3.349E+00	3.269E+00	3.203E+00	3.173E+00	3.151E+00	3.198E+00	3.185E+00	3.103E+00	2.919E+00	2.757E+00	2.654E+00
SOIL AIR	2.748E-02	2.862E-02	2.830E-02	2.804E-02	2.771E-02	2.732E-02	2.687E-02	2.640E-02	2.544E-02	2.385E-02	2.253E-02	2.183E-02
SUBLAYER 2												
MOISTURE	4.006E+00	4.027E+00	3.903E+00	3.803E+00	3.751E+00	3.720E+00	3.749E+00	3.734E+00	3.671E+00	3.522E+00	3.384E+00	3.288E+00
%SOLUBILITY	1.335E+01	1.342E+01	1.301E+01	1.268E+01	1.250E+01	1.240E+01	1.250E+01	1.245E+01	1.224E+01	1.174E+01	1.128E+01	1.096E+01
ADSORBED	9.533E+00	9.583E+00	9.290E+00	9.051E+00	8.927E+00	8.854E+00	8.921E+00	8.888E+00	8.737E+00	8.382E+00	8.054E+00	7.827E+00
SOIL AIR	7.995E-02	8.188E-02	8.042E-02	7.924E-02	7.795E-02	7.677E-02	7.496E-02	7.367E-02	7.165E-02	6.847E-02	6.581E-02	6.436E-02
LOWER SOIL ZONE:												
SUBLAYER 1												
MOISTURE	6.876E+00	6.837E+00	6.590E+00	6.394E+00	6.290E+00	6.239E+00	6.262E+00	6.244E+00	6.178E+00	6.001E+00	5.828E+00	5.695E+00
%SOLUBILITY	2.292E+01	2.279E+01	2.197E+01	2.131E+01	2.097E+01	2.080E+01	2.087E+01	2.081E+01	2.059E+01	2.000E+01	1.943E+01	1.898E+01
ADSORBED	1.636E+01	1.627E+01	1.568E+01	1.522E+01	1.497E+01	1.485E+01	1.490E+01	1.486E+01	1.470E+01	1.428E+01	1.387E+01	1.355E+01

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SOIL AIR    1.372E-01 1.390E-01 1.358E-01 1.332E-01 1.307E-01 1.288E-01 1.252E-01 1.232E-01 1.206E-01 1.167E-01 1.133E-01 1.115E-01

         SUBLAYER  2
MOISTURE    9.512E+00 9.332E+00 9.005E+00 8.747E+00 8.591E+00 8.506E+00 8.469E+00 8.427E+00 8.384E+00 8.269E+00 8.136E+00 7.997E+00
%SOLUBILITY 3.171E+01 3.111E+01 3.002E+01 2.916E+01 2.864E+01 2.835E+01 2.823E+01 2.809E+01 2.795E+01 2.756E+01 2.712E+01 2.666E+01
ADSORBED    2.264E+01 2.221E+01 2.143E+01 2.082E+01 2.045E+01 2.024E+01 2.016E+01 2.006E+01 1.995E+01 1.968E+01 1.936E+01 1.903E+01
SOIL AIR    1.898E-01 1.898E-01 1.855E-01 1.823E-01 1.785E-01 1.755E-01 1.694E-01 1.662E-01 1.636E-01 1.608E-01 1.582E-01 1.565E-01


POL DEP CM  1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02

                        YEAR -  17 ANNUAL SUMMARY REPORT
                        ================================
      -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

         -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918

        -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
        ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
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    UPPER SOIL ZONE:
        SUBLAYER  1
            TOTAL VOLATILIZED                 2.586E+07
        SUBLAYER  2
            TOTAL DIFFUSED (UP)               7.841E+07
    SOIL ZONE 2:
        SUBLAYER  1
            TOTAL DIFFUSED (UP)               2.040E+08
        SUBLAYER  2
            TOTAL DIFFUSED (UP)               5.059E+08
    LOWER SOIL ZONE:
        SUBLAYER  1
            TOTAL DIFFUSED (UP)               8.110E+08
        SUBLAYER  2
            TOTAL DIFFUSED (UP)               7.343E+08
            TOTAL IN GROUNDWATER RUNOFF       1.396E+09

                    -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                    ---------------------------------------------------------------------------------
    UPPER SOIL ZONE:
        SUBLAYER  1
                                SOIL MOISTURE (UG/ML)  8.234E-02
                                ADSORBED SOIL (UG/G)   1.960E-01
                                SOIL AIR (UG/ML)       1.656E-03
        SUBLAYER  2
                                SOIL MOISTURE (UG/ML)  3.317E-01
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ADSORBED SOIL (UG/G)	7.895E-01
SOIL AIR (UG/ML)	6.668E-03

SOIL ZONE 2:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	1.304E+00
ADSORBED SOIL (UG/G)	3.103E+00
SOIL AIR (UG/ML)	2.620E-02

SUBLAYER 2

SOIL MOISTURE (UG/ML)	3.713E+00
ADSORBED SOIL (UG/G)	8.837E+00
SOIL AIR (UG/ML)	7.459E-02

LOWER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	6.286E+00
ADSORBED SOIL (UG/G)	1.496E+01
SOIL AIR (UG/ML)	1.263E-01

SUBLAYER 2

SOIL MOISTURE (UG/ML)	8.615E+00
ADSORBED SOIL (UG/G)	2.050E+01
SOIL AIR (UG/ML)	1.730E-01
MAX. POLL. DEPTH (M)	1.067E+00

YEAR - 18 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:

SUBLAYER 1

VOLATILIZED	2.327E+06	2.181E+06	1.570E+06	1.535E+06	1.743E+06	1.944E+06	2.402E+06	2.247E+06	1.926E+06	1.433E+06	1.225E+06	1.167E+06
IN SOIL MOI	1.644E+06	1.916E+06	2.064E+06	2.050E+06	1.996E+06	1.929E+06	1.917E+06	1.928E+06	1.833E+06	1.632E+06	1.438E+06	1.336E+06
ADS ON SOIL	2.183E+07	2.422E+07	2.404E+07	2.376E+07	2.376E+07	2.354E+07	2.463E+07	2.437E+07	2.264E+07	1.942E+07	1.705E+07	1.597E+07
IN SOIL AIR	2.866E+04	3.052E+04	2.733E+04	2.711E+04	2.815E+04	2.873E+04	3.114E+04	2.979E+04	2.657E+04	2.153E+04	1.882E+04	1.796E+04

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          SUBLAYER  2
DIFFUSED UP 7.612E+06 6.692E+06 4.658E+06 4.514E+06 5.096E+06 5.682E+06 6.959E+06 6.471E+06 5.667E+06 4.432E+06 4.003E+06 3.930E+06
IN SOIL MOI 6.847E+06 7.642E+06 8.156E+06 8.062E+06 7.818E+06 7.573E+06 7.417E+06 7.498E+06 7.316E+06 6.836E+06 6.242E+06 5.868E+06
ADS ON SOIL 9.094E+07 9.661E+07 9.498E+07 9.343E+07 9.304E+07 9.244E+07 9.530E+07 9.479E+07 9.040E+07 8.134E+07 7.403E+07 7.018E+07
IN SOIL AIR 1.194E+05 1.217E+05 1.080E+05 1.066E+05 1.103E+05 1.128E+05 1.205E+05 1.159E+05 1.061E+05 9.018E+04 8.169E+04 7.890E+04

     SOIL ZONE 2:
          SUBLAYER  1
DIFFUSED UP 2.088E+07 1.759E+07 1.198E+07 1.156E+07 1.299E+07 1.442E+07 1.750E+07 1.614E+07 1.428E+07 1.153E+07 1.085E+07 1.094E+07
IN SOIL MOI 4.168E+07 4.474E+07 4.740E+07 4.666E+07 4.501E+07 4.356E+07 4.199E+07 4.250E+07 4.236E+07 4.138E+07 3.920E+07 3.742E+07
ADS ON SOIL 5.536E+08 5.656E+08 5.520E+08 5.408E+08 5.356E+08 5.317E+08 5.396E+08 5.374E+08 5.234E+08 4.924E+08 4.650E+08 4.476E+08
IN SOIL AIR 7.267E+05 7.126E+05 6.276E+05 6.170E+05 6.347E+05 6.489E+05 6.822E+05 6.567E+05 6.141E+05 5.459E+05 5.131E+05 5.032E+05

          SUBLAYER  2
DIFFUSED UP 5.294E+07 4.409E+07 2.974E+07 2.848E+07 3.181E+07 3.522E+07 4.259E+07 3.917E+07 3.478E+07 2.840E+07 2.712E+07 2.769E+07
IN SOIL MOI 1.209E+08 1.277E+08 1.344E+08 1.315E+08 1.263E+08 1.221E+08 1.169E+08 1.184E+08 1.191E+08 1.186E+08 1.144E+08 1.102E+08
ADS ON SOIL 1.606E+09 1.614E+09 1.565E+09 1.524E+09 1.503E+09 1.491E+09 1.502E+09 1.497E+09 1.471E+09 1.411E+09 1.356E+09 1.318E+09
IN SOIL AIR 2.108E+06 2.034E+06 1.779E+06 1.740E+06 1.782E+06 1.820E+06 1.899E+06 1.829E+06 1.726E+06 1.565E+06 1.497E+06 1.482E+06

     LOWER SOIL ZONE:
          SUBLAYER  1
DIFFUSED UP 8.712E+07 7.137E+07 4.748E+07 4.507E+07 5.008E+07 5.539E+07 6.681E+07 6.135E+07 5.483E+07 4.548E+07 4.424E+07 4.574E+07
IN SOIL MOI 1.381E+08 1.443E+08 1.510E+08 1.472E+08 1.410E+08 1.364E+08 1.300E+08 1.318E+08 1.334E+08 1.346E+08 1.311E+08 1.271E+08
ADS ON SOIL 1.834E+09 1.824E+09 1.758E+09 1.706E+09 1.678E+09 1.665E+09 1.671E+09 1.666E+09 1.649E+09 1.601E+09 1.555E+09 1.520E+09
IN SOIL AIR 2.408E+06 2.298E+06 1.999E+06 1.947E+06 1.989E+06 2.032E+06 2.113E+06 2.036E+06 1.934E+06 1.775E+06 1.716E+06 1.709E+06

          SUBLAYER  2
DIFFUSED UP 8.162E+07 6.425E+07 4.235E+07 4.068E+07 4.539E+07 4.996E+07 5.930E+07 5.353E+07 4.793E+07 4.081E+07 4.112E+07 4.344E+07
IN SOIL MOI 1.908E+08 1.967E+08 2.061E+08 2.012E+08 1.925E+08 1.858E+08 1.757E+08 1.777E+08 1.809E+08 1.853E+08 1.830E+08 1.783E+08
ADS ON SOIL 2.535E+09 2.487E+09 2.400E+09 2.332E+09 2.290E+09 2.268E+09 2.258E+09 2.247E+09 2.236E+09 2.205E+09 2.170E+09 2.133E+09
IN SOIL AIR 3.327E+06 3.133E+06 2.729E+06 2.661E+06 2.714E+06 2.767E+06 2.855E+06 2.746E+06 2.623E+06 2.445E+06 2.394E+06 2.398E+06
GWR. RUNOFF 0.000E+00 6.474E+06 1.933E+08 1.851E+08 1.153E+08 6.765E+07 0.000E+00 1.750E+07 6.827E+07 1.774E+08 1.857E+08 1.464E+08

     -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --
     ----------------------------------------------------------------------------------------------------------------------------


     UPPER SOIL ZONE:
          SUBLAYER  1
MOISTURE    6.825E-02 7.571E-02 7.513E-02 7.428E-02 7.426E-02 7.359E-02 7.698E-02 7.619E-02 7.079E-02 6.070E-02 5.330E-02 4.993E-02
%SOLUBILITY 2.275E-01 2.524E-01 2.504E-01 2.476E-01 2.475E-01 2.453E-01 2.566E-01 2.540E-01 2.360E-01 2.023E-01 1.777E-01 1.664E-01
ADSORBED    1.624E-01 1.802E-01 1.788E-01 1.768E-01 1.767E-01 1.751E-01 1.832E-01 1.813E-01 1.685E-01 1.445E-01 1.269E-01 1.188E-01
SOIL AIR    1.362E-03 1.540E-03 1.548E-03 1.548E-03 1.543E-03 1.519E-03 1.539E-03 1.503E-03 1.381E-03 1.180E-03 1.037E-03 9.772E-04

          SUBLAYER  2
MOISTURE    2.843E-01 3.020E-01 2.969E-01 2.921E-01 2.908E-01 2.890E-01 2.979E-01 2.963E-01 2.826E-01 2.543E-01 2.314E-01 2.194E-01
%SOLUBILITY 9.476E-01 1.007E+00 9.897E-01 9.735E-01 9.694E-01 9.632E-01 9.930E-01 9.877E-01 9.419E-01 8.475E-01 7.713E-01 7.312E-01
ADSORBED    6.766E-01 7.187E-01 7.066E-01 6.951E-01 6.921E-01 6.877E-01 7.090E-01 7.052E-01 6.725E-01 6.051E-01 5.507E-01 5.221E-01
SOIL AIR    5.674E-03 6.141E-03 6.117E-03 6.085E-03 6.044E-03 5.963E-03 5.957E-03 5.845E-03 5.515E-03 4.944E-03 4.501E-03 4.294E-03

     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE    1.154E+00 1.179E+00 1.150E+00 1.127E+00 1.116E+00 1.108E+00 1.124E+00 1.120E+00 1.091E+00 1.026E+00 9.689E-01 9.328E-01
%SOLUBILITY 3.845E+00 3.929E+00 3.835E+00 3.756E+00 3.721E+00 3.694E+00 3.748E+00 3.733E+00 3.636E+00 3.421E+00 3.230E+00 3.109E+00
ADSORBED    2.746E+00 2.805E+00 2.738E+00 2.682E+00 2.656E+00 2.637E+00 2.676E+00 2.665E+00 2.596E+00 2.442E+00 2.306E+00 2.220E+00
SOIL AIR    2.303E-02 2.397E-02 2.370E-02 2.348E-02 2.320E-02 2.287E-02 2.248E-02 2.209E-02 2.129E-02 1.995E-02 1.884E-02 1.826E-02

          SUBLAYER  2
MOISTURE    3.347E+00 3.364E+00 3.261E+00 3.177E+00 3.133E+00 3.107E+00 3.131E+00 3.119E+00 3.066E+00 2.941E+00 2.826E+00 2.746E+00
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%SOLUBILITY 1.116E+01 1.121E+01 1.087E+01 1.059E+01 1.044E+01 1.036E+01 1.044E+01 1.040E+01 1.022E+01 9.804E+00 9.421E+00 9.155E+00
ADSORBED    7.965E+00 8.006E+00 7.760E+00 7.561E+00 7.457E+00 7.395E+00 7.451E+00 7.423E+00 7.297E+00 7.000E+00 6.726E+00 6.536E+00
SOIL AIR    6.679E-02 6.840E-02 6.717E-02 6.619E-02 6.511E-02 6.412E-02 6.260E-02 6.152E-02 5.984E-02 5.719E-02 5.497E-02 5.375E-02

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE    5.734E+00 5.702E+00 5.496E+00 5.333E+00 5.246E+00 5.204E+00 5.223E+00 5.208E+00 5.153E+00 5.006E+00 4.862E+00 4.752E+00
%SOLUBILITY 1.911E+01 1.901E+01 1.832E+01 1.778E+01 1.749E+01 1.735E+01 1.741E+01 1.736E+01 1.718E+01 1.669E+01 1.621E+01 1.584E+01
ADSORBED    1.365E+01 1.357E+01 1.308E+01 1.269E+01 1.249E+01 1.239E+01 1.243E+01 1.239E+01 1.226E+01 1.191E+01 1.157E+01 1.131E+01
SOIL AIR    1.144E-01 1.159E-01 1.132E-01 1.111E-01 1.090E-01 1.074E-01 1.044E-01 1.027E-01 1.006E-01 9.733E-02 9.456E-02 9.300E-02

          SUBLAYER  2
MOISTURE    7.923E+00 7.774E+00 7.502E+00 7.288E+00 7.159E+00 7.089E+00 7.058E+00 7.023E+00 6.988E+00 6.893E+00 6.782E+00 6.668E+00
%SOLUBILITY 2.641E+01 2.591E+01 2.501E+01 2.429E+01 2.386E+01 2.363E+01 2.353E+01 2.341E+01 2.329E+01 2.298E+01 2.261E+01 2.223E+01
ADSORBED    1.886E+01 1.850E+01 1.786E+01 1.735E+01 1.704E+01 1.687E+01 1.680E+01 1.672E+01 1.663E+01 1.640E+01 1.614E+01 1.587E+01
SOIL AIR    1.581E-01 1.581E-01 1.546E-01 1.519E-01 1.488E-01 1.463E-01 1.411E-01 1.385E-01 1.364E-01 1.340E-01 1.319E-01 1.305E-01


POL DEP CM  1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02

                          YEAR -  18 ANNUAL SUMMARY REPORT
                           ==================================
       -- TOTAL INPUTS (UG) --

UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

          -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918

         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
         ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
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     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED              2.170E+07
          SUBLAYER  2
               TOTAL DIFFUSED (UP)            6.572E+07
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)            1.707E+08
          SUBLAYER  2
               TOTAL DIFFUSED (UP)            4.220E+08
     LOWER SOIL ZONE:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)            6.750E+08
          SUBLAYER  2
               TOTAL DIFFUSED (UP)            6.104E+08
               TOTAL IN GROUNDWATER RUNOFF    1.163E+09
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-- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON-ZERO VALUES ARE PRINTED --

UPPER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	6.909E-02
ADSORBED SOIL (UG/G)	1.644E-01
SOIL AIR (UG/ML)	1.390E-03

SUBLAYER 2

SOIL MOISTURE (UG/ML)	2.781E-01
ADSORBED SOIL (UG/G)	6.618E-01
SOIL AIR (UG/ML)	5.590E-03

SOIL ZONE 2:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	1.091E+00
ADSORBED SOIL (UG/G)	2.597E+00
SOIL AIR (UG/ML)	2.193E-02

SUBLAYER 2

SOIL MOISTURE (UG/ML)	3.101E+00
ADSORBED SOIL (UG/G)	7.381E+00
SOIL AIR (UG/ML)	6.231E-02

LOWER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	5.243E+00
ADSORBED SOIL (UG/G)	1.248E+01
SOIL AIR (UG/ML)	1.053E-01

SUBLAYER 2

SOIL MOISTURE (UG/ML)	7.179E+00
ADSORBED SOIL (UG/G)	1.709E+01
SOIL AIR (UG/ML)	1.442E-01

MAX. POLL. DEPTH (M) 1.067E+00

YEAR - 19 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:

SUBLAYER 1

VOLATILIZED	1.949E+06	1.827E+06	1.315E+06	1.285E+06	1.459E+06	1.627E+06	2.010E+06	1.880E+06	1.611E+06	1.199E+06	1.025E+06	9.757E+05
IN SOIL MOI	1.377E+06	1.604E+06	1.728E+06	1.717E+06	1.671E+06	1.614E+06	1.604E+06	1.613E+06	1.533E+06	1.365E+06	1.203E+06	1.117E+06
ADS ON SOIL	1.829E+07	2.028E+07	2.013E+07	1.989E+07	1.989E+07	1.970E+07	2.061E+07	2.039E+07	1.895E+07	1.625E+07	1.426E+07	1.336E+07
IN SOIL AIR	2.401E+04	2.556E+04	2.288E+04	2.270E+04	2.357E+04	2.405E+04	2.606E+04	2.493E+04	2.223E+04	1.801E+04	1.574E+04	1.502E+04

SUBLAYER 2

DIFFUSED UP	6.372E+06	5.600E+06	3.898E+06	3.777E+06	4.264E+06	4.753E+06	5.821E+06	5.412E+06	4.739E+06	3.706E+06	3.347E+06	3.285E+06
IN SOIL MOI	5.732E+06	6.396E+06	6.825E+06	6.746E+06	6.541E+06	6.335E+06	6.204E+06	6.271E+06	6.118E+06	5.716E+06	5.219E+06	4.906E+06
ADS ON SOIL	7.613E+07	8.086E+07	7.949E+07	7.818E+07	7.784E+07	7.733E+07	7.971E+07	7.928E+07	7.560E+07	6.802E+07	6.190E+07	5.868E+07
IN SOIL AIR	9.993E+04	1.019E+05	9.037E+04	8.921E+04	9.225E+04	9.438E+04	1.008E+05	9.690E+04	8.871E+04	7.541E+04	6.831E+04	6.597E+04

SOIL ZONE 2:

SUBLAYER 1

DIFFUSED UP	1.746E+07	1.470E+07	1.002E+07	9.661E+06	1.085E+07	1.205E+07	1.462E+07	1.348E+07	1.193E+07	9.635E+06	9.067E+06	9.144E+06
IN SOIL MOI	3.486E+07	3.741E+07	3.964E+07	3.901E+07	3.763E+07	3.642E+07	3.510E+07	3.553E+07	3.540E+07	3.458E+07	3.276E+07	3.127E+07
ADS ON SOIL	4.630E+08	4.730E+08	4.616E+08	4.521E+08	4.478E+08	4.445E+08	4.510E+08	4.491E+08	4.374E+08	4.115E+08	3.886E+08	3.740E+08
IN SOIL AIR	6.077E+05	5.959E+05	5.248E+05	5.159E+05	5.307E+05	5.425E+05	5.702E+05	5.489E+05	5.133E+05	4.562E+05	4.288E+05	4.205E+05

SUBLAYER 2

DIFFUSED UP	4.418E+07	3.679E+07	2.482E+07	2.376E+07	2.654E+07	2.939E+07	3.554E+07	3.269E+07	2.902E+07	2.370E+07	2.264E+07	2.311E+07
IN SOIL MOI	1.010E+08	1.066E+08	1.122E+08	1.098E+08	1.055E+08	1.020E+08	9.763E+07	9.884E+07	9.942E+07	9.903E+07	9.548E+07	9.200E+07
ADS ON SOIL	1.341E+09	1.348E+09	1.307E+09	1.273E+09	1.255E+09	1.245E+09	1.254E+09	1.250E+09	1.228E+09	1.178E+09	1.132E+09	1.100E+09
IN SOIL AIR	1.760E+06	1.698E+06	1.485E+06	1.453E+06	1.488E+06	1.519E+06	1.586E+06	1.527E+06	1.441E+06	1.306E+06	1.250E+06	1.237E+06

LOWER SOIL ZONE:

SUBLAYER 1

DIFFUSED UP	7.258E+07	5.946E+07	3.956E+07	3.756E+07	4.174E+07	4.616E+07	5.568E+07	5.113E+07	4.571E+07	3.791E+07	3.689E+07	3.814E+07
IN SOIL MOI	1.152E+08	1.204E+08	1.260E+08	1.228E+08	1.177E+08	1.138E+08	1.085E+08	1.100E+08	1.113E+08	1.123E+08	1.094E+08	1.061E+08
ADS ON SOIL	1.530E+09	1.522E+09	1.467E+09	1.423E+09	1.400E+09	1.389E+09	1.394E+09	1.390E+09	1.376E+09	1.336E+09	1.298E+09	1.269E+09
IN SOIL AIR	2.009E+06	1.917E+06	1.668E+06	1.624E+06	1.659E+06	1.695E+06	1.763E+06	1.699E+06	1.614E+06	1.481E+06	1.432E+06	1.426E+06

SUBLAYER 2

DIFFUSED UP	6.794E+07	5.349E+07	3.526E+07	3.388E+07	3.780E+07	4.161E+07	4.939E+07	4.459E+07	3.993E+07	3.400E+07	3.427E+07	3.621E+07
IN SOIL MOI	1.591E+08	1.640E+08	1.718E+08	1.678E+08	1.605E+08	1.549E+08	1.466E+08	1.482E+08	1.509E+08	1.546E+08	1.526E+08	1.488E+08
ADS ON SOIL	2.113E+09	2.074E+09	2.001E+09	1.944E+09	1.910E+09	1.891E+09	1.883E+09	1.874E+09	1.865E+09	1.839E+09	1.810E+09	1.779E+09
IN SOIL AIR	2.774E+06	2.613E+06	2.275E+06	2.219E+06	2.263E+06	2.308E+06	2.381E+06	2.290E+06	2.188E+06	2.039E+06	1.997E+06	2.001E+06
GWR. RUNOFF	0.000E+00	5.398E+06	1.612E+08	1.543E+08	9.617E+07	5.641E+07	0.000E+00	1.460E+07	5.694E+07	1.480E+08	1.549E+08	1.221E+08

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --

UPPER SOIL ZONE:

SUBLAYER 1

MOISTURE	5.717E-02	6.341E-02	6.291E-02	6.219E-02	6.216E-02	6.159E-02	6.442E-02	6.375E-02	5.922E-02	5.078E-02	4.459E-02	4.176E-02
%SOLUBILITY	1.906E-01	2.114E-01	2.097E-01	2.073E-01	2.072E-01	2.053E-01	2.147E-01	2.125E-01	1.974E-01	1.693E-01	1.486E-01	1.392E-01
ADSORBED	1.361E-01	1.509E-01	1.497E-01	1.480E-01	1.479E-01	1.466E-01	1.533E-01	1.517E-01	1.409E-01	1.209E-01	1.061E-01	9.939E-02
SOIL AIR	1.141E-03	1.289E-03	1.296E-03	1.296E-03	1.292E-03	1.271E-03	1.288E-03	1.258E-03	1.156E-03	9.873E-04	8.671E-04	8.173E-04

SUBLAYER 2

MOISTURE	2.380E-01	2.528E-01	2.485E-01	2.444E-01	2.433E-01	2.417E-01	2.492E-01	2.478E-01	2.363E-01	2.126E-01	1.935E-01	1.834E-01
%SOLUBILITY	7.932E-01	8.425E-01	8.282E-01	8.146E-01	8.111E-01	8.058E-01	8.306E-01	8.261E-01	7.877E-01	7.087E-01	6.450E-01	6.114E-01
ADSORBED	5.664E-01	6.016E-01	5.913E-01	5.816E-01	5.791E-01	5.753E-01	5.930E-01	5.898E-01	5.624E-01	5.060E-01	4.605E-01	4.365E-01
SOIL AIR	4.750E-03	5.140E-03	5.119E-03	5.092E-03	5.057E-03	4.989E-03	4.983E-03	4.889E-03	4.612E-03	4.134E-03	3.763E-03	3.590E-03

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     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE     9.648E-01 9.856E-01 9.619E-01 9.422E-01 9.332E-01 9.263E-01 9.399E-01 9.359E-01 9.115E-01 8.576E-01 8.097E-01 7.795E-01
%SOLUBILITY 3.216E+00 3.285E+00 3.206E+00 3.141E+00 3.111E+00 3.088E+00 3.133E+00 3.120E+00 3.038E+00 2.859E+00 2.699E+00 2.598E+00
ADSORBED     2.296E+00 2.346E+00 2.289E+00 2.242E+00 2.221E+00 2.205E+00 2.237E+00 2.228E+00 2.169E+00 2.041E+00 1.927E+00 1.855E+00
SOIL AIR     1.926E-02 2.004E-02 1.982E-02 1.963E-02 1.939E-02 1.912E-02 1.879E-02 1.846E-02 1.779E-02 1.667E-02 1.575E-02 1.526E-02

          SUBLAYER  2
MOISTURE     2.795E+00 2.809E+00 2.723E+00 2.653E+00 2.616E+00 2.594E+00 2.614E+00 2.604E+00 2.560E+00 2.456E+00 2.360E+00 2.293E+00
%SOLUBILITY 9.316E+00 9.363E+00 9.076E+00 8.842E+00 8.720E+00 8.648E+00 8.713E+00 8.680E+00 8.533E+00 8.186E+00 7.866E+00 7.644E+00
ADSORBED     6.651E+00 6.685E+00 6.480E+00 6.313E+00 6.226E+00 6.175E+00 6.221E+00 6.198E+00 6.092E+00 5.845E+00 5.616E+00 5.457E+00
SOIL AIR     5.578E-02 5.712E-02 5.609E-02 5.527E-02 5.437E-02 5.354E-02 5.227E-02 5.137E-02 4.996E-02 4.775E-02 4.589E-02 4.488E-02

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE     4.784E+00 4.757E+00 4.585E+00 4.449E+00 4.377E+00 4.342E+00 4.358E+00 4.345E+00 4.300E+00 4.177E+00 4.057E+00 3.965E+00
%SOLUBILITY 1.595E+01 1.586E+01 1.528E+01 1.483E+01 1.459E+01 1.447E+01 1.453E+01 1.448E+01 1.433E+01 1.392E+01 1.352E+01 1.322E+01
ADSORBED     1.139E+01 1.132E+01 1.091E+01 1.059E+01 1.042E+01 1.033E+01 1.037E+01 1.034E+01 1.023E+01 9.941E+00 9.656E+00 9.437E+00
SOIL AIR     9.548E-02 9.673E-02 9.447E-02 9.270E-02 9.097E-02 8.960E-02 8.715E-02 8.572E-02 8.392E-02 8.121E-02 7.891E-02 7.761E-02

          SUBLAYER  2
MOISTURE     6.606E+00 6.482E+00 6.256E+00 6.078E+00 5.970E+00 5.912E+00 5.887E+00 5.858E+00 5.829E+00 5.749E+00 5.658E+00 5.562E+00
%SOLUBILITY 2.202E+01 2.161E+01 2.085E+01 2.026E+01 1.990E+01 1.971E+01 1.962E+01 1.953E+01 1.943E+01 1.916E+01 1.886E+01 1.854E+01
ADSORBED     1.572E+01 1.543E+01 1.489E+01 1.447E+01 1.421E+01 1.407E+01 1.401E+01 1.394E+01 1.387E+01 1.368E+01 1.347E+01 1.324E+01
SOIL AIR     1.318E-01 1.318E-01 1.289E-01 1.266E-01 1.241E-01 1.220E-01 1.177E-01 1.156E-01 1.138E-01 1.118E-01 1.100E-01 1.089E-01

POL DEP CM   1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02


                         YEAR -  19 ANNUAL SUMMARY REPORT
                          ================================
       -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

          -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918

         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
         ------------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
-------------------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED                1.816E+07
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              5.497E+07
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)              1.426E+08
          SUBLAYER  2
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          TOTAL DIFFUSED (UP)                3.522E+08
     LOWER SOIL ZONE:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)           5.625E+08
          SUBLAYER  2
               TOTAL DIFFUSED (UP)           5.084E+08
               TOTAL IN GROUNDWATER RUNOFF   9.700E+08
                       -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                        ------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
                                    SOIL MOISTURE (UG/ML)  5.783E-02
                                    ADSORBED SOIL (UG/G)   1.376E-01
                                    SOIL AIR (UG/ML)       1.163E-03
          SUBLAYER  2
                                    SOIL MOISTURE (UG/ML)  2.326E-01
                                    ADSORBED SOIL (UG/G)   5.536E-01
                                    SOIL AIR (UG/ML)       4.676E-03
     SOIL ZONE 2:
          SUBLAYER  1
                                    SOIL MOISTURE (UG/ML)  9.123E-01
                                    ADSORBED SOIL (UG/G)   2.171E+00
                                    SOIL AIR (UG/ML)       1.833E-02
          SUBLAYER  2
                                    SOIL MOISTURE (UG/ML)  2.590E+00
                                    ADSORBED SOIL (UG/G)   6.163E+00
                                    SOIL AIR (UG/ML)       5.202E-02
     LOWER SOIL ZONE:
          SUBLAYER  1
                                    SOIL MOISTURE (UG/ML)  4.375E+00
                                    ADSORBED SOIL (UG/G)   1.041E+01
                                    SOIL AIR (UG/ML)       8.787E-02
          SUBLAYER  2
                                    SOIL MOISTURE (UG/ML)  5.987E+00
                                    ADSORBED SOIL (UG/G)   1.425E+01
                                    SOIL AIR (UG/ML)       1.202E-01

                                    MAX. POLL. DEPTH (M)   1.067E+00

     YEAR -  20    MONTHLY RESULTS (OUTPUT)
     ========    ========================
     -- HYDROLOGIC CYCLE COMPONENTS --
                        OCT       NOV       DEC       JAN       FEB       MAR       APR       MAY       JUN       JUL       AUG       SEP
MOIS. IN L1 (%)       25.087    26.356    28.612    28.753    28.001    27.296    25.933    26.356    26.967    28.001    28.095    27.860
MOIS. BELOW L1 (%)    25.087    26.356    28.612    28.753    28.001    27.296    25.933    26.356    26.967    28.001    28.095    27.860
PRECIPATION (CM)       5.722     4.855     7.244     7.487     8.085     9.910     8.368    11.054    14.182    18.155    17.320    13.818
NET INFILT. (CM)       5.693     4.815     7.205     7.450     8.031     9.764     8.235    10.786    13.888    17.675    16.756    13.602
EVAPOTRANS. (CM)       7.063     4.571     2.973     3.462     5.565     8.320     8.566    10.353    12.285    13.520    12.436    10.168
MOIS. RETEN (CM)      -0.246     0.113     0.201     0.013    -0.067    -0.063    -0.121     0.038     0.055     0.092     0.009    -0.021
SUR. RUNOFF (CM)       0.029     0.040     0.039     0.037     0.055     0.146     0.133     0.269     0.294     0.480     0.564     0.216
GRW. RUNOFF (CM)      -1.124     0.131     4.032     3.975     2.532     1.506    -0.210     0.395     1.548     4.063     4.312     3.455
YIELD (CM)            -1.095     0.171     4.071     4.012     2.587     1.652    -0.076     0.664     1.842     4.543     4.875     3.671

PAU/MPA (GZU)          1.004     1.001     1.001     0.992     1.008     1.008     1.008     0.992     0.997     0.998     0.993     1.003
PA/MPA (GZ)            1.004     1.001     1.001     0.992     1.008     1.008     1.008     0.992     0.997     0.998     0.993     1.003

                                        -- POLLUTANT MASS INPUT TO COLUMN (UG) --
                                        -----------------------------------------
          OCT       NOV       DEC       JAN       FEB       MAR       APR       MAY       JUN       JUL       AUG       SEP
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PRECIP.      0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LOAD UPPER   0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LOAD ZONE 2  0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LOAD LOWER   0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00

TOTAL INPUT  0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00

        -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
        ---------------------------------------------------------------------------------------------------------------
    UPPER SOIL ZONE:
        SUBLAYER  1
VOLATILIZED 1.630E+06 1.528E+06 1.099E+06 1.074E+06 1.220E+06 1.360E+06 1.680E+06 1.572E+06 1.347E+06 1.002E+06 8.563E+05 8.153E+05
IN SOIL MOI 1.152E+06 1.342E+06 1.445E+06 1.435E+06 1.397E+06 1.349E+06 1.341E+06 1.348E+06 1.281E+06 1.141E+06 1.005E+06 9.334E+05
ADS ON SOIL 1.529E+07 1.696E+07 1.683E+07 1.663E+07 1.663E+07 1.647E+07 1.723E+07 1.705E+07 1.583E+07 1.358E+07 1.192E+07 1.116E+07
IN SOIL AIR 2.008E+04 2.137E+04 1.913E+04 1.898E+04 1.970E+04 2.010E+04 2.178E+04 2.083E+04 1.858E+04 1.505E+04 1.315E+04 1.255E+04

        SUBLAYER  2
DIFFUSED UP 5.327E+06 4.681E+06 3.258E+06 3.156E+06 3.563E+06 3.972E+06 4.864E+06 4.522E+06 3.959E+06 3.096E+06 2.796E+06 2.745E+06
IN SOIL MOI 4.792E+06 5.346E+06 5.705E+06 5.639E+06 5.467E+06 5.294E+06 5.184E+06 5.240E+06 5.112E+06 4.776E+06 4.361E+06 4.099E+06
ADS ON SOIL 6.364E+07 6.759E+07 6.644E+07 6.534E+07 6.506E+07 6.463E+07 6.661E+07 6.625E+07 6.316E+07 5.683E+07 5.172E+07 4.902E+07
IN SOIL AIR 8.354E+04 8.516E+04 7.554E+04 7.456E+04 7.710E+04 7.887E+04 8.422E+04 8.097E+04 7.412E+04 6.301E+04 5.707E+04 5.511E+04

    SOIL ZONE 2:
        SUBLAYER  1
DIFFUSED UP 1.459E+07 1.228E+07 8.368E+06 8.070E+06 9.067E+06 1.007E+07 1.221E+07 1.126E+07 9.963E+06 8.047E+06 7.572E+06 7.636E+06
IN SOIL MOI 2.913E+07 3.126E+07 3.311E+07 3.259E+07 3.144E+07 3.042E+07 2.932E+07 2.967E+07 2.957E+07 2.889E+07 2.736E+07 2.612E+07
ADS ON SOIL 3.869E+08 3.952E+08 3.856E+08 3.777E+08 3.741E+08 3.713E+08 3.767E+08 3.752E+08 3.654E+08 3.437E+08 3.245E+08 3.124E+08
IN SOIL AIR 5.078E+05 4.979E+05 4.385E+05 4.310E+05 4.433E+05 4.532E+05 4.763E+05 4.585E+05 4.287E+05 3.811E+05 3.581E+05 3.512E+05

        SUBLAYER  2
DIFFUSED UP 3.687E+07 3.071E+07 2.071E+07 1.983E+07 2.215E+07 2.453E+07 2.966E+07 2.728E+07 2.422E+07 1.978E+07 1.889E+07 1.929E+07
IN SOIL MOI 8.430E+07 8.901E+07 9.367E+07 9.171E+07 8.807E+07 8.515E+07 8.150E+07 8.251E+07 8.299E+07 8.267E+07 7.971E+07 7.681E+07
ADS ON SOIL 1.120E+09 1.125E+09 1.091E+09 1.063E+09 1.048E+09 1.039E+09 1.047E+09 1.043E+09 1.025E+09 9.838E+08 9.453E+08 9.186E+08
IN SOIL AIR 1.470E+06 1.418E+06 1.240E+06 1.213E+06 1.242E+06 1.268E+06 1.324E+06 1.275E+06 1.203E+06 1.091E+06 1.043E+06 1.033E+06

    LOWER SOIL ZONE:
        SUBLAYER  1
DIFFUSED UP 6.053E+07 4.958E+07 3.299E+07 3.132E+07 3.481E+07 3.850E+07 4.644E+07 4.265E+07 3.812E+07 3.163E+07 3.077E+07 3.182E+07
IN SOIL MOI 9.615E+07 1.004E+08 1.051E+08 1.025E+08 9.820E+07 9.496E+07 9.055E+07 9.176E+07 9.291E+07 9.372E+07 9.134E+07 8.852E+07
ADS ON SOIL 1.277E+09 1.270E+09 1.224E+09 1.188E+09 1.169E+09 1.159E+09 1.163E+09 1.160E+09 1.148E+09 1.115E+09 1.083E+09 1.059E+09
IN SOIL AIR 1.676E+06 1.600E+06 1.392E+06 1.355E+06 1.385E+06 1.415E+06 1.471E+06 1.418E+06 1.347E+06 1.236E+06 1.195E+06 1.190E+06

        SUBLAYER  2
DIFFUSED UP 5.663E+07 4.459E+07 2.939E+07 2.824E+07 3.151E+07 3.469E+07 4.118E+07 3.718E+07 3.330E+07 2.835E+07 2.858E+07 3.020E+07
IN SOIL MOI 1.327E+08 1.368E+08 1.434E+08 1.400E+08 1.339E+08 1.293E+08 1.223E+08 1.237E+08 1.259E+08 1.290E+08 1.273E+08 1.241E+08
ADS ON SOIL 1.763E+09 1.730E+09 1.670E+09 1.622E+09 1.593E+09 1.578E+09 1.571E+09 1.564E+09 1.556E+09 1.535E+09 1.510E+09 1.485E+09
IN SOIL AIR 2.314E+06 2.180E+06 1.898E+06 1.851E+06 1.888E+06 1.926E+06 1.987E+06 1.911E+06 1.826E+06 1.701E+06 1.667E+06 1.669E+06
GWR. RUNOFF 0.000E+00 4.503E+06 1.345E+08 1.287E+08 8.024E+07 4.707E+07 0.000E+00 1.218E+07 4.751E+07 1.235E+08 1.292E+08 1.019E+08

    -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --
    ---------------------------------------------------------------------------------------------------------------------
    UPPER SOIL ZONE:
        SUBLAYER  1
MOISTURE     4.781E-02 5.302E-02 5.260E-02 5.199E-02 5.197E-02 5.149E-02 5.385E-02 5.328E-02 4.949E-02 4.244E-02 3.726E-02 3.489E-02
%SOLUBILITY 1.594E-01 1.767E-01 1.753E-01 1.733E-01 1.732E-01 1.716E-01 1.795E-01 1.776E-01 1.650E-01 1.415E-01 1.242E-01 1.163E-01
ADSORBED     1.138E-01 1.262E-01 1.252E-01 1.237E-01 1.237E-01 1.225E-01 1.282E-01 1.268E-01 1.178E-01 1.010E-01 8.867E-02 8.305E 02
SOIL AIR     9.542E-04 1.078E-03 1.084E-03 1.083E-03 1.080E-03 1.063E-03 1.077E-03 1.051E-03 9.659E-04 8.251E-04 7.246E-04 6.830E-04

        SUBLAYER  2
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MOISTURE     1.989E-01 2.113E-01 2.077E-01 2.043E-01 2.034E-01 2.020E-01 2.082E-01 2.071E-01 1.974E-01 1.776E-01 1.617E-01 1.532E-01
%SOLUBILITY 6.631E-01 7.043E-01 6.923E-01 6.809E-01 6.779E-01 6.734E-01 6.941E-01 6.903E-01 6.581E-01 5.922E-01 5.389E-01 5.108E-01
ADSORBED     4.735E-01 5.029E-01 4.943E-01 4.861E-01 4.840E-01 4.808E-01 4.956E-01 4.929E-01 4.699E-01 4.228E-01 3.847E-01 3.647E-01
SOIL AIR     3.971E-03 4.297E-03 4.279E-03 4.256E-03 4.226E-03 4.169E-03 4.164E-03 4.085E-03 3.853E-03 3.454E-03 3.144E-03 2.999E-03

     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE     8.062E-01 8.235E-01 8.036E-01 7.871E-01 7.796E-01 7.738E-01 7.851E-01 7.818E-01 7.614E-01 7.163E-01 6.763E-01 6.510E-01
%SOLUBILITY 2.687E+00 2.745E+00 2.679E+00 2.624E+00 2.599E+00 2.579E+00 2.617E+00 2.606E+00 2.538E+00 2.388E+00 2.254E+00 2.170E+00
ADSORBED     1.919E+00 1.960E+00 1.913E+00 1.873E+00 1.855E+00 1.842E+00 1.869E+00 1.861E+00 1.812E+00 1.705E+00 1.610E+00 1.549E+00
SOIL AIR     1.609E-02 1.675E-02 1.656E-02 1.640E-02 1.620E-02 1.597E-02 1.570E-02 1.542E-02 1.486E-02 1.393E-02 1.315E-02 1.274E-02

          SUBLAYER  2
MOISTURE     2.333E+00 2.345E+00 2.273E+00 2.215E+00 2.184E+00 2.166E+00 2.182E+00 2.174E+00 2.137E+00 2.050E+00 1.970E+00 1.914E+00
%SOLUBILITY 7.778E+00 7.817E+00 7.577E+00 7.382E+00 7.280E+00 7.220E+00 7.274E+00 7.246E+00 7.123E+00 6.834E+00 6.566E+00 6.381E+00
ADSORBED     5.553E+00 5.581E+00 5.410E+00 5.271E+00 5.198E+00 5.155E+00 5.194E+00 5.174E+00 5.086E+00 4.879E+00 4.688E+00 4.556E+00
SOIL AIR     4.657E-02 4.769E-02 4.683E-02 4.615E-02 4.539E-02 4.470E-02 4.364E-02 4.288E-02 4.171E-02 3.986E-02 3.831E-02 3.747E-02

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE     3.992E+00 3.969E+00 3.826E+00 3.713E+00 3.653E+00 3.624E+00 3.637E+00 3.626E+00 3.588E+00 3.486E+00 3.386E+00 3.309E+00
%SOLUBILITY 1.331E+01 1.323E+01 1.275E+01 1.238E+01 1.218E+01 1.208E+01 1.212E+01 1.209E+01 1.196E+01 1.162E+01 1.129E+01 1.103E+01
ADSORBED     9.501E+00 9.447E+00 9.107E+00 8.837E+00 8.693E+00 8.624E+00 8.656E+00 8.631E+00 8.541E+00 8.297E+00 8.059E+00 7.876E+00
SOIL AIR     7.968E-02 8.072E-02 7.883E-02 7.736E-02 7.591E-02 7.478E-02 7.273E-02 7.153E-02 7.003E-02 6.778E-02 6.585E-02 6.477E-02

          SUBLAYER  2
MOISTURE     5.511E+00 5.408E+00 5.219E+00 5.071E+00 4.981E+00 4.932E+00 4.912E+00 4.887E+00 4.863E+00 4.797E+00 4.721E+00 4.641E+00
%SOLUBILITY 1.837E+01 1.803E+01 1.740E+01 1.690E+01 1.660E+01 1.644E+01 1.637E+01 1.629E+01 1.621E+01 1.599E+01 1.574E+01 1.547E+01
ADSORBED     1.312E+01 1.287E+01 1.242E+01 1.207E+01 1.185E+01 1.174E+01 1.169E+01 1.163E+01 1.157E+01 1.142E+01 1.124E+01 1.105E+01
SOIL AIR     1.100E-01 1.100E-01 1.075E-01 1.057E-01 1.035E-01 1.018E-01 9.822E-02 9.641E-02 9.491E-02 9.327E-02 9.181E-02 9.084E-02

POL DEP CM   1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02

                          YEAR -  20 ANNUAL SUMMARY REPORT
                          ================================
       -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

          -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918

         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
         ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
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     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED                1.518E+07
           SUBLAYER  2
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          TOTAL DIFFUSED (UP)                4.594E+07
SOIL ZONE 2:
     SUBLAYER  1
          TOTAL DIFFUSED (UP)                1.191E+08
     SUBLAYER  2
          TOTAL DIFFUSED (UP)                2.939E+08
LOWER SOIL ZONE:
     SUBLAYER  1
          TOTAL DIFFUSED (UP)                4.692E+08
     SUBLAYER  2
          TOTAL DIFFUSED (UP)                4.238E+08
          TOTAL IN GROUNDWATER RUNOFF        8.093E+08

                    -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                    ------------------------------------------------------------------------------

UPPER SOIL ZONE:
     SUBLAYER  1
                              SOIL MOISTURE (UG/ML)  4.834E-02
                              ADSORBED SOIL (UG/G)   1.150E-01
                              SOIL AIR (UG/ML)       9.724E-04
     SUBLAYER  2
                              SOIL MOISTURE (UG/ML)  1.944E-01
                              ADSORBED SOIL (UG/G)   4.627E-01
                              SOIL AIR (UG/ML)       3.908E-03
SOIL ZONE 2:
     SUBLAYER  1
                              SOIL MOISTURE (UG/ML)  7.621E-01
                              ADSORBED SOIL (UG/G)   1.814E+00
                              SOIL AIR (UG/ML)       1.531E-02
     SUBLAYER  2
                              SOIL MOISTURE (UG/ML)  2.162E+00
                              ADSORBED SOIL (UG/G)   5.146E+00
                              SOIL AIR (UG/ML)       4.343E-02
LOWER SOIL ZONE:
     SUBLAYER  1
                              SOIL MOISTURE (UG/ML)  3.651E+00
                              ADSORBED SOIL (UG/G)   8.689E+00
                              SOIL AIR (UG/ML)       7.333E-02
     SUBLAYER  2
                              SOIL MOISTURE (UG/ML)  4.995E+00
                              ADSORBED SOIL (UG/G)   1.189E+01
                              SOIL AIR (UG/ML)       1.003E-01

                              MAX. POLL. DEPTH (M)   1.067E+00

     YEAR -  21    MONTHLY RESULTS (OUTPUT)
     ========    ========================
     -- HYDROLOGIC CYCLE COMPONENTS --
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	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671

PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:												
SUBLAYER 1												
VOLATILIZED	1.362E+06	1.276E+06	9.183E+05	8.976E+05	1.019E+06	1.136E+06	1.404E+06	1.313E+06	1.125E+06	8.369E+05	7.152E+05	6.809E+05
IN SOIL MOI	9.621E+05	1.121E+06	1.207E+06	1.199E+06	1.167E+06	1.127E+06	1.120E+06	1.126E+06	1.070E+06	9.528E+05	8.393E+05	7.795E+05
ADS ON SOIL	1.278E+07	1.417E+07	1.406E+07	1.389E+07	1.389E+07	1.376E+07	1.439E+07	1.424E+07	1.322E+07	1.134E+07	9.955E+06	9.323E+06
IN SOIL AIR	1.677E+04	1.785E+04	1.598E+04	1.586E+04	1.646E+04	1.679E+04	1.819E+04	1.740E+04	1.552E+04	1.257E+04	1.098E+04	1.048E+04
SUBLAYER 2												
DIFFUSED UP	4.450E+06	3.910E+06	2.721E+06	2.636E+06	2.976E+06	3.317E+06	4.062E+06	3.776E+06	3.306E+06	2.586E+06	2.335E+06	2.292E+06
IN SOIL MOI	4.003E+06	4.466E+06	4.765E+06	4.710E+06	4.566E+06	4.422E+06	4.330E+06	4.376E+06	4.269E+06	3.988E+06	3.641E+06	3.423E+06
ADS ON SOIL	5.317E+07	5.646E+07	5.550E+07	5.458E+07	5.434E+07	5.398E+07	5.563E+07	5.533E+07	5.275E+07	4.746E+07	4.319E+07	4.094E+07
IN SOIL AIR	6.979E+04	7.114E+04	6.310E+04	6.228E+04	6.439E+04	6.587E+04	7.034E+04	6.762E+04	6.190E+04	5.262E+04	4.766E+04	4.602E+04
SOIL ZONE 2:												
SUBLAYER 1												
DIFFUSED UP	1.218E+07	1.026E+07	6.988E+06	6.739E+06	7.571E+06	8.407E+06	1.020E+07	9.403E+06	8.318E+06	6.719E+06	6.322E+06	6.376E+06
IN SOIL MOI	2.432E+07	2.610E+07	2.765E+07	2.722E+07	2.625E+07	2.540E+07	2.448E+07	2.478E+07	2.469E+07	2.412E+07	2.285E+07	2.181E+07
ADS ON SOIL	3.231E+08	3.300E+08	3.220E+08	3.154E+08	3.124E+08	3.101E+08	3.146E+08	3.132E+08	3.051E+08	2.870E+08	2.710E+08	2.608E+08
IN SOIL AIR	4.241E+05	4.158E+05	3.662E+05	3.599E+05	3.702E+05	3.784E+05	3.977E+05	3.828E+05	3.580E+05	3.182E+05	2.990E+05	2.933E+05
SUBLAYER 2												
DIFFUSED UP	3.077E+07	2.563E+07	1.729E+07	1.655E+07	1.849E+07	2.047E+07	2.475E+07	2.277E+07	2.021E+07	1.651E+07	1.577E+07	1.610E+07
IN SOIL MOI	7.038E+07	7.431E+07	7.819E+07	7.656E+07	7.352E+07	7.108E+07	6.804E+07	6.888E+07	6.928E+07	6.901E+07	6.653E+07	6.411E+07
ADS ON SOIL	9.347E+08	9.394E+08	9.106E+08	8.872E+08	8.749E+08	8.676E+08	8.742E+08	8.708E+08	8.560E+08	8.212E+08	7.891E+08	7.668E+08
IN SOIL AIR	1.227E+06	1.184E+06	1.035E+06	1.012E+06	1.037E+06	1.059E+06	1.105E+06	1.064E+06	1.004E+06	9.104E+05	8.708E+05	8.621E+05
LOWER SOIL ZONE:												
SUBLAYER 1												
DIFFUSED UP	5.049E+07	4.137E+07	2.752E+07	2.613E+07	2.904E+07	3.212E+07	3.875E+07	3.559E+07	3.181E+07	2.639E+07	2.568E+07	2.655E+07
IN SOIL MOI	8.025E+07	8.383E+07	8.773E+07	8.554E+07	8.196E+07	7.926E+07	7.558E+07	7.659E+07	7.754E+07	7.822E+07	7.623E+07	7.388E+07
ADS ON SOIL	1.066E+09	1.060E+09	1.022E+09	9.913E+08	9.753E+08	9.675E+08	9.710E+08	9.682E+08	9.581E+08	9.308E+08	9.041E+08	8.836E+08
IN SOIL AIR	1.399E+06	1.335E+06	1.162E+06	1.131E+06	1.156E+06	1.181E+06	1.228E+06	1.183E+06	1.124E+06	1.032E+06	9.977E+05	9.935E+05
SUBLAYER 2												
DIFFUSED UP	4.723E+07	3.719E+07	2.452E+07	2.356E+07	2.629E+07	2.894E+07	3.436E+07	3.102E+07	2.778E+07	2.366E+07	2.384E+07	2.519E+07
IN SOIL MOI	1.108E+08	1.142E+08	1.196E+08	1.168E+08	1.117E+08	1.079E+08	1.021E+08	1.032E+08	1.051E+08	1.076E+08	1.063E+08	1.036E+08
ADS ON SOIL	1.471E+09	1.444E+09	1.393E+09	1.354E+09	1.330E+09	1.317E+09	1.311E+09	1.305E+09	1.298E+09	1.281E+09	1.260E+09	1.239E+09
IN SOIL AIR	1.931E+06	1.819E+06	1.584E+06	1.545E+06	1.576E+06	1.607E+06	1.658E+06	1.595E+06	1.523E+06	1.420E+06	1.391E+06	1.393E+06
GWR. RUNOFF	0.000E+00	3.758E+06	1.122E+08	1.074E+08	6.696E+07	3.928E+07	0.000E+00	1.016E+07	3.965E+07	1.030E+08	1.079E+08	8.504E+07

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --

UPPER SOIL ZONE:
SUBLAYER 1

MOISTURE	3.995E-02	4.429E-02	4.394E-02	4.343E-02	4.341E-02	4.301E-02	4.498E-02	4.450E-02	4.134E-02	3.544E-02	3.112E-02	2.914E-02
%SOLUBILITY	1.332E-01	1.476E-01	1.465E-01	1.448E-01	1.447E-01	1.434E-01	1.499E-01	1.483E-01	1.378E-01	1.181E-01	1.037E-01	9.714E-02
ADSORBED	9.507E-02	1.054E-01	1.046E-01	1.034E-01	1.033E-01	1.024E-01	1.070E-01	1.059E-01	9.838E-02	8.435E-02	7.406E-02	6.936E-02
SOIL AIR	7.973E-04	9.008E-04	9.053E-04	9.050E-04	9.022E-04	8.876E-04	8.994E-04	8.779E-04	8.067E-04	6.891E-04	6.052E-04	5.704E-04

SUBLAYER 2

MOISTURE	1.662E-01	1.765E-01	1.735E-01	1.706E-01	1.699E-01	1.687E-01	1.739E-01	1.729E-01	1.649E-01	1.484E-01	1.350E-01	1.280E-01
%SOLUBILITY	5.540E-01	5.883E-01	5.783E-01	5.687E-01	5.662E-01	5.624E-01	5.797E-01	5.765E-01	5.496E-01	4.945E-01	4.500E-01	4.265E-01
ADSORBED	3.955E-01	4.200E-01	4.129E-01	4.061E-01	4.043E-01	4.016E-01	4.139E-01	4.116E-01	3.924E-01	3.531E-01	3.213E-01	3.045E-01
SOIL AIR	3.317E-03	3.589E-03	3.574E-03	3.555E-03	3.530E-03	3.482E-03	3.477E-03	3.412E-03	3.218E-03	2.884E-03	2.626E-03	2.504E-03

SOIL ZONE 2:

SUBLAYER 1

MOISTURE	6.733E-01	6.877E-01	6.711E-01	6.573E-01	6.510E-01	6.462E-01	6.556E-01	6.528E-01	6.357E-01	5.981E-01	5.647E-01	5.435E-01
%SOLUBILITY	2.244E+00	2.292E+00	2.237E+00	2.191E+00	2.170E+00	2.154E+00	2.185E+00	2.176E+00	2.119E+00	1.994E+00	1.882E+00	1.812E+00
ADSORBED	1.602E+00	1.637E+00	1.597E+00	1.564E+00	1.549E+00	1.538E+00	1.560E+00	1.554E+00	1.513E+00	1.423E+00	1.344E+00	1.294E+00
SOIL AIR	1.344E-02	1.398E-02	1.383E-02	1.370E-02	1.353E-02	1.333E-02	1.311E-02	1.288E-02	1.241E-02	1.163E-02	1.098E-02	1.064E-02

SUBLAYER 2

MOISTURE	1.948E+00	1.958E+00	1.898E+00	1.849E+00	1.823E+00	1.808E+00	1.822E+00	1.815E+00	1.784E+00	1.711E+00	1.644E+00	1.598E+00
%SOLUBILITY	6.493E+00	6.526E+00	6.325E+00	6.163E+00	6.077E+00	6.027E+00	6.072E+00	6.049E+00	5.946E+00	5.704E+00	5.481E+00	5.327E+00
ADSORBED	4.636E+00	4.659E+00	4.516E+00	4.400E+00	4.339E+00	4.303E+00	4.336E+00	4.319E+00	4.246E+00	4.073E+00	3.914E+00	3.803E+00
SOIL AIR	3.888E-02	3.981E-02	3.909E-02	3.852E-02	3.789E-02	3.731E-02	3.643E-02	3.580E-02	3.481E-02	3.327E-02	3.198E-02	3.128E-02

LOWER SOIL ZONE:

SUBLAYER 1

MOISTURE	3.332E+00	3.313E+00	3.194E+00	3.099E+00	3.049E+00	3.024E+00	3.035E+00	3.027E+00	2.995E+00	2.909E+00	2.826E+00	2.762E+00
%SOLUBILITY	1.111E+01	1.104E+01	1.065E+01	1.033E+01	1.016E+01	1.008E+01	1.012E+01	1.009E+01	9.983E+00	9.698E+00	9.420E+00	9.207E+00
ADSORBED	7.929E+00	7.884E+00	7.601E+00	7.375E+00	7.255E+00	7.198E+00	7.224E+00	7.203E+00	7.128E+00	6.924E+00	6.726E+00	6.574E+00
SOIL AIR	6.650E-02	6.737E-02	6.579E-02	6.457E-02	6.336E-02	6.241E-02	6.070E-02	5.970E-02	5.845E-02	5.657E-02	5.496E-02	5.406E-02

SUBLAYER 2

MOISTURE	4.598E+00	4.512E+00	4.355E+00	4.231E+00	4.157E+00	4.116E+00	4.099E+00	4.079E+00	4.058E+00	4.003E+00	3.940E+00	3.873E+00
%SOLUBILITY	1.533E+01	1.504E+01	1.452E+01	1.410E+01	1.386E+01	1.372E+01	1.366E+01	1.360E+01	1.353E+01	1.334E+01	1.313E+01	1.291E+01
ADSORBED	1.094E+01	1.074E+01	1.036E+01	1.007E+01	9.892E+00	9.796E+00	9.755E+00	9.707E+00	9.659E+00	9.528E+00	9.376E+00	9.218E+00
SOIL AIR	9.178E-02	9.176E-02	8.972E-02	8.816E-02	8.638E-02	8.494E-02	8.196E-02	8.046E-02	7.920E-02	7.784E-02	7.662E-02	7.581E-02

POL DEP CM	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02

YEAR - 21 ANNUAL SUMMARY REPORT

-- TOTAL INPUTS (UG) --

UPPER SOIL ZONE	0.000E+00
SOIL ZONE 2	0.000E+00
LOWER SOIL ZONE	0.000E+00

-- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)	27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)	27.276
TOTAL PRECIPITATION (CM)	126.201
TOTAL INFILTRATION (CM)	123.899
TOTAL EVAPOTRANSPIRATION (CM)	99.280
TOTAL SURFACE RUNOFF (CM)	2.302
TOTAL GRW RUNOFF (CM)	24.616
TOTAL MOISTURE RETENTION (CM)	0.003
TOTAL YIELD (CM)	26.918

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)

UPPER SOIL ZONE:
SUBLAYER 1
TOTAL VOLATILIZED 1.268E+07
SUBLAYER 2
TOTAL DIFFUSED (UP) 3.837E+07
SOIL ZONE 2:
SUBLAYER 1
TOTAL DIFFUSED (UP) 9.948E+07
SUBLAYER 2
TOTAL DIFFUSED (UP) 2.453E+08
LOWER SOIL ZONE:
SUBLAYER 1
TOTAL DIFFUSED (UP) 3.914E+08
SUBLAYER 2
TOTAL DIFFUSED (UP) 3.536E+08
TOTAL IN GROUNDWATER RUNOFF 6.754E+08

-- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON-ZERO VALUES ARE PRINTED --

UPPER SOIL ZONE:
SUBLAYER 1
SOIL MOISTURE (UG/ML) 4.038E-02
ADSORBED SOIL (UG/G) 9.610E-02
SOIL AIR (UG/ML) 8.122E-04
SUBLAYER 2
SOIL MOISTURE (UG/ML) 1.624E-01
ADSORBED SOIL (UG/G) 3.864E-01
SOIL AIR (UG/ML) 3.264E-03
SOIL ZONE 2:
SUBLAYER 1
SOIL MOISTURE (UG/ML) 6.364E-01
ADSORBED SOIL (UG/G) 1.515E+00
SOIL AIR (UG/ML) 1.279E-02
SUBLAYER 2
SOIL MOISTURE (UG/ML) 1.805E+00
ADSORBED SOIL (UG/G) 4.295E+00
SOIL AIR (UG/ML) 3.626E-02
LOWER SOIL ZONE:
SUBLAYER 1
SOIL MOISTURE (UG/ML) 3.047E+00
ADSORBED SOIL (UG/G) 7.252E+00
SOIL AIR (UG/ML) 6.120E-02
SUBLAYER 2
SOIL MOISTURE (UG/ML) 4.168E+00
ADSORBED SOIL (UG/G) 9.921E+00
SOIL AIR (UG/ML) 8.372E-02

MAX. POLL. DEPTH (M) 1.067E+00

YEAR - 22 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602

EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
UPPER SOIL ZONE:												
SUBLAYER 1												
VOLATILIZED	1.138E+06	1.066E+06	7.668E+05	7.495E+05	8.509E+05	9.490E+05	1.172E+06	1.096E+06	9.391E+05	6.988E+05	5.971E+05	5.685E+05
IN SOIL MOI	8.035E+05	9.360E+05	1.008E+06	1.001E+06	9.746E+05	9.412E+05	9.351E+05	9.403E+05	8.936E+05	7.956E+05	7.008E+05	6.508E+05
ADS ON SOIL	1.067E+07	1.183E+07	1.174E+07	1.160E+07	1.160E+07	1.149E+07	1.201E+07	1.189E+07	1.104E+07	9.467E+06	8.311E+06	7.784E+06
IN SOIL AIR	1.401E+04	1.491E+04	1.335E+04	1.324E+04	1.374E+04	1.402E+04	1.519E+04	1.453E+04	1.296E+04	1.050E+04	9.172E+03	8.752E+03
SUBLAYER 2												
DIFFUSED UP	3.716E+06	3.265E+06	2.272E+06	2.201E+06	2.485E+06	2.770E+06	3.391E+06	3.153E+06	2.760E+06	2.159E+06	1.949E+06	1.913E+06
IN SOIL MOI	3.343E+06	3.729E+06	3.979E+06	3.933E+06	3.813E+06	3.692E+06	3.615E+06	3.654E+06	3.564E+06	3.330E+06	3.040E+06	2.858E+06
ADS ON SOIL	4.440E+07	4.715E+07	4.634E+07	4.557E+07	4.537E+07	4.507E+07	4.645E+07	4.619E+07	4.404E+07	3.962E+07	3.606E+07	3.418E+07
IN SOIL AIR	5.828E+04	5.940E+04	5.269E+04	5.200E+04	5.377E+04	5.500E+04	5.873E+04	5.646E+04	5.168E+04	4.393E+04	3.979E+04	3.842E+04
SOIL ZONE 2:												
SUBLAYER 1												
DIFFUSED UP	1.017E+07	8.563E+06	5.834E+06	5.626E+06	6.320E+06	7.019E+06	8.514E+06	7.850E+06	6.944E+06	5.609E+06	5.278E+06	5.322E+06
IN SOIL MOI	2.031E+07	2.179E+07	2.309E+07	2.272E+07	2.192E+07	2.121E+07	2.044E+07	2.068E+07	2.061E+07	2.013E+07	1.907E+07	1.821E+07
ADS ON SOIL	2.697E+08	2.755E+08	2.689E+08	2.633E+08	2.608E+08	2.589E+08	2.626E+08	2.615E+08	2.547E+08	2.396E+08	2.262E+08	2.177E+08
IN SOIL AIR	3.541E+05	3.471E+05	3.057E+05	3.005E+05	3.091E+05	3.159E+05	3.321E+05	3.196E+05	2.988E+05	2.656E+05	2.496E+05	2.448E+05
SUBLAYER 2												
DIFFUSED UP	2.568E+07	2.139E+07	1.443E+07	1.381E+07	1.543E+07	1.709E+07	2.066E+07	1.900E+07	1.687E+07	1.378E+07	1.316E+07	1.344E+07
IN SOIL MOI	5.875E+07	6.203E+07	6.527E+07	6.390E+07	6.137E+07	5.933E+07	5.679E+07	5.749E+07	5.783E+07	5.760E+07	5.554E+07	5.352E+07
ADS ON SOIL	7.803E+08	7.842E+08	7.601E+08	7.405E+08	7.303E+08	7.242E+08	7.297E+08	7.269E+08	7.145E+08	6.855E+08	6.587E+08	6.401E+08
IN SOIL AIR	1.024E+06	9.880E+05	8.642E+05	8.450E+05	8.654E+05	8.838E+05	9.226E+05	8.884E+05	8.384E+05	7.599E+05	7.268E+05	7.196E+05
LOWER SOIL ZONE:												
SUBLAYER 1												
DIFFUSED UP	4.214E+07	3.452E+07	2.297E+07	2.181E+07	2.423E+07	2.681E+07	3.234E+07	2.970E+07	2.655E+07	2.202E+07	2.143E+07	2.216E+07
IN SOIL MOI	6.698E+07	6.996E+07	7.322E+07	7.140E+07	6.840E+07	6.615E+07	6.308E+07	6.392E+07	6.472E+07	6.528E+07	6.363E+07	6.166E+07
ADS ON SOIL	8.896E+08	8.845E+08	8.527E+08	8.274E+08	8.140E+08	8.075E+08	8.105E+08	8.081E+08	7.997E+08	7.769E+08	7.546E+08	7.375E+08
IN SOIL AIR	1.168E+06	1.114E+06	9.695E+05	9.441E+05	9.646E+05	9.854E+05	1.025E+06	9.877E+05	9.383E+05	8.613E+05	8.327E+05	8.292E+05
SUBLAYER 2												
DIFFUSED UP	3.941E+07	3.103E+07	2.046E+07	1.966E+07	2.194E+07	2.415E+07	2.867E+07	2.588E+07	2.318E+07	1.974E+07	1.990E+07	2.102E+07
IN SOIL MOI	9.243E+07	9.529E+07	9.984E+07	9.748E+07	9.326E+07	9.002E+07	8.517E+07	8.614E+07	8.770E+07	8.982E+07	8.869E+07	8.647E+07
ADS ON SOIL	1.228E+09	1.205E+09	1.163E+09	1.130E+09	1.110E+09	1.099E+09	1.094E+09	1.089E+09	1.084E+09	1.069E+09	1.052E+09	1.034E+09
IN SOIL AIR	1.612E+06	1.518E+06	1.322E+06	1.289E+06	1.315E+06	1.341E+06	1.384E+06	1.331E+06	1.271E+06	1.185E+06	1.161E+06	1.163E+06

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GWR. RUNOFF 0.000E+00 3.136E+06 9.364E+07 8.966E+07 5.588E+07 3.278E+07 0.000E+00 8.482E+06 3.309E+07 8.598E+07 9.001E+07 7.097E+07

     -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --
     ---------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
MOISTURE     3.336E-02 3.699E-02 3.670E-02 3.627E-02 3.625E-02 3.591E-02 3.756E-02 3.716E-02 3.451E-02 2.959E-02 2.598E-02 2.433E-02
%SOLUBILITY 1.112E-01 1.233E-01 1.223E-01 1.209E-01 1.208E-01 1.197E-01 1.252E-01 1.239E-01 1.150E-01 9.864E-02 8.660E-02 8.110E-02
ADSORBED     7.940E-02 8.804E-02 8.734E-02 8.632E-02 8.628E-02 8.548E-02 8.938E-02 8.844E-02 8.215E-02 7.043E-02 6.183E-02 5.791E-02
SOIL AIR     6.658E-04 7.522E-04 7.560E-04 7.557E-04 7.534E-04 7.411E-04 7.510E-04 7.330E-04 6.736E-04 5.754E-04 5.053E-04 4.762E-04

          SUBLAYER  2
MOISTURE     1.388E-01 1.474E-01 1.449E-01 1.425E-01 1.418E-01 1.409E-01 1.452E-01 1.444E-01 1.377E-01 1.239E-01 1.127E-01 1.068E-01
%SOLUBILITY 4.626E-01 4.912E-01 4.828E-01 4.749E-01 4.727E-01 4.696E-01 4.840E-01 4.813E-01 4.589E-01 4.129E-01 3.757E-01 3.561E-01
ADSORBED     3.303E-01 3.507E-01 3.447E-01 3.391E-01 3.375E-01 3.353E-01 3.456E-01 3.437E-01 3.276E-01 2.948E-01 2.682E-01 2.543E-01
SOIL AIR     2.770E-03 2.997E-03 2.984E-03 2.968E-03 2.947E-03 2.907E-03 2.903E-03 2.848E-03 2.687E-03 2.408E-03 2.192E-03 2.091E-03

     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE     5.621E-01 5.742E-01 5.603E-01 5.488E-01 5.435E-01 5.395E-01 5.473E-01 5.450E-01 5.307E-01 4.993E-01 4.714E-01 4.538E-01
%SOLUBILITY 1.874E+00 1.914E+00 1.868E+00 1.829E+00 1.812E+00 1.798E+00 1.824E+00 1.817E+00 1.769E+00 1.664E+00 1.571E+00 1.513E+00
ADSORBED     1.338E+00 1.367E+00 1.334E+00 1.306E+00 1.293E+00 1.284E+00 1.303E+00 1.297E+00 1.263E+00 1.188E+00 1.122E+00 1.080E+00
SOIL AIR     1.122E-02 1.168E-02 1.154E-02 1.143E-02 1.129E-02 1.113E-02 1.094E-02 1.075E-02 1.036E-02 9.708E-03 9.168E-03 8.881E-03

          SUBLAYER  2
MOISTURE     1.626E+00 1.634E+00 1.584E+00 1.543E+00 1.522E+00 1.509E+00 1.521E+00 1.515E+00 1.489E+00 1.428E+00 1.373E+00 1.334E+00
%SOLUBILITY 5.420E+00 5.447E+00 5.280E+00 5.144E+00 5.073E+00 5.031E+00 5.069E+00 5.049E+00 4.963E+00 4.761E+00 4.575E+00 4.446E+00
ADSORBED     3.870E+00 3.889E+00 3.770E+00 3.673E+00 3.622E+00 3.592E+00 3.619E+00 3.605E+00 3.544E+00 3.400E+00 3.267E+00 3.175E+00
SOIL AIR     3.245E-02 3.323E-02 3.263E-02 3.215E-02 3.163E-02 3.115E-02 3.041E-02 2.988E-02 2.906E-02 2.777E-02 2.670E-02 2.611E-02

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE     2.781E+00 2.765E+00 2.665E+00 2.586E+00 2.544E+00 2.524E+00 2.533E+00 2.526E+00 2.500E+00 2.428E+00 2.359E+00 2.305E+00
%SOLUBILITY 9.269E+00 9.216E+00 8.885E+00 8.621E+00 8.481E+00 8.414E+00 8.445E+00 8.420E+00 8.332E+00 8.094E+00 7.863E+00 7.684E+00
ADSORBED     6.618E+00 6.580E+00 6.344E+00 6.155E+00 6.056E+00 6.007E+00 6.029E+00 6.012E+00 5.949E+00 5.779E+00 5.614E+00 5.487E+00
SOIL AIR     5.550E-02 5.623E-02 5.491E-02 5.389E-02 5.288E-02 5.209E-02 5.066E-02 4.983E-02 4.878E-02 4.721E-02 4.588E-02 4.512E-02

          SUBLAYER  2
MOISTURE     3.838E+00 3.766E+00 3.635E+00 3.531E+00 3.469E+00 3.435E+00 3.421E+00 3.404E+00 3.387E+00 3.341E+00 3.288E+00 3.233E+00
%SOLUBILITY 1.279E+01 1.255E+01 1.212E+01 1.177E+01 1.156E+01 1.145E+01 1.140E+01 1.135E+01 1.129E+01 1.114E+01 1.096E+01 1.078E+01
ADSORBED     9.134E+00 8.963E+00 8.650E+00 8.405E+00 8.256E+00 8.176E+00 8.141E+00 8.102E+00 8.061E+00 7.952E+00 7.826E+00 7.694E+00
SOIL AIR     7.659E-02 7.658E-02 7.488E-02 7.358E-02 7.209E-02 7.089E-02 6.840E-02 6.715E-02 6.610E-02 6.496E-02 6.395E-02 6.327E-02

POL DEP CM   1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02

                          YEAR -  22 ANNUAL SUMMARY REPORT
                           ================================
       -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

          -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
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TOTAL GRW RUNOFF (CM)                          24.616
TOTAL MOISTURE RETENTION (CM)                   0.003
TOTAL YIELD (CM)                               26.918

        -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
        ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
-------------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED                 1.059E+07
          SUBLAYER  2
               TOTAL DIFFUSED (UP)               3.203E+07
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)               8.305E+07
          SUBLAYER  2
               TOTAL DIFFUSED (UP)               2.047E+08
     LOWER SOIL ZONE:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)               3.267E+08
          SUBLAYER  2
               TOTAL DIFFUSED (UP)               2.950E+08
               TOTAL IN GROUNDWATER RUNOFF       5.636E+08

                    -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                    ---------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
                                   SOIL MOISTURE (UG/ML)  3.372E-02
                                   ADSORBED SOIL (UG/G)   8.025E-02
                                   SOIL AIR (UG/ML)       6.782E-04
          SUBLAYER  2
                                   SOIL MOISTURE (UG/ML)  1.356E-01
                                   ADSORBED SOIL (UG/G)   3.227E-01
                                   SOIL AIR (UG/ML)       2.725E-03
     SOIL ZONE 2:
          SUBLAYER  1
                                   SOIL MOISTURE (UG/ML)  5.313E-01
                                   ADSORBED SOIL (UG/G)   1.265E+00
                                   SOIL AIR (UG/ML)       1.068E-02
          SUBLAYER  2
                                   SOIL MOISTURE (UG/ML)  1.506E+00
                                   ADSORBED SOIL (UG/G)   3.585E+00
                                   SOIL AIR (UG/ML)       3.026E-02
     LOWER SOIL ZONE:
          SUBLAYER  1
                                   SOIL MOISTURE (UG/ML)  2.543E+00
                                   ADSORBED SOIL (UG/G)   6.053E+00
                                   SOIL AIR (UG/ML)       5.108E-02
          SUBLAYER  2
                                   SOIL MOISTURE (UG/ML)  3.479E+00
                                   ADSORBED SOIL (UG/G)   8.280E+00
                                   SOIL AIR (UG/ML)       6.987E-02

                                   MAX. POLL. DEPTH (M)   1.067E+00

     YEAR -  23     MONTHLY RESULTS (OUTPUT)
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-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
UPPER SOIL ZONE:												
SUBLAYER 1												
VOLATILIZED	9.498E+05	8.899E+05	6.402E+05	6.257E+05	7.104E+05	7.923E+05	9.785E+05	9.150E+05	7.840E+05	5.833E+05	4.985E+05	4.746E+05
IN SOIL MOI	6.708E+05	7.815E+05	8.416E+05	8.359E+05	8.136E+05	7.858E+05	7.806E+05	7.850E+05	7.460E+05	6.641E+05	5.850E+05	5.433E+05
ADS ON SOIL	8.910E+06	9.880E+06	9.801E+06	9.687E+06	9.682E+06	9.592E+06	1.003E+07	9.924E+06	9.218E+06	7.903E+06	6.938E+06	6.498E+06
IN SOIL AIR	1.170E+04	1.245E+04	1.114E+04	1.105E+04	1.147E+04	1.171E+04	1.268E+04	1.213E+04	1.082E+04	8.762E+03	7.657E+03	7.306E+03
SUBLAYER 2												
DIFFUSED UP	3.102E+06	2.726E+06	1.897E+06	1.838E+06	2.074E+06	2.312E+06	2.831E+06	2.632E+06	2.304E+06	1.802E+06	1.627E+06	1.597E+06
IN SOIL MOI	2.791E+06	3.113E+06	3.322E+06	3.283E+06	3.183E+06	3.082E+06	3.018E+06	3.050E+06	2.976E+06	2.780E+06	2.538E+06	2.385E+06
ADS ON SOIL	3.706E+07	3.936E+07	3.869E+07	3.805E+07	3.788E+07	3.762E+07	3.878E+07	3.856E+07	3.677E+07	3.308E+07	3.010E+07	2.853E+07
IN SOIL AIR	4.865E+04	4.959E+04	4.398E+04	4.341E+04	4.489E+04	4.592E+04	4.903E+04	4.713E+04	4.314E+04	3.667E+04	3.322E+04	3.208E+04
SOIL ZONE 2:												
SUBLAYER 1												
DIFFUSED UP	8.490E+06	7.149E+06	4.870E+06	4.696E+06	5.276E+06	5.859E+06	7.107E+06	6.553E+06	5.796E+06	4.682E+06	4.405E+06	4.443E+06
IN SOIL MOI	1.695E+07	1.819E+07	1.927E+07	1.897E+07	1.830E+07	1.770E+07	1.706E+07	1.727E+07	1.721E+07	1.681E+07	1.592E+07	1.520E+07
ADS ON SOIL	2.252E+08	2.300E+08	2.245E+08	2.198E+08	2.177E+08	2.161E+08	2.192E+08	2.183E+08	2.126E+08	2.000E+08	1.888E+08	1.818E+08
IN SOIL AIR	2.956E+05	2.898E+05	2.552E+05	2.508E+05	2.580E+05	2.637E+05	2.772E+05	2.668E+05	2.495E+05	2.217E+05	2.084E+05	2.044E+05
SUBLAYER 2												
DIFFUSED UP	2.144E+07	1.785E+07	1.204E+07	1.153E+07	1.288E+07	1.426E+07	1.724E+07	1.586E+07	1.408E+07	1.150E+07	1.098E+07	1.122E+07
IN SOIL MOI	4.903E+07	5.177E+07	5.448E+07	5.334E+07	5.123E+07	4.952E+07	4.740E+07	4.799E+07	4.827E+07	4.808E+07	4.636E+07	4.467E+07
ADS ON SOIL	6.513E+08	6.545E+08	6.344E+08	6.181E+08	6.096E+08	6.045E+08	6.091E+08	6.067E+08	5.964E+08	5.721E+08	5.498E+08	5.342E+08
IN SOIL AIR	8.549E+05	8.247E+05	7.213E+05	7.053E+05	7.224E+05	7.377E+05	7.701E+05	7.415E+05	6.998E+05	6.343E+05	6.067E+05	6.007E+05
LOWER SOIL ZONE:												
SUBLAYER 1												
DIFFUSED UP	3.516E+07	2.881E+07	1.917E+07	1.820E+07	2.022E+07	2.237E+07	2.699E+07	2.478E+07	2.216E+07	1.838E+07	1.788E+07	1.849E+07
IN SOIL MOI	5.590E+07	5.840E+07	6.111E+07	5.959E+07	5.709E+07	5.521E+07	5.265E+07	5.335E+07	5.402E+07	5.449E+07	5.310E+07	5.147E+07

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ADS ON SOIL 7.425E+08 7.383E+08 7.117E+08 6.906E+08 6.794E+08 6.740E+08 6.765E+08 6.745E+08 6.675E+08 6.484E+08 6.298E+08 6.156E+08
IN SOIL AIR 9.746E+05 9.302E+05 8.092E+05 7.880E+05 8.051E+05 8.225E+05 8.553E+05 8.244E+05 7.832E+05 7.189E+05 6.950E+05 6.921E+05

          SUBLAYER  2
DIFFUSED UP 3.289E+07 2.589E+07 1.707E+07 1.640E+07 1.831E+07 2.015E+07 2.393E+07 2.160E+07 1.934E+07 1.647E+07 1.660E+07 1.755E+07
IN SOIL MOI 7.715E+07 7.953E+07 8.333E+07 8.136E+07 7.783E+07 7.514E+07 7.108E+07 7.189E+07 7.319E+07 7.497E+07 7.403E+07 7.217E+07
ADS ON SOIL 1.025E+09 1.005E+09 9.704E+08 9.429E+08 9.262E+08 9.172E+08 9.133E+08 9.089E+08 9.044E+08 8.921E+08 8.779E+08 8.631E+08
IN SOIL AIR 1.345E+06 1.267E+06 1.103E+06 1.076E+06 1.098E+06 1.119E+06 1.155E+06 1.111E+06 1.061E+06 9.891E+05 9.688E+05 9.705E+05
GWR. RUNOFF 0.000E+00 2.617E+06 7.815E+07 7.483E+07 4.664E+07 2.736E+07 0.000E+00 7.079E+06 2.762E+07 7.176E+07 7.513E+07 5.924E+07

     -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --
     ---------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
MOISTURE    2.785E-02 3.088E-02 3.064E-02 3.028E-02 3.026E-02 2.998E-02 3.135E-02 3.102E-02 2.881E-02 2.470E-02 2.169E-02 2.031E-02
%SOLUBILITY 9.284E-02 1.029E-01 1.021E-01 1.009E-01 1.009E-01 9.994E-02 1.045E-01 1.034E-01 9.605E-02 8.235E-02 7.229E-02 6.771E-02
ADSORBED    6.629E-02 7.350E-02 7.292E-02 7.207E-02 7.203E-02 7.136E-02 7.462E-02 7.383E-02 6.858E-02 5.880E-02 5.162E-02 4.834E-02
SOIL AIR    5.559E-04 6.280E-04 6.312E-04 6.309E-04 6.290E-04 6.187E-04 6.269E-04 6.119E-04 5.623E-04 4.803E-04 4.218E-04 3.975E-04

          SUBLAYER  2
MOISTURE    1.159E-01 1.230E-01 1.209E-01 1.189E-01 1.184E-01 1.176E-01 1.212E-01 1.205E-01 1.149E-01 1.034E-01 9.409E-02 8.918E-02
%SOLUBILITY 3.862E-01 4.101E-01 4.031E-01 3.964E-01 3.947E-01 3.920E-01 4.040E-01 4.018E-01 3.831E-01 3.447E-01 3.136E-01 2.973E-01
ADSORBED    2.757E-01 2.928E-01 2.878E-01 2.831E-01 2.818E-01 2.799E-01 2.885E-01 2.869E-01 2.735E-01 2.461E-01 2.239E-01 2.122E-01
SOIL AIR    2.312E-03 2.502E-03 2.491E-03 2.478E-03 2.461E-03 2.427E-03 2.424E-03 2.378E-03 2.243E-03 2.010E-03 1.830E-03 1.745E-03

     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE    4.693E-01 4.793E-01 4.677E-01 4.581E-01 4.537E-01 4.503E-01 4.569E-01 4.549E-01 4.430E-01 4.168E-01 3.935E-01 3.788E-01
%SOLUBILITY 1.564E+00 1.598E+00 1.559E+00 1.527E+00 1.512E+00 1.501E+00 1.523E+00 1.516E+00 1.477E+00 1.389E+00 1.312E+00 1.263E+00
ADSORBED    1.117E+00 1.141E+00 1.113E+00 1.090E+00 1.080E+00 1.072E+00 1.087E+00 1.083E+00 1.054E+00 9.919E-01 9.365E-01 9.015E-01
SOIL AIR    9.366E-03 9.747E-03 9.636E-03 9.545E-03 9.429E-03 9.293E-03 9.136E-03 8.974E-03 8.646E-03 8.103E-03 7.653E-03 7.413E-03

          SUBLAYER  2
MOISTURE    1.357E+00 1.364E+00 1.322E+00 1.288E+00 1.270E+00 1.260E+00 1.269E+00 1.264E+00 1.243E+00 1.192E+00 1.146E+00 1.113E+00
%SOLUBILITY 4.524E+00 4.547E+00 4.407E+00 4.294E+00 4.234E+00 4.199E+00 4.231E+00 4.214E+00 4.143E+00 3.974E+00 3.819E+00 3.711E+00
ADSORBED    3.230E+00 3.246E+00 3.147E+00 3.066E+00 3.023E+00 2.998E+00 3.021E+00 3.009E+00 2.958E+00 2.838E+00 2.727E+00 2.650E+00
SOIL AIR    2.709E-02 2.774E-02 2.724E-02 2.684E-02 2.640E-02 2.600E-02 2.538E-02 2.494E-02 2.426E-02 2.318E-02 2.228E-02 2.179E-02

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE    2.321E+00 2.308E+00 2.225E+00 2.159E+00 2.124E+00 2.107E+00 2.114E+00 2.108E+00 2.086E+00 2.027E+00 1.969E+00 1.924E+00
%SOLUBILITY 7.736E+00 7.692E+00 7.415E+00 7.196E+00 7.079E+00 7.022E+00 7.048E+00 7.028E+00 6.955E+00 6.756E+00 6.562E+00 6.414E+00
ADSORBED    5.524E+00 5.492E+00 5.295E+00 5.138E+00 5.054E+00 5.014E+00 5.032E+00 5.018E+00 4.966E+00 4.824E+00 4.686E+00 4.579E+00
SOIL AIR    4.632E-02 4.693E-02 4.583E-02 4.498E-02 4.414E-02 4.348E-02 4.228E-02 4.159E-02 4.072E-02 3.941E-02 3.829E-02 3.766E-02

          SUBLAYER  2
MOISTURE    3.203E+00 3.143E+00 3.033E+00 2.947E+00 2.895E+00 2.867E+00 2.855E+00 2.841E+00 2.827E+00 2.789E+00 2.744E+00 2.698E+00
%SOLUBILITY 1.068E+01 1.048E+01 1.011E+01 9.824E+00 9.651E+00 9.557E+00 9.517E+00 9.470E+00 9.423E+00 9.295E+00 9.148E+00 8.994E+00
ADSORBED    7.623E+00 7.480E+00 7.220E+00 7.015E+00 6.891E+00 6.823E+00 6.795E+00 6.762E+00 6.728E+00 6.637E+00 6.531E+00 6.421E+00
SOIL AIR    6.393E-02 6.391E-02 6.249E-02 6.141E-02 6.017E-02 5.916E-02 5.709E-02 5.604E-02 5.517E-02 5.422E-02 5.337E-02 5.281E-02

POL DEP CM  1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02

                         YEAR -  23 ANNUAL SUMMARY REPORT
                          ================================
       -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00
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          -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918

         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
         ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
-----------------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
              TOTAL VOLATILIZED                8.842E+06
          SUBLAYER  2
               TOTAL DIFFUSED (UP)             2.674E+07
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)             6.932E+07
          SUBLAYER  2
               TOTAL DIFFUSED (UP)             1.709E+08
     LOWER SOIL ZONE:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)             2.726E+08
          SUBLAYER  2
               TOTAL DIFFUSED (UP)             2.462E+08
               TOTAL IN GROUNDWATER RUNOFF     4.704E+08

                    -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                     ---------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
                                  SOIL MOISTURE (UG/ML)  2.815E-02
                                  ADSORBED SOIL (UG/G)   6.700E-02
                                  SOIL AIR (UG/ML)       5.662E-04
          SUBLAYER  2
                                  SOIL MOISTURE (UG/ML)  1.132E-01
                                  ADSORBED SOIL (UG/G)   2.694E-01
                                  SOIL AIR (UG/ML)       2.275E-03
     SOIL ZONE 2:
          SUBLAYER  1
                                  SOIL MOISTURE (UG/ML)  4.435E-01
                                  ADSORBED SOIL (UG/G)   1.056E+00
                                  SOIL AIR (UG/ML)       8.912E-03
          SUBLAYER  2
                                  SOIL MOISTURE (UG/ML)  1.257E+00
                                  ADSORBED SOIL (UG/G)   2.993E+00
                                  SOIL AIR (UG/ML)       2.526E-02
     LOWER SOIL ZONE:
          SUBLAYER  1
                                  SOIL MOISTURE (UG/ML)  2.123E+00
                                  ADSORBED SOIL (UG/G)   5.052E+00
                                  SOIL AIR (UG/ML)       4.263E-02
          SUBLAYER  2
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SOIL MOISTURE (UG/ML)	2.904E+00
ADSORBED SOIL (UG/G)	6.910E+00
SOIL AIR (UG/ML)	5.832E-02
MAX. POLL. DEPTH (M)	1.067E+00

YEAR - 24 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
UPPER SOIL ZONE:												
SUBLAYER 1												
VOLATILIZED	7.929E+05	7.429E+05	5.344E+05	5.224E+05	5.930E+05	6.614E+05	8.169E+05	7.638E+05	6.544E+05	4.869E+05	4.161E+05	3.962E+05
IN SOIL MOI	5.600E+05	6.524E+05	7.026E+05	6.978E+05	6.792E+05	6.559E+05	6.516E+05	6.553E+05	6.227E+05	5.544E+05	4.884E+05	4.535E+05
ADS ON SOIL	7.438E+06	8.247E+06	8.182E+06	8.086E+06	8.082E+06	8.007E+06	8.373E+06	8.284E+06	7.695E+06	6.597E+06	5.792E+06	5.424E+06
IN SOIL AIR	9.763E+03	1.039E+04	9.303E+03	9.227E+03	9.578E+03	9.772E+03	1.059E+04	1.013E+04	9.029E+03	7.314E+03	6.391E+03	6.099E+03
SUBLAYER 2												
DIFFUSED UP	2.590E+06	2.275E+06	1.583E+06	1.534E+06	1.732E+06	1.930E+06	2.363E+06	2.197E+06	1.923E+06	1.504E+06	1.358E+06	1.333E+06
IN SOIL MOI	2.330E+06	2.599E+06	2.773E+06	2.741E+06	2.657E+06	2.573E+06	2.519E+06	2.546E+06	2.484E+06	2.320E+06	2.119E+06	1.991E+06
ADS ON SOIL	3.094E+07	3.286E+07	3.229E+07	3.176E+07	3.162E+07	3.141E+07	3.237E+07	3.219E+07	3.069E+07	2.761E+07	2.513E+07	2.381E+07
IN SOIL AIR	4.061E+04	4.140E+04	3.672E+04	3.624E+04	3.747E+04	3.833E+04	4.093E+04	3.934E+04	3.601E+04	3.061E+04	2.773E+04	2.678E+04
SOIL ZONE 2:												
SUBLAYER 1												
DIFFUSED UP	7.087E+06	5.967E+06	4.065E+06	3.920E+06	4.404E+06	4.890E+06	5.932E+06	5.469E+06	4.838E+06	3.908E+06	3.677E+06	3.708E+06
IN SOIL MOI	1.415E+07	1.519E+07	1.609E+07	1.583E+07	1.527E+07	1.478E+07	1.424E+07	1.441E+07	1.436E+07	1.403E+07	1.329E+07	1.269E+07
ADS ON SOIL	1.880E+08	1.920E+08	1.874E+08	1.835E+08	1.817E+08	1.804E+08	1.830E+08	1.822E+08	1.774E+08	1.669E+08	1.576E+08	1.517E+08
IN SOIL AIR	2.467E+05	2.419E+05	2.130E+05	2.094E+05	2.154E+05	2.201E+05	2.314E+05	2.227E+05	2.082E+05	1.851E+05	1.739E+05	1.706E+05
SUBLAYER 2												
DIFFUSED UP	1.789E+07	1.490E+07	1.005E+07	9.623E+06	1.075E+07	1.190E+07	1.439E+07	1.324E+07	1.175E+07	9.597E+06	9.168E+06	9.362E+06
IN SOIL MOI	4.093E+07	4.321E+07	4.547E+07	4.452E+07	4.276E+07	4.133E+07	3.956E+07	4.005E+07	4.029E+07	4.013E+07	3.869E+07	3.728E+07
ADS ON SOIL	5.436E+08	5.463E+08	5.296E+08	5.159E+08	5.088E+08	5.046E+08	5.084E+08	5.064E+08	4.978E+08	4.775E+08	4.589E+08	4.459E+08

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IN SOIL AIR 7.136E+05 6.883E+05 6.021E+05 5.887E+05 6.029E+05 6.158E+05 6.427E+05 6.189E+05 5.841E+05 5.294E+05 5.064E+05 5.014E+05

     LOWER SOIL ZONE:
          SUBLAYER  1
DIFFUSED UP 2.935E+07 2.404E+07 1.600E+07 1.519E+07 1.688E+07 1.867E+07 2.252E+07 2.069E+07 1.849E+07 1.534E+07 1.493E+07 1.543E+07
IN SOIL MOI 4.666E+07 4.874E+07 5.101E+07 4.974E+07 4.765E+07 4.608E+07 4.394E+07 4.453E+07 4.509E+07 4.548E+07 4.432E+07 4.296E+07
ADS ON SOIL 6.197E+08 6.162E+08 5.940E+08 5.764E+08 5.670E+08 5.625E+08 5.646E+08 5.630E+08 5.571E+08 5.412E+08 5.257E+08 5.138E+08
IN SOIL AIR 8.134E+05 7.764E+05 6.754E+05 6.577E+05 6.720E+05 6.865E+05 7.138E+05 6.881E+05 6.537E+05 6.000E+05 5.801E+05 5.776E+05

          SUBLAYER  2
DIFFUSED UP 2.745E+07 2.161E+07 1.425E+07 1.369E+07 1.528E+07 1.682E+07 1.997E+07 1.803E+07 1.614E+07 1.375E+07 1.386E+07 1.464E+07
IN SOIL MOI 6.439E+07 6.638E+07 6.955E+07 6.791E+07 6.496E+07 6.271E+07 5.933E+07 6.000E+07 6.109E+07 6.257E+07 6.178E+07 6.024E+07
ADS ON SOIL 8.552E+08 8.392E+08 8.099E+08 7.869E+08 7.730E+08 7.655E+08 7.623E+08 7.586E+08 7.548E+08 7.446E+08 7.328E+08 7.204E+08
IN SOIL AIR 1.123E+06 1.057E+06 9.209E+05 8.980E+05 9.161E+05 9.342E+05 9.638E+05 9.271E+05 8.857E+05 8.255E+05 8.086E+05 8.100E+05
GWR. RUNOFF 0.000E+00 2.184E+06 6.523E+07 6.246E+07 3.893E+07 2.283E+07 0.000E+00 5.908E+06 2.305E+07 5.990E+07 6.270E+07 4.944E+07

     -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --
     ---------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
MOISTURE    2.325E-02 2.578E-02 2.558E-02 2.528E-02 2.526E-02 2.503E-02 2.617E-02 2.590E-02 2.405E-02 2.062E-02 1.810E-02 1.696E-02
%SOLUBILITY 7.750E-02 8.593E-02 8.525E-02 8.426E-02 8.421E-02 8.343E-02 8.724E-02 8.632E-02 8.017E-02 6.874E-02 6.035E-02 5.652E-02
ADSORBED    5.534E-02 6.136E-02 6.087E-02 6.016E-02 6.013E-02 5.957E-02 6.229E-02 6.163E-02 5.724E-02 4.908E-02 4.309E-02 4.035E-02
SOIL AIR    4.641E-04 5.243E-04 5.269E-04 5.267E-04 5.250E-04 5.165E-04 5.234E-04 5.108E-04 4.694E-04 4.010E-04 3.521E-04 3.319E-04

          SUBLAYER  2
MOISTURE    9.672E-02 1.027E-01 1.009E-01 9.928E-02 9.883E-02 9.818E-02 1.012E-01 1.006E-01 9.593E-02 8.631E-02 7.854E-02 7.444E-02
%SOLUBILITY 3.224E-01 3.424E-01 3.365E-01 3.309E-01 3.294E-01 3.273E-01 3.373E-01 3.354E-01 3.198E-01 2.877E-01 2.618E-01 2.481E-01
ADSORBED    2.302E-01 2.444E-01 2.403E-01 2.363E-01 2.352E-01 2.337E-01 2.408E-01 2.395E-01 2.283E-01 2.054E-01 1.869E-01 1.772E-01
SOIL AIR    1.930E-03 2.089E-03 2.080E-03 2.069E-03 2.054E-03 2.026E-03 2.023E-03 1.985E-03 1.872E-03 1.678E-03 1.528E-03 1.457E-03

     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE    3.917E-01 4.001E-01 3.904E-01 3.824E-01 3.787E-01 3.759E-01 3.813E-01 3.797E-01 3.698E-01 3.479E-01 3.285E-01 3.162E-01
%SOLUBILITY 1.306E+00 1.334E+00 1.301E+00 1.275E+00 1.262E+00 1.253E+00 1.271E+00 1.266E+00 1.233E+00 1.160E+00 1.095E+00 1.054E+00
ADSORBED    9.323E-01 9.522E-01 9.292E-01 9.101E-01 9.013E-01 8.946E-01 9.076E-01 9.037E-01 8.801E-01 8.280E-01 7.817E-01 7.525E-01
SOIL AIR    7.818E-03 8.136E-03 8.044E-03 7.968E-03 7.870E-03 7.757E-03 7.626E-03 7.490E-03 7.217E-03 6.764E-03 6.388E-03 6.188E-03

          SUBLAYER  2
MOISTURE    1.133E+00 1.138E+00 1.104E+00 1.075E+00 1.060E+00 1.051E+00 1.059E+00 1.055E+00 1.037E+00 9.952E-01 9.563E-01 9.293E-01
%SOLUBILITY 3.776E+00 3.795E+00 3.678E+00 3.584E+00 3.534E+00 3.505E+00 3.531E+00 3.518E+00 3.458E+00 3.317E+00 3.188E+00 3.098E+00
ADSORBED    2.696E+00 2.710E+00 2.626E+00 2.559E+00 2.523E+00 2.503E+00 2.521E+00 2.512E+00 2.469E+00 2.368E+00 2.276E+00 2.212E+00
SOIL AIR    2.261E-02 2.315E-02 2.273E-02 2.240E-02 2.204E-02 2.170E-02 2.118E-02 2.082E-02 2.025E-02 1.935E-02 1.860E-02 1.819E-02

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE    1.937E+00 1.926E+00 1.857E+00 1.802E+00 1.773E+00 1.758E+00 1.765E+00 1.760E+00 1.741E+00 1.692E+00 1.643E+00 1.606E+00
%SOLUBILITY 6.457E+00 6.420E+00 6.189E+00 6.006E+00 5.908E+00 5.861E+00 5.883E+00 5.866E+00 5.805E+00 5.639E+00 5.477E+00 5.353E+00
ADSORBED    4.610E+00 4.584E+00 4.419E+00 4.288E+00 4.219E+00 4.185E+00 4.200E+00 4.188E+00 4.144E+00 4.026E+00 3.911E+00 3.822E+00
SOIL AIR    3.866E-02 3.917E-02 3.825E-02 3.754E-02 3.684E-02 3.629E-02 3.529E-02 3.471E-02 3.398E-02 3.289E-02 3.196E-02 3.143E-02

          SUBLAYER  2
MOISTURE    2.673E+00 2.623E+00 2.532E+00 2.460E+00 2.416E+00 2.393E+00 2.383E+00 2.371E+00 2.359E+00 2.327E+00 2.291E+00 2.252E+00
%SOLUBILITY 8.911E+00 8.744E+00 8.439E+00 8.200E+00 8.055E+00 7.976E+00 7.943E+00 7.904E+00 7.865E+00 7.758E+00 7.635E+00 7.506E+00
ADSORBED    6.362E+00 6.243E+00 6.026E+00 5.855E+00 5.751E+00 5.695E+00 5.671E+00 5.644E+00 5.616E+00 5.539E+00 5.451E+00 5.360E+00
SOIL AIR    5.335E-02 5.334E-02 5.216E-02 5.125E-02 5.022E-02 4.938E-02 4.765E-02 4.677E-02 4.605E-02 4.525E-02 4.455E-02 4.408E-02

POL DEP CM  1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02
                         YEAR -  24 ANNUAL SUMMARY REPORT
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                    ==================================
      -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

         -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918

        -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
        ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
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     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED                7.381E+06
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              2.232E+07
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)              5.787E+07
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              1.426E+08
     LOWER SOIL ZONE:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)              2.275E+08
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              2.055E+08
               TOTAL IN GROUNDWATER RUNOFF      3.926E+08

                       -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                       ---------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
                                    SOIL MOISTURE (UG/ML)  2.350E-02
                                    ADSORBED SOIL (UG/G)   5.593E-02
                                    SOIL AIR (UG/ML)       4.727E-04
          SUBLAYER  2
                                    SOIL MOISTURE (UG/ML)  9.447E-02
                                    ADSORBED SOIL (UG/G)   2.248E-01
                                    SOIL AIR (UG/ML)       1.899E-03
     SOIL ZONE 2:
          SUBLAYER  1
                                    SOIL MOISTURE (UG/ML)  3.702E-01
                                    ADSORBED SOIL (UG/G)   8.811E-01
                                    SOIL AIR (UG/ML)       7.439E-03
          SUBLAYER  2
                                    SOIL MOISTURE (UG/ML)  1.050E+00
                                    ADSORBED SOIL (UG/G)   2.498E+00
                                    SOIL AIR (UG/ML)       2.108E-02
     LOWER SOIL ZONE:
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SUBLAYER 1

SOIL MOISTURE (UG/ML)	1.772E+00
ADSORBED SOIL (UG/G)	4.216E+00
SOIL AIR (UG/ML)	3.558E-02

SUBLAYER 2

SOIL MOISTURE (UG/ML)	2.423E+00
ADSORBED SOIL (UG/G)	5.768E+00
SOIL AIR (UG/ML)	4.867E-02
MAX. POLL. DEPTH (M)	1.067E+00

YEAR - 25 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:

SUBLAYER 1

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
VOLATILIZED	6.618E+05	6.201E+05	4.461E+05	4.360E+05	4.950E+05	5.521E+05	6.818E+05	6.376E+05	5.463E+05	4.065E+05	3.473E+05	3.307E+05
IN SOIL MOI	4.675E+05	5.445E+05	5.865E+05	5.825E+05	5.669E+05	5.475E+05	5.439E+05	5.470E+05	5.198E+05	4.628E+05	4.076E+05	3.786E+05
ADS ON SOIL	6.209E+06	6.884E+06	6.830E+06	6.750E+06	6.746E+06	6.684E+06	6.989E+06	6.915E+06	6.423E+06	5.507E+06	4.835E+06	4.528E+06
IN SOIL AIR	8.150E+03	8.674E+03	7.765E+03	7.702E+03	7.995E+03	8.157E+03	8.836E+03	8.452E+03	7.537E+03	6.105E+03	5.335E+03	5.091E+03

SUBLAYER 2

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DIFFUSED UP	2.162E+06	1.899E+06	1.322E+06	1.280E+06	1.445E+06	1.611E+06	1.973E+06	1.834E+06	1.606E+06	1.256E+06	1.134E+06	1.113E+06
IN SOIL MOI	1.945E+06	2.169E+06	2.315E+06	2.288E+06	2.218E+06	2.148E+06	2.103E+06	2.125E+06	2.073E+06	1.937E+06	1.768E+06	1.662E+06
ADS ON SOIL	2.583E+07	2.743E+07	2.696E+07	2.651E+07	2.639E+07	2.622E+07	2.702E+07	2.687E+07	2.562E+07	2.305E+07	2.097E+07	1.988E+07
IN SOIL AIR	3.390E+04	3.456E+04	3.065E+04	3.025E+04	3.128E+04	3.199E+04	3.416E+04	3.284E+04	3.006E+04	2.555E+04	2.314E+04	2.235E+04

SOIL ZONE 2:

SUBLAYER 1

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DIFFUSED UP	5.915E+06	4.981E+06	3.393E+06	3.272E+06	3.676E+06	4.082E+06	4.951E+06	4.565E+06	4.038E+06	3.262E+06	3.069E+06	3.095E+06
IN SOIL MOI	1.181E+07	1.268E+07	1.343E+07	1.322E+07	1.275E+07	1.233E+07	1.189E+07	1.203E+07	1.199E+07	1.171E+07	1.109E+07	1.059E+07
ADS ON SOIL	1.569E+08	1.603E+08	1.564E+08	1.532E+08	1.517E+08	1.506E+08	1.527E+08	1.521E+08	1.481E+08	1.393E+08	1.316E+08	1.266E+08
IN SOIL AIR	2.059E+05	2.019E+05	1.778E+05	1.748E+05	1.798E+05	1.837E+05	1.931E+05	1.859E+05	1.738E+05	1.545E+05	1.452E+05	1.424E+05

SUBLAYER 2

DIFFUSED UP	1.493E+07	1.244E+07	8.389E+06	8.032E+06	8.973E+06	9.935E+06	1.201E+07	1.105E+07	9.810E+06	8.011E+06	7.653E+06	7.814E+06
IN SOIL MOI	3.416E+07	3.607E+07	3.796E+07	3.716E+07	3.569E+07	3.450E+07	3.303E+07	3.343E+07	3.363E+07	3.350E+07	3.230E+07	3.112E+07
ADS ON SOIL	4.537E+08	4.560E+08	4.420E+08	4.306E+08	4.247E+08	4.212E+08	4.243E+08	4.227E+08	4.155E+08	3.986E+08	3.830E+08	3.722E+08
IN SOIL AIR	5.956E+05	5.745E+05	5.026E+05	4.914E+05	5.033E+05	5.140E+05	5.365E+05	5.166E+05	4.876E+05	4.419E+05	4.227E+05	4.185E+05

LOWER SOIL ZONE:

SUBLAYER 1

DIFFUSED UP	2.449E+07	2.007E+07	1.335E+07	1.268E+07	1.409E+07	1.558E+07	1.880E+07	1.726E+07	1.543E+07	1.280E+07	1.246E+07	1.288E+07
IN SOIL MOI	3.894E+07	4.068E+07	4.257E+07	4.151E+07	3.977E+07	3.846E+07	3.668E+07	3.717E+07	3.763E+07	3.796E+07	3.700E+07	3.585E+07
ADS ON SOIL	5.172E+08	5.143E+08	4.958E+08	4.811E+08	4.733E+08	4.695E+08	4.712E+08	4.699E+08	4.650E+08	4.517E+08	4.388E+08	4.288E+08
IN SOIL AIR	6.789E+05	6.480E+05	5.637E+05	5.490E+05	5.609E+05	5.730E+05	5.958E+05	5.743E+05	5.456E+05	5.008E+05	4.842E+05	4.821E+05

SUBLAYER 2

DIFFUSED UP	2.291E+07	1.804E+07	1.189E+07	1.143E+07	1.275E+07	1.404E+07	1.667E+07	1.505E+07	1.347E+07	1.148E+07	1.157E+07	1.222E+07
IN SOIL MOI	5.374E+07	5.540E+07	5.805E+07	5.668E+07	5.422E+07	5.234E+07	4.952E+07	5.008E+07	5.099E+07	5.223E+07	5.157E+07	5.027E+07
ADS ON SOIL	7.138E+08	7.004E+08	6.760E+08	6.568E+08	6.452E+08	6.389E+08	6.363E+08	6.331E+08	6.300E+08	6.215E+08	6.116E+08	6.013E+08
IN SOIL AIR	9.369E+05	8.825E+05	7.686E+05	7.495E+05	7.646E+05	7.797E+05	8.044E+05	7.738E+05	7.392E+05	6.890E+05	6.749E+05	6.760E+05
GWR. RUNOFF	0.000E+00	1.823E+06	5.444E+07	5.213E+07	3.249E+07	1.906E+07	0.000E+00	4.931E+06	1.924E+07	4.999E+07	5.234E+07	4.126E+07

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --

UPPER SOIL ZONE:

SUBLAYER 1

MOISTURE	1.941E-02	2.152E-02	2.135E-02	2.110E-02	2.109E-02	2.089E-02	2.185E-02	2.162E-02	2.008E-02	1.721E-02	1.511E-02	1.415E-02
%SOLUBILITY	6.469E-02	7.173E-02	7.116E-02	7.033E-02	7.030E-02	6.964E-02	7.282E-02	7.205E-02	6.692E-02	5.738E-02	5.037E-02	4.718E-02
ADSORBED	4.619E-02	5.122E-02	5.081E-02	5.022E-02	5.019E-02	4.972E-02	5.199E-02	5.145E-02	4.778E-02	4.097E-02	3.597E-02	3.368E-02
SOIL AIR	3.874E-04	4.376E-04	4.398E-04	4.396E-04	4.383E-04	4.311E-04	4.369E-04	4.264E-04	3.918E-04	3.347E-04	2.939E-04	2.770E-04

SUBLAYER 2

MOISTURE	8.073E-02	8.573E-02	8.426E-02	8.287E-02	8.250E-02	8.195E-02	8.446E-02	8.399E-02	8.008E-02	7.205E-02	6.556E-02	6.214E-02
%SOLUBILITY	2.691E-01	2.858E-01	2.809E-01	2.762E-01	2.750E-01	2.732E-01	2.815E-01	2.800E-01	2.669E-01	2.402E-01	2.185E-01	2.071E-01
ADSORBED	1.921E-01	2.040E-01	2.005E-01	1.972E-01	1.963E-01	1.950E-01	2.010E-01	1.999E-01	1.906E-01	1.715E-01	1.560E-01	1.479E-01
SOIL AIR	1.611E-03	1.743E-03	1.736E-03	1.727E-03	1.715E-03	1.691E-03	1.689E-03	1.657E-03	1.563E-03	1.401E-03	1.275E-03	1.216E-03

SOIL ZONE 2:

SUBLAYER 1

MOISTURE	3.270E-01	3.340E-01	3.259E-01	3.192E-01	3.161E-01	3.138E-01	3.183E-01	3.169E-01	3.087E-01	2.904E-01	2.742E-01	2.639E-01
%SOLUBILITY	1.090E+00	1.113E+00	1.086E+00	1.064E+00	1.054E+00	1.046E+00	1.061E+00	1.056E+00	1.029E+00	9.679E-01	9.139E-01	8.797E-01
ADSORBED	7.782E-01	7.948E-01	7.756E-01	7.597E-01	7.523E-01	7.468E-01	7.576E-01	7.543E-01	7.346E-01	6.911E-01	6.525E-01	6.281E-01
SOIL AIR	6.526E-03	6.791E-03	6.714E-03	6.651E-03	6.569E-03	6.475E-03	6.365E-03	6.252E-03	6.024E-03	5.646E-03	5.332E-03	5.165E-03

SUBLAYER 2

MOISTURE	9.456E-01	9.503E-01	9.211E-01	8.974E-01	8.850E-01	8.777E-01	8.843E-01	8.809E-01	8.659E-01	8.307E-01	7.982E-01	7.757E-01
%SOLUBILITY	3.152E+00	3.168E+00	3.070E+00	2.991E+00	2.950E+00	2.926E+00	2.948E+00	2.936E+00	2.886E+00	2.769E+00	2.661E+00	2.586E+00
ADSORBED	2.250E+00	2.262E+00	2.192E+00	2.136E+00	2.106E+00	2.089E+00	2.105E+00	2.096E+00	2.061E+00	1.977E+00	1.900E+00	1.846E+00
SOIL AIR	1.887E-02	1.932E-02	1.898E-02	1.870E-02	1.839E-02	1.811E-02	1.768E-02	1.738E-02	1.690E-02	1.615E-02	1.552E-02	1.518E-02

LOWER SOIL ZONE:

SUBLAYER 1

MOISTURE	1.617E+00	1.608E+00	1.550E+00	1.504E+00	1.479E+00	1.468E+00	1.473E+00	1.469E+00	1.453E+00	1.412E+00	1.372E+00	1.340E+00
%SOLUBILITY	5.389E+00	5.359E+00	5.166E+00	5.013E+00	4.931E+00	4.892E+00	4.910E+00	4.896E+00	4.845E+00	4.707E+00	4.572E+00	4.468E+00
ADSORBED	3.848E+00	3.826E+00	3.688E+00	3.579E+00	3.521E+00	3.493E+00	3.506E+00	3.496E+00	3.459E+00	3.360E+00	3.264E+00	3.190E+00
SOIL AIR	3.227E-02	3.269E-02	3.193E-02	3.133E-02	3.075E-02	3.029E-02	2.946E-02	2.897E-02	2.837E-02	2.745E-02	2.667E-02	2.624E-02

SUBLAYER 2

MOISTURE	2.231E+00	2.189E+00	2.113E+00	2.053E+00	2.017E+00	1.997E+00	1.989E+00	1.979E+00	1.969E+00	1.943E+00	1.912E+00	1.880E+00

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%SOLUBILITY 7.437E+00 7.298E+00 7.044E+00 6.844E+00 6.723E+00 6.657E+00 6.629E+00 6.597E+00 6.564E+00 6.475E+00 6.372E+00 6.265E+00
ADSORBED    5.310E+00 5.211E+00 5.029E+00 4.886E+00 4.800E+00 4.753E+00 4.733E+00 4.710E+00 4.687E+00 4.623E+00 4.550E+00 4.473E+00
SOIL AIR    4.453E-02 4.452E-02 4.353E-02 4.278E-02 4.192E-02 4.121E-02 3.977E-02 3.904E-02 3.843E-02 3.777E-02 3.718E-02 3.679E-02

POL DEP CM  1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02
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YEAR - 25 ANNUAL SUMMARY REPORT

-- TOTAL INPUTS (UG) --

UPPER SOIL ZONE	0.000E+00
SOIL ZONE 2	0.000E+00
LOWER SOIL ZONE	0.000E+00

-- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)	27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)	27.276
TOTAL PRECIPITATION (CM)	126.201
TOTAL INFILTRATION (CM)	123.899
TOTAL EVAPOTRANSPIRATION (CM)	99.280
TOTAL SURFACE RUNOFF (CM)	2.302
TOTAL GRW RUNOFF (CM)	24.616
TOTAL MOISTURE RETENTION (CM)	0.003
TOTAL YIELD (CM)	26.918

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)

UPPER SOIL ZONE:	
SUBLAYER 1	
TOTAL VOLATILIZED	6.161E+06
SUBLAYER 2	
TOTAL DIFFUSED (UP)	1.863E+07
SOIL ZONE 2:	
SUBLAYER 1	
TOTAL DIFFUSED (UP)	4.830E+07
SUBLAYER 2	
TOTAL DIFFUSED (UP)	1.191E+08
LOWER SOIL ZONE:	
SUBLAYER 1	
TOTAL DIFFUSED (UP)	1.899E+08
SUBLAYER 2	
TOTAL DIFFUSED (UP)	1.715E+08
TOTAL IN GROUNDWATER RUNOFF	3.277E+08

-- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON-ZERO VALUES ARE PRINTED --

UPPER SOIL ZONE:		
SUBLAYER 1		
	SOIL MOISTURE (UG/ML)	1.961E-02
	ADSORBED SOIL (UG/G)	4.668E-02
	SOIL AIR (UG/ML)	3.945E-04
SUBLAYER 2		
	SOIL MOISTURE (UG/ML)	7.886E-02
	ADSORBED SOIL (UG/G)	1.877E-01
	SOIL AIR (UG/ML)	1.585E-03
SOIL ZONE 2:		
SUBLAYER 1		
	SOIL MOISTURE (UG/ML)	3.090E-01

ADSORBED SOIL (UG/G)	7.355E-01
SOIL AIR (UG/ML)	6.209E-03
SUBLAYER 2	
SOIL MOISTURE (UG/ML)	8.761E-01
ADSORBED SOIL (UG/G)	2.085E+00
SOIL AIR (UG/ML)	1.760E-02
LOWER SOIL ZONE:	
SUBLAYER 1	
SOIL MOISTURE (UG/ML)	1.479E+00
ADSORBED SOIL (UG/G)	3.519E+00
SOIL AIR (UG/ML)	2.970E-02
SUBLAYER 2	
SOIL MOISTURE (UG/ML)	2.023E+00
ADSORBED SOIL (UG/G)	4.814E+00
SOIL AIR (UG/ML)	4.062E-02
MAX. POLL. DEPTH (M)	1.067E+00

YEAR - 26 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
UPPER SOIL ZONE:												
SUBLAYER 1												
VOLATILIZED	5.524E+05	5.176E+05	3.724E+05	3.640E+05	4.132E+05	4.608E+05	5.691E+05	5.322E+05	4.560E+05	3.393E+05	2.899E+05	2.760E+05
IN SOIL MOI	3.902E+05	4.545E+05	4.895E+05	4.862E+05	4.732E+05	4.570E+05	4.540E+05	4.566E+05	4.339E+05	3.863E+05	3.403E+05	3.160E+05
ADS ON SOIL	5.183E+06	5.747E+06	5.701E+06	5.634E+06	5.631E+06	5.579E+06	5.834E+06	5.772E+06	5.361E+06	4.597E+06	4.035E+06	3.779E+06
IN SOIL AIR	6.803E+03	7.240E+03	6.482E+03	6.429E+03	6.673E+03	6.808E+03	7.376E+03	7.055E+03	6.291E+03	5.096E+03	4.453E+03	4.249E+03
SUBLAYER 2												
DIFFUSED UP	1.804E+06	1.585E+06	1.103E+06	1.069E+06	1.206E+06	1.345E+06	1.647E+06	1.531E+06	1.340E+06	1.048E+06	9.464E+05	9.290E+05
IN SOIL MOI	1.623E+06	1.811E+06	1.932E+06	1.910E+06	1.851E+06	1.793E+06	1.755E+06	1.774E+06	1.731E+06	1.617E+06	1.476E+06	1.387E+06
ADS ON SOIL	2.156E+07	2.289E+07	2.250E+07	2.213E+07	2.203E+07	2.188E+07	2.255E+07	2.243E+07	2.138E+07	1.924E+07	1.751E+07	1.659E+07
IN SOIL AIR	2.830E+04	2.884E+04	2.558E+04	2.525E+04	2.611E+04	2.671E+04	2.851E+04	2.741E+04	2.509E+04	2.133E+04	1.932E+04	1.866E+04

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     SOIL ZONE 2:
          SUBLAYER  1
DIFFUSED UP 4.937E+06 4.157E+06 2.832E+06 2.731E+06 3.068E+06 3.407E+06 4.133E+06 3.811E+06 3.371E+06 2.723E+06 2.562E+06 2.584E+06
IN SOIL MOI 9.860E+06 1.058E+07 1.121E+07 1.103E+07 1.064E+07 1.030E+07 9.923E+06 1.004E+07 1.001E+07 9.774E+06 9.259E+06 8.838E+06
ADS ON SOIL 1.310E+08 1.338E+08 1.305E+08 1.278E+08 1.266E+08 1.257E+08 1.275E+08 1.270E+08 1.236E+08 1.163E+08 1.098E+08 1.057E+08
IN SOIL AIR 1.719E+05 1.685E+05 1.484E+05 1.459E+05 1.500E+05 1.534E+05 1.612E+05 1.552E+05 1.451E+05 1.289E+05 1.212E+05 1.188E+05

          SUBLAYER  2
DIFFUSED UP 1.247E+07 1.038E+07 7.002E+06 6.704E+06 7.490E+06 8.293E+06 1.003E+07 9.223E+06 8.188E+06 6.687E+06 6.388E+06 6.522E+06
IN SOIL MOI 2.852E+07 3.011E+07 3.168E+07 3.102E+07 2.979E+07 2.880E+07 2.757E+07 2.791E+07 2.807E+07 2.796E+07 2.696E+07 2.598E+07
ADS ON SOIL 3.787E+08 3.806E+08 3.689E+08 3.595E+08 3.545E+08 3.515E+08 3.542E+08 3.528E+08 3.468E+08 3.327E+08 3.197E+08 3.107E+08
IN SOIL AIR 4.971E+05 4.796E+05 4.195E+05 4.102E+05 4.201E+05 4.290E+05 4.478E+05 4.312E+05 4.070E+05 3.689E+05 3.528E+05 3.493E+05

     LOWER SOIL ZONE:
          SUBLAYER  1
DIFFUSED UP 2.044E+07 1.675E+07 1.114E+07 1.058E+07 1.176E+07 1.301E+07 1.569E+07 1.441E+07 1.288E+07 1.069E+07 1.040E+07 1.075E+07
IN SOIL MOI 3.250E+07 3.395E+07 3.553E+07 3.465E+07 3.320E+07 3.210E+07 3.061E+07 3.102E+07 3.141E+07 3.168E+07 3.088E+07 2.993E+07
ADS ON SOIL 4.317E+08 4.293E+08 4.138E+08 4.015E+08 3.950E+08 3.919E+08 3.933E+08 3.922E+08 3.881E+08 3.770E+08 3.662E+08 3.579E+08
IN SOIL AIR 5.667E+05 5.409E+05 4.705E+05 4.582E+05 4.681E+05 4.782E+05 4.973E+05 4.793E+05 4.554E+05 4.180E+05 4.041E+05 4.024E+05

          SUBLAYER  2
DIFFUSED UP 1.912E+07 1.505E+07 9.924E+06 9.536E+06 1.064E+07 1.171E+07 1.391E+07 1.256E+07 1.125E+07 9.577E+06 9.653E+06 1.020E+07
IN SOIL MOI 4.485E+07 4.624E+07 4.845E+07 4.731E+07 4.526E+07 4.369E+07 4.133E+07 4.180E+07 4.256E+07 4.359E+07 4.304E+07 4.196E+07
ADS ON SOIL 5.958E+08 5.846E+08 5.642E+08 5.482E+08 5.385E+08 5.333E+08 5.310E+08 5.285E+08 5.258E+08 5.187E+08 5.105E+08 5.019E+08
IN SOIL AIR 7.820E+05 7.366E+05 6.415E+05 6.255E+05 6.382E+05 6.508E+05 6.714E+05 6.459E+05 6.170E+05 5.751E+05 5.633E+05 5.643E+05
GWR. RUNOFF 0.000E+00 1.522E+06 4.544E+07 4.351E+07 2.712E+07 1.591E+07 0.000E+00 4.116E+06 1.606E+07 4.173E+07 4.368E+07 3.444E+07

     -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --
     ----------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
MOISTURE     1.620E-02 1.796E-02 1.782E-02 1.761E-02 1.760E-02 1.744E-02 1.824E-02 1.804E-02 1.676E-02 1.437E-02 1.261E-02 1.181E-02
%SOLUBILITY 5.400E-02 5.988E-02 5.940E-02 5.871E-02 5.868E-02 5.813E-02 6.078E-02 6.014E-02 5.586E-02 4.789E-02 4.205E-02 3.938E-02
ADSORBED     3.856E-02 4.275E-02 4.241E-02 4.192E-02 4.189E-02 4.150E-02 4.340E-02 4.294E-02 3.989E-02 3.420E-02 3.002E-02 2.812E-02
SOIL AIR     3.233E-04 3.653E-04 3.671E-04 3.670E-04 3.658E-04 3.599E-04 3.646E-04 3.559E-04 3.271E-04 2.794E-04 2.453E-04 2.312E-04

          SUBLAYER  2
MOISTURE     6.739E-02 7.156E-02 7.034E-02 6.917E-02 6.886E-02 6.840E-02 7.050E-02 7.011E-02 6.684E-02 6.014E-02 5.472E-02 5.187E-02
%SOLUBILITY 2.246E-01 2.385E-01 2.345E-01 2.306E-01 2.295E-01 2.280E-01 2.350E-01 2.337E-01 2.228E-01 2.005E-01 1.824E-01 1.729E-01
ADSORBED     1.604E-01 1.703E-01 1.674E-01 1.646E-01 1.639E-01 1.628E-01 1.678E-01 1.669E-01 1.591E-01 1.431E-01 1.302E-01 1.234E-01
SOIL AIR     1.345E-03 1.455E-03 1.449E-03 1.441E-03 1.431E-03 1.412E-03 1.410E-03 1.383E-03 1.304E-03 1.169E-03 1.064E-03 1.015E-03

     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE     2.729E-01 2.788E-01 2.720E-01 2.664E-01 2.638E-01 2.619E-01 2.657E-01 2.646E-01 2.576E-01 2.424E-01 2.288E-01 2.203E-01
%SOLUBILITY 9.097E-01 9.292E-01 9.067E-01 8.881E-01 8.795E-01 8.730E-01 8.856E-01 8.819E-01 8.588E-01 8.079E-01 7.628E-01 7.342E-01
ADSORBED     6.495E-01 6.634E-01 6.474E-01 6.341E-01 6.280E-01 6.233E-01 6.324E-01 6.296E-01 6.132E-01 5.769E-01 5.447E-01 5.242E-01
SOIL AIR     5.447E-03 5.669E-03 5.604E-03 5.551E-03 5.483E-03 5.405E-03 5.313E-03 5.219E-03 5.028E-03 4.713E-03 4.451E-03 4.311E-03

          SUBLAYER  2
MOISTURE     7.893E-01 7.932E-01 7.689E-01 7.491E-01 7.387E-01 7.326E-01 7.381E-01 7.352E-01 7.227E-01 6.934E-01 6.662E-01 6.474E-01
%SOLUBILITY 2.631E+00 2.644E+00 2.563E+00 2.497E+00 2.462E+00 2.442E+00 2.460E+00 2.451E+00 2.409E+00 2.311E+00 2.221E+00 2.158E+00
ADSORBED     1.878E+00 1.888E+00 1.830E+00 1.783E+00 1.758E+00 1.744E+00 1.757E+00 1.750E+00 1.720E+00 1.650E+00 1.586E+00 1.541E+00
SOIL AIR     1.575E-02 1.613E-02 1.584E-02 1.561E-02 1.535E-02 1.512E-02 1.476E-02 1.450E-02 1.411E-02 1.348E-02 1.296E-02 1.267E-02

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE     1.350E+00 1.342E+00 1.294E+00 1.255E+00 1.235E+00 1.225E+00 1.229E+00 1.226E+00 1.213E+00 1.179E+00 1.145E+00 1.119E+00
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%SOLUBILITY 4.498E+00 4.473E+00 4.312E+00 4.184E+00 4.116E+00 4.083E+00 4.098E+00 4.086E+00 4.044E+00 3.928E+00 3.816E+00 3.729E+00
ADSORBED    3.212E+00 3.194E+00 3.079E+00 2.987E+00 2.939E+00 2.915E+00 2.926E+00 2.918E+00 2.887E+00 2.805E+00 2.724E+00 2.663E+00
SOIL AIR    2.693E-02 2.729E-02 2.665E-02 2.615E-02 2.566E-02 2.528E-02 2.459E-02 2.418E-02 2.368E-02 2.291E-02 2.226E-02 2.190E-02

         SUBLAYER  2
MOISTURE    1.862E+00 1.827E+00 1.764E+00 1.714E+00 1.683E+00 1.667E+00 1.660E+00 1.652E+00 1.644E+00 1.621E+00 1.596E+00 1.569E+00
%SOLUBILITY 6.208E+00 6.091E+00 5.879E+00 5.712E+00 5.611E+00 5.557E+00 5.533E+00 5.506E+00 5.479E+00 5.405E+00 5.319E+00 5.229E+00
ADSORBED    4.432E+00 4.349E+00 4.198E+00 4.078E+00 4.006E+00 3.967E+00 3.951E+00 3.931E+00 3.912E+00 3.859E+00 3.798E+00 3.734E+00
SOIL AIR    3.717E-02 3.716E-02 3.634E-02 3.571E-02 3.498E-02 3.440E-02 3.319E-02 3.258E-02 3.208E-02 3.152E-02 3.103E-02 3.070E-02

POL DEP CM  1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02
                          YEAR -  26 ANNUAL SUMMARY REPORT
                          ================================
       -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

         -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918

         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
         ----------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
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     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED                5.143E+06
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              1.555E+07
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)              4.032E+07
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              9.937E+07
     LOWER SOIL ZONE:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)              1.585E+08
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              1.431E+08
               TOTAL IN GROUNDWATER RUNOFF      2.735E+08

                    -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                    ---------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
                                   SOIL MOISTURE (UG/ML)  1.637E-02
                                   ADSORBED SOIL (UG/G)   3.897E-02
                                   SOIL AIR (UG/ML)       3.293E-04
          SUBLAYER  2
                                   SOIL MOISTURE (UG/ML)  6.582E-02
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	ADSORBED SOIL (UG/G)	1.567E-01
	SOIL AIR (UG/ML)	1.323E-03
SOIL ZONE 2:		
SUBLAYER 1		
	SOIL MOISTURE (UG/ML)	2.579E-01
	ADSORBED SOIL (UG/G)	6.139E-01
	SOIL AIR (UG/ML)	5.183E-03
SUBLAYER 2		
	SOIL MOISTURE (UG/ML)	7.312E-01
	ADSORBED SOIL (UG/G)	1.740E+00
	SOIL AIR (UG/ML)	1.469E-02
LOWER SOIL ZONE:		
SUBLAYER 1		
	SOIL MOISTURE (UG/ML)	1.234E+00
	ADSORBED SOIL (UG/G)	2.937E+00
	SOIL AIR (UG/ML)	2.479E-02
SUBLAYER 2		
	SOIL MOISTURE (UG/ML)	1.688E+00
	ADSORBED SOIL (UG/G)	4.018E+00
	SOIL AIR (UG/ML)	3.391E-02
	MAX. POLL. DEPTH (M)	1.067E+00

YEAR - 27 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
UPPER SOIL ZONE:												
SUBLAYER 1												
VOLATILIZED	4.611E+05	4.320E+05	3.108E+05	3.038E+05	3.449E+05	3.846E+05	4.751E+05	4.442E+05	3.806E+05	2.832E+05	2.420E+05	2.304E+05
IN SOIL MOI	3.257E+05	3.794E+05	4.086E+05	4.058E+05	3.950E+05	3.815E+05	3.790E+05	3.811E+05	3.622E+05	3.224E+05	2.840E+05	2.637E+05
ADS ON SOIL	4.326E+06	4.797E+06	4.758E+06	4.703E+06	4.700E+06	4.657E+06	4.869E+06	4.818E+06	4.475E+06	3.837E+06	3.368E+06	3.154E+06
IN SOIL AIR	5.678E+03	6.043E+03	5.410E+03	5.366E+03	5.570E+03	5.683E+03	6.156E+03	5.888E+03	5.251E+03	4.254E+03	3.717E+03	3.547E+03

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          SUBLAYER  2
DIFFUSED UP 1.506E+06 1.323E+06 9.208E+05 8.921E+05 1.007E+06 1.122E+06 1.374E+06 1.278E+06 1.119E+06 8.748E+05 7.899E+05 7.754E+05
IN SOIL MOI 1.355E+06 1.511E+06 1.613E+06 1.594E+06 1.545E+06 1.496E+06 1.465E+06 1.481E+06 1.444E+06 1.349E+06 1.232E+06 1.158E+06
ADS ON SOIL 1.799E+07 1.911E+07 1.878E+07 1.847E+07 1.839E+07 1.827E+07 1.882E+07 1.872E+07 1.785E+07 1.606E+07 1.461E+07 1.385E+07
IN SOIL AIR 2.362E+04 2.408E+04 2.135E+04 2.108E+04 2.179E+04 2.229E+04 2.380E+04 2.288E+04 2.094E+04 1.780E+04 1.612E+04 1.557E+04

     SOIL ZONE 2:
          SUBLAYER  1
DIFFUSED UP 4.121E+06 3.470E+06 2.364E+06 2.280E+06 2.561E+06 2.844E+06 3.450E+06 3.181E+06 2.814E+06 2.272E+06 2.138E+06 2.156E+06
IN SOIL MOI 8.230E+06 8.832E+06 9.356E+06 9.208E+06 8.881E+06 8.593E+06 8.283E+06 8.382E+06 8.352E+06 8.158E+06 7.729E+06 7.377E+06
ADS ON SOIL 1.093E+08 1.117E+08 1.090E+08 1.067E+08 1.057E+08 1.049E+08 1.064E+08 1.060E+08 1.032E+08 9.708E+07 9.166E+07 8.823E+07
IN SOIL AIR 1.435E+05 1.407E+05 1.239E+05 1.218E+05 1.252E+05 1.280E+05 1.346E+05 1.295E+05 1.211E+05 1.076E+05 1.011E+05 9.919E+04

          SUBLAYER  2
DIFFUSED UP 1.040E+07 8.665E+06 5.845E+06 5.596E+06 6.251E+06 6.922E+06 8.370E+06 7.698E+06 6.834E+06 5.581E+06 5.332E+06 5.444E+06
IN SOIL MOI 2.380E+07 2.513E+07 2.644E+07 2.589E+07 2.486E+07 2.404E+07 2.301E+07 2.329E+07 2.343E+07 2.334E+07 2.250E+07 2.168E+07
ADS ON SOIL 3.161E+08 3.177E+08 3.080E+08 3.000E+08 2.959E+08 2.934E+08 2.956E+08 2.945E+08 2.895E+08 2.777E+08 2.669E+08 2.593E+08
IN SOIL AIR 4.150E+05 4.003E+05 3.501E+05 3.424E+05 3.506E+05 3.581E+05 3.738E+05 3.599E+05 3.397E+05 3.079E+05 2.945E+05 2.916E+05

     LOWER SOIL ZONE:
          SUBLAYER  1
DIFFUSED UP 1.706E+07 1.398E+07 9.301E+06 8.831E+06 9.813E+06 1.085E+07 1.309E+07 1.203E+07 1.075E+07 8.919E+06 8.678E+06 8.974E+06
IN SOIL MOI 2.713E+07 2.834E+07 2.966E+07 2.892E+07 2.771E+07 2.679E+07 2.555E+07 2.589E+07 2.622E+07 2.644E+07 2.577E+07 2.498E+07
ADS ON SOIL 3.603E+08 3.583E+08 3.454E+08 3.352E+08 3.297E+08 3.271E+08 3.283E+08 3.273E+08 3.239E+08 3.147E+08 3.057E+08 2.987E+08
IN SOIL AIR 4.730E+05 4.514E+05 3.927E+05 3.824E+05 3.907E+05 3.992E+05 4.151E+05 4.001E+05 3.801E+05 3.489E+05 3.373E+05 3.359E+05

          SUBLAYER  2
DIFFUSED UP 1.596E+07 1.256E+07 8.282E+06 7.959E+06 8.882E+06 9.777E+06 1.161E+07 1.048E+07 9.386E+06 7.993E+06 8.057E+06 8.513E+06
IN SOIL MOI 3.744E+07 3.860E+07 4.044E+07 3.948E+07 3.777E+07 3.646E+07 3.450E+07 3.489E+07 3.552E+07 3.638E+07 3.592E+07 3.502E+07
ADS ON SOIL 4.972E+08 4.879E+08 4.709E+08 4.576E+08 4.495E+08 4.451E+08 4.432E+08 4.411E+08 4.389E+08 4.329E+08 4.261E+08 4.189E+08
IN SOIL AIR 6.527E+05 6.148E+05 5.354E+05 5.221E+05 5.326E+05 5.432E+05 5.604E+05 5.391E+05 5.150E+05 4.800E+05 4.702E+05 4.710E+05
GWR. RUNOFF 0.000E+00 1.270E+06 3.793E+07 3.632E+07 2.263E+07 1.328E+07 0.000E+00 3.435E+06 1.340E+07 3.483E+07 3.646E+07 2.875E+07

     -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --
     ----------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
MOISTURE    1.352E-02 1.499E-02 1.487E-02 1.470E-02 1.469E-02 1.456E-02 1.522E-02 1.506E-02 1.399E-02 1.199E-02 1.053E-02 9.860E-03
%SOLUBILITY 4.507E-02 4.998E-02 4.958E-02 4.900E-02 4.898E-02 4.852E-02 5.074E-02 5.020E-02 4.663E-02 3.998E-02 3.510E-02 3.287E-02
ADSORBED    3.218E-02 3.568E-02 3.540E-02 3.499E-02 3.497E-02 3.464E-02 3.623E-02 3.584E-02 3.329E-02 2.854E-02 2.506E-02 2.347E-02
SOIL AIR    2.699E-04 3.049E-04 3.064E-04 3.063E-04 3.054E-04 3.004E-04 3.044E-04 2.971E-04 2.730E-04 2.332E-04 2.048E-04 1.930E-04

          SUBLAYER  2
MOISTURE    5.625E-02 5.973E-02 5.871E-02 5.774E-02 5.748E-02 5.710E-02 5.884E-02 5.852E-02 5.579E-02 5.019E-02 4.567E-02 4.329E-02
%SOLUBILITY 1.875E-01 1.991E-01 1.957E-01 1.925E-01 1.916E-01 1.903E-01 1.961E-01 1.951E-01 1.860E-01 1.673E-01 1.522E-01 1.443E-01
ADSORBED    1.339E-01 1.422E-01 1.397E-01 1.374E-01 1.368E-01 1.359E-01 1.400E-01 1.393E-01 1.328E-01 1.195E-01 1.087E-01 1.030E-01
SOIL AIR    1.123E-03 1.215E-03 1.209E-03 1.203E-03 1.195E-03 1.178E-03 1.177E-03 1.154E-03 1.089E-03 9.759E-04 8.883E-04 8.473E-04

     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE    2.278E-01 2.327E-01 2.271E-01 2.224E-01 2.202E-01 2.186E-01 2.218E-01 2.208E-01 2.150E-01 2.023E-01 1.910E-01 1.839E-01
%SOLUBILITY 7.593E-01 7.756E-01 7.568E-01 7.413E-01 7.341E-01 7.287E-01 7.392E-01 7.361E-01 7.168E-01 6.744E-01 6.367E-01 6.129E-01
ADSORBED    5.422E-01 5.538E-01 5.404E-01 5.293E-01 5.241E-01 5.203E-01 5.278E-01 5.255E-01 5.118E-01 4.815E-01 4.546E-01 4.376E-01
SOIL AIR    4.547E-03 4.732E-03 4.678E-03 4.634E-03 4.577E-03 4.511E-03 4.435E-03 4.356E-03 4.197E-03 3.933E-03 3.715E-03 3.598E-03

          SUBLAYER  2
MOISTURE    6.588E-01 6.621E-01 6.417E-01 6.252E-01 6.166E-01 6.115E-01 6.161E-01 6.137E-01 6.033E-01 5.787E-01 5.561E-01 5.404E-01
%SOLUBILITY 2.196E+00 2.207E+00 2.139E+00 2.084E+00 2.055E+00 2.038E+00 2.054E+00 2.046E+00 2.011E+00 1.929E+00 1.854E+00 1.801E+00
ADSORBED    1.568E+00 1.576E+00 1.527E+00 1.488E+00 1.467E+00 1.455E+00 1.466E+00 1.461E+00 1.436E+00 1.377E+00 1.323E+00 1.286E+00
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SOIL AIR     1.315E-02 1.346E-02 1.322E-02 1.303E-02 1.281E-02 1.262E-02 1.232E-02 1.211E-02 1.177E-02 1.125E-02 1.082E-02 1.058E-02

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE     1.126E+00 1.120E+00 1.080E+00 1.048E+00 1.031E+00 1.022E+00 1.026E+00 1.023E+00 1.013E+00 9.837E-01 9.555E-01 9.338E-01
%SOLUBILITY 3.755E+00 3.733E+00 3.599E+00 3.492E+00 3.435E+00 3.408E+00 3.421E+00 3.411E+00 3.375E+00 3.279E+00 3.185E+00 3.113E+00
ADSORBED     2.681E+00 2.666E+00 2.570E+00 2.493E+00 2.453E+00 2.433E+00 2.442E+00 2.435E+00 2.410E+00 2.341E+00 2.274E+00 2.223E+00
SOIL AIR     2.248E-02 2.278E-02 2.224E-02 2.183E-02 2.142E-02 2.110E-02 2.052E-02 2.018E-02 1.976E-02 1.913E-02 1.858E-02 1.828E-02

          SUBLAYER  2
MOISTURE     1.554E+00 1.525E+00 1.472E+00 1.430E+00 1.405E+00 1.391E+00 1.385E+00 1.379E+00 1.372E+00 1.353E+00 1.332E+00 1.309E+00
%SOLUBILITY 5.181E+00 5.084E+00 4.907E+00 4.768E+00 4.683E+00 4.638E+00 4.618E+00 4.596E+00 4.573E+00 4.511E+00 4.439E+00 4.364E+00
ADSORBED     3.699E+00 3.630E+00 3.504E+00 3.404E+00 3.344E+00 3.311E+00 3.297E+00 3.281E+00 3.265E+00 3.221E+00 3.170E+00 3.116E+00
SOIL AIR     3.102E-02 3.102E-02 3.033E-02 2.980E-02 2.920E-02 2.871E-02 2.771E-02 2.720E-02 2.677E-02 2.631E-02 2.590E-02 2.563E-02


POL DEP CM   1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02

                          YEAR -  27 ANNUAL SUMMARY REPORT
                          ================================
       -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

          -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918

         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
         ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
-------------------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED              4.293E+06
          SUBLAYER  2
               TOTAL DIFFUSED (UP)            1.298E+07
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)            3.365E+07
          SUBLAYER  2
               TOTAL DIFFUSED (UP)            8.294E+07
     LOWER SOIL ZONE:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)            1.323E+08
          SUBLAYER  2
               TOTAL DIFFUSED (UP)            1.195E+08
               TOTAL IN GROUNDWATER RUNOFF    2.283E+08

                    -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
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UPPER SOIL ZONE:
     SUBLAYER  1
                                SOIL MOISTURE (UG/ML)   1.367E-02
                                ADSORBED SOIL (UG/G)    3.252E-02
                                SOIL AIR (UG/ML)        2.749E-04
     SUBLAYER  2
                                SOIL MOISTURE (UG/ML)   5.494E-02
                                ADSORBED SOIL (UG/G)    1.308E-01
                                SOIL AIR (UG/ML)        1.105E-03
SOIL ZONE 2:
     SUBLAYER  1
                                SOIL MOISTURE (UG/ML)   2.153E-01
                                ADSORBED SOIL (UG/G)    5.124E-01
                                SOIL AIR (UG/ML)        4.326E-03
     SUBLAYER  2
                                SOIL MOISTURE (UG/ML)   6.103E-01
                                ADSORBED SOIL (UG/G)    1.453E+00
                                SOIL AIR (UG/ML)        1.226E-02
LOWER SOIL ZONE:
     SUBLAYER  1
                                SOIL MOISTURE (UG/ML)   1.030E+00
                                ADSORBED SOIL (UG/G)    2.452E+00
                                SOIL AIR (UG/ML)        2.069E-02
     SUBLAYER  2
                                SOIL MOISTURE (UG/ML)   1.409E+00
                                ADSORBED SOIL (UG/G)    3.354E+00
                                SOIL AIR (UG/ML)        2.830E-02

                                MAX. POLL. DEPTH (M)    1.067E+00
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YEAR - 28 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
MOIS. BELOW L1 (%)	25.087	26.356	28.612	28.753	28.001	27.296	25.933	26.356	26.967	28.001	28.095	27.860
PRECIPATION (CM)	5.722	4.855	7.244	7.487	8.085	9.910	8.368	11.054	14.182	18.155	17.320	13.818
NET INFILT. (CM)	5.693	4.815	7.205	7.450	8.031	9.764	8.235	10.786	13.888	17.675	16.756	13.602
EVAPOTRANS. (CM)	7.063	4.571	2.973	3.462	5.565	8.320	8.566	10.353	12.285	13.520	12.436	10.168
MOIS. RETEN (CM)	-0.246	0.113	0.201	0.013	-0.067	-0.063	-0.121	0.038	0.055	0.092	0.009	-0.021
SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:

SUBLAYER 1

VOLATILIZED	3.849E+05	3.606E+05	2.594E+05	2.536E+05	2.879E+05	3.210E+05	3.965E+05	3.708E+05	3.177E+05	2.364E+05	2.020E+05	1.923E+05
IN SOIL MOI	2.719E+05	3.167E+05	3.410E+05	3.387E+05	3.297E+05	3.184E+05	3.163E+05	3.181E+05	3.023E+05	2.691E+05	2.370E+05	2.201E+05
ADS ON SOIL	3.611E+06	4.004E+06	3.972E+06	3.925E+06	3.923E+06	3.887E+06	4.064E+06	4.021E+06	3.735E+06	3.202E+06	2.811E+06	2.633E+06
IN SOIL AIR	4.740E+03	5.044E+03	4.516E+03	4.479E+03	4.649E+03	4.743E+03	5.139E+03	4.915E+03	4.383E+03	3.550E+03	3.102E+03	2.960E+03

SUBLAYER 2

DIFFUSED UP	1.257E+06	1.104E+06	7.685E+05	7.446E+05	8.405E+05	9.369E+05	1.147E+06	1.066E+06	9.337E+05	7.302E+05	6.593E+05	6.472E+05
IN SOIL MOI	1.131E+06	1.262E+06	1.346E+06	1.330E+06	1.290E+06	1.249E+06	1.223E+06	1.236E+06	1.206E+06	1.126E+06	1.028E+06	9.665E+05
ADS ON SOIL	1.502E+07	1.595E+07	1.568E+07	1.542E+07	1.535E+07	1.525E+07	1.571E+07	1.563E+07	1.490E+07	1.340E+07	1.220E+07	1.156E+07
IN SOIL AIR	1.972E+04	2.010E+04	1.782E+04	1.759E+04	1.819E+04	1.861E+04	1.987E+04	1.910E+04	1.748E+04	1.486E+04	1.346E+04	1.300E+04

SOIL ZONE 2:

SUBLAYER 1

DIFFUSED UP	3.440E+06	2.896E+06	1.973E+06	1.903E+06	2.138E+06	2.374E+06	2.879E+06	2.655E+06	2.348E+06	1.897E+06	1.785E+06	1.800E+06
IN SOIL MOI	6.869E+06	7.371E+06	7.809E+06	7.686E+06	7.413E+06	7.172E+06	6.913E+06	6.996E+06	6.971E+06	6.809E+06	6.451E+06	6.157E+06
ADS ON SOIL	9.124E+07	9.319E+07	9.094E+07	8.907E+07	8.821E+07	8.756E+07	8.882E+07	8.844E+07	8.613E+07	8.103E+07	7.650E+07	7.364E+07
IN SOIL AIR	1.198E+05	1.174E+05	1.034E+05	1.016E+05	1.045E+05	1.068E+05	1.123E+05	1.081E+05	1.011E+05	8.983E+04	8.442E+04	8.279E+04

SUBLAYER 2

DIFFUSED UP	8.684E+06	7.232E+06	4.878E+06	4.671E+06	5.218E+06	5.777E+06	6.986E+06	6.425E+06	5.704E+06	4.658E+06	4.450E+06	4.544E+06
IN SOIL MOI	1.987E+07	2.098E+07	2.207E+07	2.161E+07	2.075E+07	2.006E+07	1.920E+07	1.944E+07	1.955E+07	1.948E+07	1.878E+07	1.810E+07
ADS ON SOIL	2.639E+08	2.652E+08	2.570E+08	2.504E+08	2.470E+08	2.449E+08	2.468E+08	2.458E+08	2.416E+08	2.318E+08	2.227E+08	2.164E+08
IN SOIL AIR	3.463E+05	3.341E+05	2.922E+05	2.858E+05	2.927E+05	2.989E+05	3.120E+05	3.004E+05	2.835E+05	2.570E+05	2.458E+05	2.434E+05

LOWER SOIL ZONE:

SUBLAYER 1

DIFFUSED UP	1.424E+07	1.167E+07	7.763E+06	7.371E+06	8.191E+06	9.061E+06	1.093E+07	1.004E+07	8.974E+06	7.445E+06	7.244E+06	7.490E+06
IN SOIL MOI	2.264E+07	2.366E+07	2.476E+07	2.414E+07	2.313E+07	2.237E+07	2.133E+07	2.161E+07	2.188E+07	2.207E+07	2.151E+07	2.085E+07
ADS ON SOIL	3.008E+08	2.991E+08	2.883E+08	2.797E+08	2.752E+08	2.730E+08	2.740E+08	2.732E+08	2.704E+08	2.627E+08	2.551E+08	2.494E+08
IN SOIL AIR	3.948E+05	3.768E+05	3.278E+05	3.192E+05	3.261E+05	3.332E+05	3.465E+05	3.339E+05	3.173E+05	2.912E+05	2.815E+05	2.804E+05

SUBLAYER 2

DIFFUSED UP	1.332E+07	1.049E+07	6.912E+06	6.642E+06	7.412E+06	8.160E+06	9.688E+06	8.747E+06	7.833E+06	6.671E+06	6.724E+06	7.105E+06
IN SOIL MOI	3.125E+07	3.221E+07	3.375E+07	3.296E+07	3.153E+07	3.043E+07	2.879E+07	2.912E+07	2.965E+07	3.037E+07	2.998E+07	2.923E+07
ADS ON SOIL	4.150E+08	4.073E+08	3.931E+08	3.819E+08	3.752E+08	3.715E+08	3.699E+08	3.681E+08	3.663E+08	3.614E+08	3.556E+08	3.496E+08
IN SOIL AIR	5.448E+05	5.131E+05	4.469E+05	4.358E+05	4.446E+05	4.534E+05	4.677E+05	4.499E+05	4.298E+05	4.006E+05	3.924E+05	3.931E+05
GWR. RUNOFF	0.000E+00	1.060E+06	3.165E+07	3.031E+07	1.889E+07	1.108E+07	0.000E+00	2.867E+06	1.119E+07	2.907E+07	3.043E+07	2.399E+07

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --

UPPER SOIL ZONE:

SUBLAYER 1

MOISTURE	1.129E-02	1.251E-02	1.242E-02	1.227E-02	1.226E-02	1.215E-02	1.270E-02	1.257E-02	1.168E-02	1.001E-02	8.788E-03	8.230E-03
%SOLUBILITY	3.762E-02	4.172E-02	4.138E-02	4.090E-02	4.088E-02	4.050E-02	4.235E-02	4.190E-02	3.892E-02	3.337E-02	2.929E-02	2.743E-02
ADSORBED	2.686E-02	2.978E-02	2.955E-02	2.920E-02	2.919E-02	2.892E-02	3.024E-02	2.992E-02	2.779E-02	2.382E-02	2.092E-02	1.959E-02
SOIL AIR	2.253E-04	2.545E-04	2.558E-04	2.557E-04	2.549E-04	2.507E-04	2.540E-04	2.480E-04	2.279E-04	1.946E-04	1.709E-04	1.611E-04

SUBLAYER 2

MOISTURE	4.695E-02	4.986E-02	4.900E-02	4.819E-02	4.798E-02	4.766E-02	4.911E-02	4.884E-02	4.657E-02	4.190E-02	3.812E-02	3.613E-02
%SOLUBILITY	1.565E-01	1.662E-01	1.633E-01	1.606E-01	1.599E-01	1.589E-01	1.637E-01	1.628E-01	1.552E-01	1.397E-01	1.271E-01	1.204E-01
ADSORBED	1.117E-01	1.187E-01	1.166E-01	1.147E-01	1.142E-01	1.134E-01	1.169E-01	1.162E-01	1.108E-01	9.971E-02	9.073E-02	8.600E-02
SOIL AIR	9.371E-04	1.014E-03	1.010E-03	1.004E-03	9.971E-04	9.834E-04	9.821E-04	9.635E-04	9.088E-04	8.146E-04	7.414E-04	7.072E-04

SOIL ZONE 2:

SUBLAYER 1

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MOISTURE     1.901E-01 1.942E-01 1.895E-01 1.856E-01 1.838E-01 1.825E-01 1.851E-01 1.843E-01 1.795E-01 1.689E-01 1.594E-01 1.535E-01
%SOLUBILITY 6.338E-01 6.474E-01 6.317E-01 6.187E-01 6.127E-01 6.082E-01 6.170E-01 6.144E-01 5.983E-01 5.629E-01 5.314E-01 5.115E-01
ADSORBED     4.525E-01 4.622E-01 4.510E-01 4.418E-01 4.375E-01 4.342E-01 4.405E-01 4.387E-01 4.272E-01 4.019E-01 3.794E-01 3.652E-01
SOIL AIR     3.795E-03 3.949E-03 3.904E-03 3.867E-03 3.820E-03 3.765E-03 3.701E-03 3.636E-03 3.503E-03 3.283E-03 3.101E-03 3.004E-03

          SUBLAYER  2
MOISTURE     5.499E-01 5.526E-01 5.356E-01 5.219E-01 5.146E-01 5.104E-01 5.142E-01 5.122E-01 5.035E-01 4.830E-01 4.642E-01 4.510E-01
%SOLUBILITY 1.833E+00 1.842E+00 1.785E+00 1.740E+00 1.715E+00 1.701E+00 1.714E+00 1.707E+00 1.678E+00 1.610E+00 1.547E+00 1.503E+00
ADSORBED     1.309E+00 1.315E+00 1.275E+00 1.242E+00 1.225E+00 1.215E+00 1.224E+00 1.219E+00 1.198E+00 1.150E+00 1.105E+00 1.073E+00
SOIL AIR     1.097E-02 1.124E-02 1.104E-02 1.087E-02 1.070E-02 1.053E-02 1.028E-02 1.010E-02 9.827E-03 9.392E-03 9.027E-03 8.828E-03

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE     9.402E-01 9.348E-01 9.012E-01 8.744E-01 8.603E-01 8.534E-01 8.566E-01 8.541E-01 8.452E-01 8.211E-01 7.975E-01 7.795E-01
%SOLUBILITY 3.134E+00 3.116E+00 3.004E+00 2.915E+00 2.868E+00 2.845E+00 2.855E+00 2.847E+00 2.817E+00 2.737E+00 2.658E+00 2.598E+00
ADSORBED     2.238E+00 2.225E+00 2.145E+00 2.081E+00 2.047E+00 2.031E+00 2.039E+00 2.033E+00 2.011E+00 1.954E+00 1.898E+00 1.855E+00
SOIL AIR     1.876E-02 1.901E-02 1.857E-02 1.822E-02 1.788E-02 1.761E-02 1.713E-02 1.685E-02 1.649E-02 1.596E-02 1.551E-02 1.526E-02

          SUBLAYER  2
MOISTURE     1.297E+00 1.273E+00 1.229E+00 1.194E+00 1.173E+00 1.161E+00 1.156E+00 1.151E+00 1.145E+00 1.130E+00 1.112E+00 1.093E+00
%SOLUBILITY 4.324E+00 4.243E+00 4.096E+00 3.979E+00 3.909E+00 3.871E+00 3.855E+00 3.836E+00 3.817E+00 3.765E+00 3.705E+00 3.643E+00
ADSORBED     3.088E+00 3.030E+00 2.924E+00 2.841E+00 2.791E+00 2.764E+00 2.752E+00 2.739E+00 2.725E+00 2.688E+00 2.646E+00 2.601E+00
SOIL AIR     2.589E-02 2.589E-02 2.531E-02 2.487E-02 2.437E-02 2.396E-02 2.312E-02 2.270E-02 2.235E-02 2.196E-02 2.162E-02 2.139E-02

POL DEP CM   1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02
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                         YEAR -  28 ANNUAL SUMMARY REPORT
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       -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE                0.000E+00
SOIL ZONE 2                    0.000E+00
LOWER SOIL ZONE                0.000E+00

          -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918

         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
         ------------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
-------------------------------------------------------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED                3.583E+06
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              1.084E+07
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)              2.809E+07
          SUBLAYER  2
               TOTAL DIFFUSED (UP)              6.923E+07
     LOWER SOIL ZONE:
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     SUBLAYER  1

          TOTAL DIFFUSED (UP)               1.104E+08
     SUBLAYER  2
          TOTAL DIFFUSED (UP)               9.970E+07
          TOTAL IN GROUNDWATER RUNOFF       1.905E+08

                    -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                     ------------------------------------------------------------------------------
UPPER SOIL ZONE:
     SUBLAYER  1
                                   SOIL MOISTURE (UG/ML)  1.141E-02
                                   ADSORBED SOIL (UG/G)   2.715E-02
                                   SOIL AIR (UG/ML)       2.294E-04
     SUBLAYER  2
                                   SOIL MOISTURE (UG/ML)  4.586E-02
                                   ADSORBED SOIL (UG/G)   1.091E-01
                                   SOIL AIR (UG/ML)       9.219E-04
SOIL ZONE 2:
     SUBLAYER  1
                                   SOIL MOISTURE (UG/ML)  1.797E-01
                                   ADSORBED SOIL (UG/G)   4.277E-01
                                   SOIL AIR (UG/ML)       3.611E-03
     SUBLAYER  2
                                   SOIL MOISTURE (UG/ML)  5.094E-01
                                   ADSORBED SOIL (UG/G)   1.212E+00
                                   SOIL AIR (UG/ML)       1.023E-02
LOWER SOIL ZONE:
     SUBLAYER  1
                                   SOIL MOISTURE (UG/ML)  8.598E-01
                                   ADSORBED SOIL (UG/G)   2.046E+00
                                   SOIL AIR (UG/ML)       1.727E-02
     SUBLAYER  2
                                   SOIL MOISTURE (UG/ML)  1.176E+00
                                   ADSORBED SOIL (UG/G)   2.799E+00
                                   SOIL AIR (UG/ML)       2.362E-02

                                   MAX. POLL. DEPTH (M)   1.067E+00

     YEAR -  29    MONTHLY RESULTS (OUTPUT)
     ========    ======================
     -- HYDROLOGIC CYCLE COMPONENTS --
                      OCT       NOV       DEC       JAN       FEB       MAR       APR       MAY       JUN       JUL       AUG       SEP
MOIS. IN L1 (%)     25.087    26.356    28.612    28.753    28.001    27.296    25.933    26.356    26.967    28.001    28.095    27.860
MOIS. BELOW L1 (%)  25.087    26.356    28.612    28.753    28.001    27.296    25.933    26.356    26.967    28.001    28.095    27.860
PRECIPATION (CM)     5.722     4.855     7.244     7.487     8.085     9.910     8.368    11.054    14.182    18.155    17.320    13.818
NET INFILT. (CM)     5.693     4.815     7.205     7.450     8.031     9.764     8.235    10.786    13.888    17.675    16.756    13.602
EVAPOTRANS. (CM)     7.063     4.571     2.973     3.462     5.565     8.320     8.566    10.353    12.285    13.520    12.436    10.168
MOIS. RETEN (CM)    -0.246     0.113     0.201     0.013    -0.067    -0.063    -0.121     0.038     0.055     0.092     0.009    -0.021
SUR. RUNOFF (CM)     0.029     0.040     0.039     0.037     0.055     0.146     0.133     0.269     0.294     0.480     0.564     0.216
GRW. RUNOFF (CM)    -1.124     0.131     4.032     3.975     2.532     1.506    -0.210     0.395     1.548     4.063     4.312     3.455
YIELD (CM)          -1.095     0.171     4.071     4.012     2.587     1.652    -0.076     0.664     1.842     4.543     4.875     3.671

PAU/MPA (GZU)        1.004     1.001     1.001     0.992     1.008     1.008     1.008     0.992     0.997     0.998     0.993     1.003
PA/MPA (GZ)          1.004     1.001     1.001     0.992     1.008     1.008     1.008     0.992     0.997     0.998     0.993     1.003

                                   -- POLLUTANT MASS INPUT TO COLUMN (UG) --
                                    ----------------------------------------
          OCT       NOV       DEC       JAN       FEB       MAR       APR       MAY       JUN       JUL       AUG       SEP
```

```
PRECIP.      0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LOAD UPPER   0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LOAD ZONE 2  0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LOAD LOWER   0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00

TOTAL INPUT  0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00

        -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
        ------------------------------------------------------------------------------------------------------------
    UPPER SOIL ZONE:
          SUBLAYER  1
VOLATILIZED 3.213E+05 3.010E+05 2.165E+05 2.116E+05 2.403E+05 2.680E+05 3.310E+05 3.095E+05 2.651E+05 1.973E+05 1.686E+05 1.605E+05
IN SOIL MOI 2.269E+05 2.643E+05 2.847E+05 2.827E+05 2.752E+05 2.658E+05 2.640E+05 2.655E+05 2.523E+05 2.246E+05 1.979E+05 1.837E+05
ADS ON SOIL 3.014E+06 3.342E+06 3.315E+06 3.276E+06 3.275E+06 3.244E+06 3.392E+06 3.356E+06 3.117E+06 2.673E+06 2.347E+06 2.198E+06
IN SOIL AIR 3.956E+03 4.210E+03 3.769E+03 3.739E+03 3.881E+03 3.959E+03 4.289E+03 4.102E+03 3.658E+03 2.963E+03 2.589E+03 2.471E+03

          SUBLAYER  2
DIFFUSED UP 1.049E+06 9.218E+05 6.415E+05 6.215E+05 7.016E+05 7.820E+05 9.575E+05 8.901E+05 7.793E+05 6.094E+05 5.503E+05 5.402E+05
IN SOIL MOI 9.439E+05 1.053E+06 1.124E+06 1.110E+06 1.077E+06 1.042E+06 1.021E+06 1.032E+06 1.006E+06 9.401E+05 8.583E+05 8.067E+05
ADS ON SOIL 1.254E+07 1.331E+07 1.308E+07 1.287E+07 1.281E+07 1.273E+07 1.311E+07 1.304E+07 1.243E+07 1.119E+07 1.018E+07 9.648E+06
IN SOIL AIR 1.646E+04 1.677E+04 1.488E+04 1.468E+04 1.518E+04 1.553E+04 1.658E+04 1.594E+04 1.459E+04 1.240E+04 1.123E+04 1.085E+04

    SOIL ZONE 2:
          SUBLAYER  1
DIFFUSED UP 2.871E+06 2.417E+06 1.647E+06 1.588E+06 1.784E+06 1.981E+06 2.403E+06 2.216E+06 1.960E+06 1.583E+06 1.490E+06 1.502E+06
IN SOIL MOI 5.734E+06 6.153E+06 6.518E+06 6.415E+06 6.187E+06 5.987E+06 5.770E+06 5.839E+06 5.818E+06 5.683E+06 5.384E+06 5.139E+06
ADS ON SOIL 7.615E+07 7.778E+07 7.590E+07 7.434E+07 7.362E+07 7.308E+07 7.414E+07 7.382E+07 7.189E+07 6.763E+07 6.386E+07 6.146E+07
IN SOIL AIR 9.996E+04 9.800E+04 8.630E+04 8.483E+04 8.725E+04 8.918E+04 9.374E+04 9.022E+04 8.436E+04 7.498E+04 7.047E+04 6.910E+04

          SUBLAYER  2
DIFFUSED UP 7.249E+06 6.037E+06 4.072E+06 3.899E+06 4.355E+06 4.822E+06 5.831E+06 5.363E+06 4.761E+06 3.888E+06 3.715E+06 3.793E+06
IN SOIL MOI 1.658E+07 1.751E+07 1.842E+07 1.804E+07 1.732E+07 1.675E+07 1.603E+07 1.623E+07 1.632E+07 1.626E+07 1.568E+07 1.511E+07
ADS ON SOIL 2.202E+08 2.213E+08 2.145E+08 2.090E+08 2.061E+08 2.044E+08 2.060E+08 2.052E+08 2.017E+08 1.935E+08 1.859E+08 1.807E+08
IN SOIL AIR 2.891E+05 2.789E+05 2.439E+05 2.385E+05 2.443E+05 2.495E+05 2.604E+05 2.507E+05 2.366E+05 2.145E+05 2.052E+05 2.031E+05

    LOWER SOIL ZONE:
          SUBLAYER  1
DIFFUSED UP 1.189E+07 9.738E+06 6.480E+06 6.153E+06 6.837E+06 7.563E+06 9.123E+06 8.379E+06 7.490E+06 6.214E+06 6.046E+06 6.252E+06
IN SOIL MOI 1.890E+07 1.974E+07 2.066E+07 2.015E+07 1.930E+07 1.867E+07 1.780E+07 1.804E+07 1.826E+07 1.842E+07 1.796E+07 1.740E+07
ADS ON SOIL 2.510E+08 2.496E+08 2.406E+08 2.335E+08 2.297E+08 2.279E+08 2.287E+08 2.281E+08 2.257E+08 2.192E+08 2.130E+08 2.081E+08
IN SOIL AIR 3.295E+05 3.145E+05 2.736E+05 2.664E+05 2.722E+05 2.781E+05 2.892E+05 2.787E+05 2.648E+05 2.431E+05 2.350E+05 2.340E+05

          SUBLAYER  2
DIFFUSED UP 1.111E+07 8.751E+06 5.769E+06 5.544E+06 6.187E+06 6.811E+06 8.087E+06 7.301E+06 6.539E+06 5.569E+06 5.613E+06 5.932E+06
IN SOIL MOI 2.608E+07 2.689E+07 2.817E+07 2.751E+07 2.631E+07 2.540E+07 2.403E+07 2.431E+07 2.475E+07 2.535E+07 2.503E+07 2.440E+07
ADS ON SOIL 3.464E+08 3.399E+08 3.281E+08 3.188E+08 3.131E+08 3.101E+08 3.088E+08 3.073E+08 3.058E+08 3.016E+08 2.968E+08 2.918E+08
IN SOIL AIR 4.547E+05 4.283E+05 3.730E+05 3.637E+05 3.711E+05 3.784E+05 3.904E+05 3.756E+05 3.588E+05 3.344E+05 3.276E+05 3.281E+05
GWR. RUNOFF 0.000E+00 8.848E+05 2.642E+07 2.530E+07 1.577E+07 9.249E+06 0.000E+00 2.393E+06 9.337E+06 2.426E+07 2.540E+07 2.003E+07

    -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --
    ------------------------------------------------------------------------------------------------------------------------
    UPPER SOIL ZONE:
          SUBLAYER  1
MOISTURE     9.421E-03 1.045E-02 1.036E-02 1.024E-02 1.024E-02 1.014E-02 1.060E-02 1.049E-02 9.745E-03 8.355E-03 7.335E-03 6.869E-03
%SOLUBILITY 3.140E-02 3.482E-02 3.454E-02 3.414E-02 3.412E-02 3.380E-02 3.535E-02 3.497E-02 3.248E-02 2.785E-02 2.445E-02 2.290E-02
ADSORBED     2.242E-02 2.486E-02 2.466E-02 2.437E-02 2.436E-02 2.413E-02 2.524E-02 2.497E-02 2.319E-02 1.988E-02 1.746E-02 1.635E-02
SOIL AIR     1.880E-04 2.124E-04 2.135E-04 2.134E-04 2.127E-04 2.093E-04 2.120E-04 2.070E-04 1.902E-04 1.624E-04 1.427E-04 1.345E-04

          SUBLAYER  2
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MOISTURE    3.919E-02 4.161E-02 4.090E-02 4.022E-02 4.004E-02 3.978E-02 4.099E-02 4.077E-02 3.887E-02 3.497E-02 3.182E-02 3.016E-02
%SOLUBILITY 1.306E-01 1.387E-01 1.363E-01 1.341E-01 1.335E-01 1.326E-01 1.366E-01 1.359E-01 1.296E-01 1.166E-01 1.061E-01 1.005E-01
ADSORBED    9.327E-02 9.904E-02 9.734E-02 9.573E-02 9.530E-02 9.467E-02 9.756E-02 9.702E-02 9.250E-02 8.322E-02 7.573E-02 7.178E-02
SOIL AIR    7.821E-04 8.462E-04 8.426E-04 8.381E-04 8.322E-04 8.208E-04 8.197E-04 8.042E-04 7.585E-04 6.799E-04 6.189E-04 5.903E-04

     SOIL ZONE 2:
          SUBLAYER  1
MOISTURE    1.587E-01 1.621E-01 1.582E-01 1.549E-01 1.534E-01 1.523E-01 1.545E-01 1.538E-01 1.498E-01 1.409E-01 1.331E-01 1.281E-01
%SOLUBILITY 5.290E-01 5.403E-01 5.273E-01 5.164E-01 5.114E-01 5.076E-01 5.150E-01 5.128E-01 4.994E-01 4.698E-01 4.436E-01 4.269E-01
ADSORBED    3.777E-01 3.858E-01 3.765E-01 3.687E-01 3.652E-01 3.624E-01 3.677E-01 3.661E-01 3.566E-01 3.354E-01 3.167E-01 3.048E-01
SOIL AIR    3.167E-03 3.296E-03 3.259E-03 3.228E-03 3.189E-03 3.143E-03 3.089E-03 3.035E-03 2.924E-03 2.740E-03 2.588E-03 2.507E-03

          SUBLAYER  2
MOISTURE    4.590E-01 4.612E-01 4.471E-01 4.356E-01 4.296E-01 4.260E-01 4.292E-01 4.275E-01 4.203E-01 4.032E-01 3.874E-01 3.765E-01
%SOLUBILITY 1.530E+00 1.537E+00 1.490E+00 1.452E+00 1.432E+00 1.420E+00 1.431E+00 1.425E+00 1.401E+00 1.344E+00 1.291E+00 1.255E+00
ADSORBED    1.092E+00 1.098E+00 1.064E+00 1.037E+00 1.022E+00 1.014E+00 1.021E+00 1.018E+00 1.000E+00 9.596E-01 9.221E-01 8.960E-01
SOIL AIR    9.160E-03 9.380E-03 9.211E-03 9.076E-03 8.927E-03 8.791E-03 8.583E-03 8.434E-03 8.202E-03 7.839E-03 7.535E-03 7.369E-03

     LOWER SOIL ZONE:
          SUBLAYER  1
MOISTURE    7.847E-01 7.803E-01 7.522E-01 7.299E-01 7.180E-01 7.123E-01 7.149E-01 7.129E-01 7.054E-01 6.853E-01 6.657E-01 6.506E-01
%SOLUBILITY 2.616E+00 2.601E+00 2.507E+00 2.433E+00 2.393E+00 2.374E+00 2.383E+00 2.376E+00 2.351E+00 2.284E+00 2.219E+00 2.169E+00
ADSORBED    1.868E+00 1.857E+00 1.790E+00 1.737E+00 1.709E+00 1.695E+00 1.702E+00 1.697E+00 1.679E+00 1.631E+00 1.584E+00 1.548E+00
SOIL AIR    1.566E-02 1.587E-02 1.550E-02 1.521E-02 1.492E-02 1.470E-02 1.430E-02 1.406E-02 1.377E-02 1.332E-02 1.295E-02 1.273E-02

          SUBLAYER  2
MOISTURE    1.083E+00 1.063E+00 1.026E+00 9.964E-01 9.788E-01 9.693E-01 9.652E-01 9.605E-01 9.558E-01 9.428E-01 9.279E-01 9.122E-01
%SOLUBILITY 3.609E+00 3.542E+00 3.418E+00 3.321E+00 3.263E+00 3.231E+00 3.217E+00 3.202E+00 3.186E+00 3.143E+00 3.093E+00 3.041E+00
ADSORBED    2.577E+00 2.529E+00 2.441E+00 2.371E+00 2.330E+00 2.307E+00 2.297E+00 2.286E+00 2.275E+00 2.244E+00 2.208E+00 2.171E+00
SOIL AIR    2.161E-02 2.161E-02 2.113E-02 2.076E-02 2.034E-02 2.000E-02 1.930E-02 1.895E-02 1.865E-02 1.833E-02 1.805E-02 1.785E-02


POL DEP CM  1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02 1.067E+02

                         YEAR -  29 ANNUAL SUMMARY REPORT
                          ================================
       -- TOTAL INPUTS (UG) --
UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
LOWER SOIL ZONE              0.000E+00

          -- HYDROLOGIC CYCLE COMPONENTS --
AVERAGE SOIL MOISTURE ZONE 1 (%)              27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        27.276
TOTAL PRECIPITATION (CM)                     126.201
TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918

         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
         ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
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     UPPER SOIL ZONE:
          SUBLAYER  1
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          TOTAL VOLATILIZED                  2.991E+06
     SUBLAYER  2
          TOTAL DIFFUSED (UP)                9.044E+06
SOIL ZONE 2:
     SUBLAYER  1
          TOTAL DIFFUSED (UP)                2.344E+07
     SUBLAYER  2
          TOTAL DIFFUSED (UP)                5.779E+07
LOWER SOIL ZONE:
     SUBLAYER  1
          TOTAL DIFFUSED (UP)                9.216E+07
     SUBLAYER  2
          TOTAL DIFFUSED (UP)                8.322E+07
          TOTAL IN GROUNDWATER RUNOFF        1.590E+08

                  -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                  ------------------------------------------------------------------------------

UPPER SOIL ZONE:
     SUBLAYER  1
                              SOIL MOISTURE (UG/ML)  9.521E-03
                              ADSORBED SOIL (UG/G)   2.266E-02
                              SOIL AIR (UG/ML)       1.915E-04
     SUBLAYER  2
                              SOIL MOISTURE (UG/ML)  3.828E-02
                              ADSORBED SOIL (UG/G)   9.110E-02
                              SOIL AIR (UG/ML)       7.695E-04
SOIL ZONE 2:
     SUBLAYER  1
                              SOIL MOISTURE (UG/ML)  1.500E-01
                              ADSORBED SOIL (UG/G)   3.570E-01
                              SOIL AIR (UG/ML)       3.014E-03
     SUBLAYER  2
                              SOIL MOISTURE (UG/ML)  4.252E-01
                              ADSORBED SOIL (UG/G)   1.012E+00
                              SOIL AIR (UG/ML)       8.542E-03
LOWER SOIL ZONE:
     SUBLAYER  1
                              SOIL MOISTURE (UG/ML)  7.177E-01
                              ADSORBED SOIL (UG/G)   1.708E+00
                              SOIL AIR (UG/ML)       1.442E-02
     SUBLAYER  2
                              SOIL MOISTURE (UG/ML)  9.817E-01
                              ADSORBED SOIL (UG/G)   2.336E+00
                              SOIL AIR (UG/ML)       1.972E-02

                              MAX. POLL. DEPTH (M)   1.067E+00


     YEAR -  30    MONTHLY RESULTS (OUTPUT)
     ========    ========================
     -- HYDROLOGIC CYCLE COMPONENTS --
                        OCT      NOV      DEC      JAN      FEB      MAR      APR      MAY      JUN      JUL      AUG      SEP
MOIS. IN L1 (%)      25.087   26.356   28.612   28.753   28.001   27.296   25.933   26.356   26.967   28.001   28.095   27.860
MOIS. BELOW L1 (%)   25.087   26.356   28.612   28.753   28.001   27.296   25.933   26.356   26.967   28.001   28.095   27.860
PRECIPATION (CM)      5.722    4.855    7.244    7.487    8.085    9.910    8.368   11.054   14.182   18.155   17.320   13.818
NET INFILT. (CM)      5.693    4.815    7.205    7.450    8.031    9.764    8.235   10.786   13.888   17.675   16.756   13.602
EVAPOTRANS. (CM)      7.063    4.571    2.973    3.462    5.565    8.320    8.566   10.353   12.285   13.520   12.436   10.168
MOIS. RETEN (CM)     -0.246    0.113    0.201    0.013   -0.067   -0.063   -0.121    0.038    0.055    0.092    0.009   -0.021
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SUR. RUNOFF (CM)	0.029	0.040	0.039	0.037	0.055	0.146	0.133	0.269	0.294	0.480	0.564	0.216
GRW. RUNOFF (CM)	-1.124	0.131	4.032	3.975	2.532	1.506	-0.210	0.395	1.548	4.063	4.312	3.455
YIELD (CM)	-1.095	0.171	4.071	4.012	2.587	1.652	-0.076	0.664	1.842	4.543	4.875	3.671
PAU/MPA (GZU)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003
PA/MPA (GZ)	1.004	1.001	1.001	0.992	1.008	1.008	1.008	0.992	0.997	0.998	0.993	1.003

-- POLLUTANT MASS INPUT TO COLUMN (UG) --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

-- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED

UPPER SOIL ZONE:												
SUBLAYER 1												
VOLATILIZED	2.681E+05	2.512E+05	1.807E+05	1.767E+05	2.005E+05	2.237E+05	2.762E+05	2.583E+05	2.213E+05	1.647E+05	1.407E+05	1.340E+05
IN SOIL MOI	1.894E+05	2.206E+05	2.376E+05	2.360E+05	2.297E+05	2.218E+05	2.204E+05	2.216E+05	2.106E+05	1.875E+05	1.651E+05	1.534E+05
ADS ON SOIL	2.516E+06	2.789E+06	2.767E+06	2.735E+06	2.733E+06	2.708E+06	2.831E+06	2.802E+06	2.602E+06	2.231E+06	1.959E+06	1.834E+06
IN SOIL AIR	3.302E+03	3.514E+03	3.146E+03	3.121E+03	3.239E+03	3.305E+03	3.580E+03	3.424E+03	3.053E+03	2.473E+03	2.161E+03	2.062E+03
SUBLAYER 2												
DIFFUSED UP	8.757E+05	7.694E+05	5.354E+05	5.188E+05	5.856E+05	6.527E+05	7.992E+05	7.429E+05	6.504E+05	5.087E+05	4.593E+05	4.509E+05
IN SOIL MOI	7.878E+05	8.789E+05	9.378E+05	9.268E+05	8.985E+05	8.701E+05	8.519E+05	8.610E+05	8.399E+05	7.847E+05	7.164E+05	6.733E+05
ADS ON SOIL	1.046E+07	1.111E+07	1.092E+07	1.074E+07	1.069E+07	1.062E+07	1.095E+07	1.089E+07	1.038E+07	9.337E+06	8.496E+06	8.053E+06
IN SOIL AIR	1.373E+04	1.400E+04	1.242E+04	1.226E+04	1.267E+04	1.296E+04	1.384E+04	1.330E+04	1.218E+04	1.035E+04	9.376E+03	9.054E+03
SOIL ZONE 2:												
SUBLAYER 1												
DIFFUSED UP	2.396E+06	2.018E+06	1.375E+06	1.326E+06	1.489E+06	1.654E+06	2.006E+06	1.849E+06	1.636E+06	1.321E+06	1.243E+06	1.254E+06
IN SOIL MOI	4.786E+06	5.135E+06	5.440E+06	5.354E+06	5.164E+06	4.997E+06	4.816E+06	4.874E+06	4.856E+06	4.744E+06	4.494E+06	4.289E+06
ADS ON SOIL	6.356E+07	6.492E+07	6.335E+07	6.205E+07	6.145E+07	6.100E+07	6.188E+07	6.162E+07	6.000E+07	5.645E+07	5.330E+07	5.130E+07
IN SOIL AIR	8.343E+04	8.180E+04	7.203E+04	7.080E+04	7.282E+04	7.444E+04	7.824E+04	7.531E+04	7.041E+04	6.258E+04	5.881E+04	5.768E+04
SUBLAYER 2												
DIFFUSED UP	6.050E+06	5.039E+06	3.399E+06	3.254E+06	3.635E+06	4.025E+06	4.867E+06	4.476E+06	3.974E+06	3.246E+06	3.100E+06	3.166E+06
IN SOIL MOI	1.384E+07	1.461E+07	1.538E+07	1.506E+07	1.446E+07	1.398E+07	1.338E+07	1.355E+07	1.362E+07	1.357E+07	1.308E+07	1.261E+07
ADS ON SOIL	1.838E+08	1.847E+08	1.791E+08	1.745E+08	1.721E+08	1.706E+08	1.719E+08	1.712E+08	1.683E+08	1.615E+08	1.552E+08	1.508E+08
IN SOIL AIR	2.413E+05	2.328E+05	2.036E+05	1.991E+05	2.039E+05	2.082E+05	2.174E+05	2.093E+05	1.975E+05	1.790E+05	1.712E+05	1.695E+05
LOWER SOIL ZONE:												
SUBLAYER 1												
DIFFUSED UP	9.923E+06	8.129E+06	5.409E+06	5.136E+06	5.707E+06	6.313E+06	7.616E+06	6.994E+06	6.252E+06	5.187E+06	5.047E+06	5.219E+06
IN SOIL MOI	1.578E+07	1.648E+07	1.725E+07	1.682E+07	1.611E+07	1.558E+07	1.486E+07	1.506E+07	1.525E+07	1.538E+07	1.499E+07	1.453E+07
ADS ON SOIL	2.095E+08	2.084E+08	2.009E+08	1.949E+08	1.917E+08	1.902E+08	1.909E+08	1.904E+08	1.884E+08	1.830E+08	1.778E+08	1.737E+08
IN SOIL AIR	2.751E+05	2.625E+05	2.284E+05	2.224E+05	2.272E+05	2.321E+05	2.414E+05	2.327E+05	2.210E+05	2.029E+05	1.962E+05	1.953E+05
SUBLAYER 2												
DIFFUSED UP	9.279E+06	7.306E+06	4.816E+06	4.628E+06	5.165E+06	5.686E+06	6.751E+06	6.095E+06	5.458E+06	4.649E+06	4.686E+06	4.951E+06
IN SOIL MOI	2.177E+07	2.244E+07	2.352E+07	2.296E+07	2.197E+07	2.120E+07	2.006E+07	2.029E+07	2.066E+07	2.116E+07	2.089E+07	2.037E+07
ADS ON SOIL	2.892E+08	2.837E+08	2.739E+08	2.661E+08	2.614E+08	2.588E+08	2.578E+08	2.565E+08	2.552E+08	2.518E+08	2.478E+08	2.436E+08
IN SOIL AIR	3.795E+05	3.575E+05	3.114E+05	3.036E+05	3.098E+05	3.159E+05	3.259E+05	3.135E+05	2.995E+05	2.791E+05	2.734E+05	2.739E+05
GWR. RUNOFF	0.000E+00	7.386E+05	2.205E+07	2.112E+07	1.316E+07	7.721E+06	0.000E+00	1.998E+06	7.794E+06	2.025E+07	2.120E+07	1.672E+07

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS ARE ZERO FOR EACH MONTH, THEY ARE NOT PRINTED --

UPPER SOIL ZONE:

SUBLAYER 1

MOISTURE	7.863E-03	8.719E-03	8.649E-03	8.548E-03	8.544E-03	8.464E-03	8.851E-03	8.757E-03	8.134E-03	6.974E-03	6.122E-03	5.734E-03
%SOLUBILITY	2.621E-02	2.906E-02	2.883E-02	2.849E-02	2.848E-02	2.821E-02	2.950E-02	2.919E-02	2.711E-02	2.325E-02	2.041E-02	1.911E-02
ADSORBED	1.871E-02	2.075E-02	2.059E-02	2.035E-02	2.033E-02	2.015E-02	2.106E-02	2.084E-02	1.936E-02	1.660E-02	1.457E-02	1.365E-02
SOIL AIR	1.569E-04	1.773E-04	1.782E-04	1.781E-04	1.776E-04	1.747E-04	1.770E-04	1.727E-04	1.587E-04	1.356E-04	1.191E-04	1.122E-04

SUBLAYER 2

MOISTURE	3.271E-02	3.473E-02	3.414E-02	3.357E-02	3.342E-02	3.320E-02	3.422E-02	3.403E-02	3.244E-02	2.919E-02	2.656E-02	2.517E-02
%SOLUBILITY	1.090E-01	1.158E-01	1.138E-01	1.119E-01	1.114E-01	1.107E-01	1.141E-01	1.134E-01	1.081E-01	9.729E-02	8.853E-02	8.391E-02
ADSORBED	7.784E-02	8.266E-02	8.125E-02	7.990E-02	7.955E-02	7.902E-02	8.143E-02	8.098E-02	7.721E-02	6.946E-02	6.321E-02	5.991E-02
SOIL AIR	6.528E-04	7.063E-04	7.033E-04	6.995E-04	6.946E-04	6.851E-04	6.842E-04	6.712E-04	6.331E-04	5.675E-04	5.165E-04	4.927E-04

SOIL ZONE 2:

SUBLAYER 1

MOISTURE	1.325E-01	1.353E-01	1.320E-01	1.293E-01	1.281E-01	1.271E-01	1.290E-01	1.284E-01	1.250E-01	1.176E-01	1.111E-01	1.069E-01
%SOLUBILITY	4.415E-01	4.510E-01	4.401E-01	4.310E-01	4.269E-01	4.237E-01	4.298E-01	4.280E-01	4.168E-01	3.921E-01	3.702E-01	3.564E-01
ADSORBED	3.153E-01	3.220E-01	3.142E-01	3.078E-01	3.048E-01	3.025E-01	3.069E-01	3.056E-01	2.976E-01	2.800E-01	2.643E-01	2.544E-01
SOIL AIR	2.644E-03	2.751E-03	2.720E-03	2.694E-03	2.661E-03	2.623E-03	2.579E-03	2.533E-03	2.440E-03	2.287E-03	2.160E-03	2.092E-03

SUBLAYER 2

MOISTURE	3.831E-01	3.850E-01	3.732E-01	3.636E-01	3.585E-01	3.556E-01	3.582E-01	3.569E-01	3.508E-01	3.365E-01	3.234E-01	3.142E-01
%SOLUBILITY	1.277E+00	1.283E+00	1.244E+00	1.212E+00	1.195E+00	1.185E+00	1.194E+00	1.190E+00	1.169E+00	1.122E+00	1.078E+00	1.047E+00
ADSORBED	9.117E-01	9.163E-01	8.881E-01	8.653E-01	8.533E-01	8.463E-01	8.526E-01	8.493E-01	8.349E-01	8.009E-01	7.696E-01	7.479E-01
SOIL AIR	7.646E-03	7.829E-03	7.688E-03	7.575E-03	7.451E-03	7.338E-03	7.164E-03	7.039E-03	6.846E-03	6.543E-03	6.289E-03	6.150E-03

LOWER SOIL ZONE:

SUBLAYER 1

MOISTURE	6.550E-01	6.513E-01	6.278E-01	6.092E-01	5.994E-01	5.946E-01	5.968E-01	5.951E-01	5.888E-01	5.720E-01	5.556E-01	5.431E-01
%SOLUBILITY	2.183E+00	2.171E+00	2.093E+00	2.031E+00	1.998E+00	1.982E+00	1.989E+00	1.984E+00	1.963E+00	1.907E+00	1.852E+00	1.810E+00
ADSORBED	1.559E+00	1.550E+00	1.494E+00	1.450E+00	1.426E+00	1.415E+00	1.420E+00	1.416E+00	1.401E+00	1.361E+00	1.322E+00	1.292E+00
SOIL AIR	1.307E-02	1.324E-02	1.293E-02	1.269E-02	1.246E-02	1.227E-02	1.193E-02	1.174E-02	1.149E-02	1.112E-02	1.081E-02	1.063E 02

SUBLAYER 2

MOISTURE	9.039E-01	8.870E-01	8.560E-01	8.317E-01	8.171E-01	8.091E-01	8.057E-01	8.018E-01	7.978E-01	7.870E-01	7.745E-01	7.615E 01
%SOLUBILITY	3.013E+00	2.957E+00	2.853E+00	2.772E+00	2.724E+00	2.697E+00	2.686E+00	2.673E+00	2.659E+00	2.623E+00	2.582E+00	2.538E+00
ADSORBED	2.151E+00	2.111E+00	2.037E+00	1.980E+00	1.945E+00	1.926E+00	1.918E+00	1.908E+00	1.899E+00	1.873E+00	1.843E+00	1.812E+00
SOIL AIR	1.804E-02	1.804E-02	1.764E-02	1.733E-02	1.698E-02	1.670E-02	1.611E-02	1.582E-02	1.557E-02	1.530E-02	1.506E-02	1.490E-02

POL DEP CM	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02	1.067E+02

YEAR - 30 ANNUAL SUMMARY REPORT

-- TOTAL INPUTS (UG) --

UPPER SOIL ZONE	0.000E+00
SOIL ZONE 2	0.000E+00
LOWER SOIL ZONE	0.000E+00

-- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)	27.276
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)	27.276
TOTAL PRECIPITATION (CM)	126.201

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TOTAL INFILTRATION (CM)                      123.899
TOTAL EVAPOTRANSPIRATION (CM)                 99.280
TOTAL SURFACE RUNOFF (CM)                      2.302
TOTAL GRW RUNOFF (CM)                         24.616
TOTAL MOISTURE RETENTION (CM)                  0.003
TOTAL YIELD (CM)                              26.918
        -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT IS ZERO EACH MONTH, IT IS NOT PRINTED
        ---------------------------------------------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AND PURE PHASE FOR EACH SUBLAYER, SEE ABOVE (MONTH SEP)
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     UPPER SOIL ZONE:
          SUBLAYER  1
               TOTAL VOLATILIZED                 2.496E+06
          SUBLAYER  2
               TOTAL DIFFUSED (UP)               7.549E+06
     SOIL ZONE 2:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)               1.957E+07
          SUBLAYER  2
               TOTAL DIFFUSED (UP)               4.823E+07
     LOWER SOIL ZONE:
          SUBLAYER  1
               TOTAL DIFFUSED (UP)               7.693E+07
          SUBLAYER  2
               TOTAL DIFFUSED (UP)               6.947E+07
               TOTAL IN GROUNDWATER RUNOFF       1.328E+08

                       -- AVERAGE POLLUTANT CONCENTRATIONS --  NOTE: ONLY NON-ZERO VALUES ARE PRINTED --
                        ------------------------------------------------------------------------------
     UPPER SOIL ZONE:
          SUBLAYER  1
                                    SOIL MOISTURE (UG/ML)  7.947E-03
                                    ADSORBED SOIL (UG/G)   1.891E-02
                                    SOIL AIR (UG/ML)       1.598E-04
          SUBLAYER  2
                                    SOIL MOISTURE (UG/ML)  3.195E-02
                                    ADSORBED SOIL (UG/G)   7.604E-02
                                    SOIL AIR (UG/ML)       6.422E-04
     SOIL ZONE 2:
          SUBLAYER  1
                                    SOIL MOISTURE (UG/ML)  1.252E-01
                                    ADSORBED SOIL (UG/G)   2.979E-01
                                    SOIL AIR (UG/ML)       2.515E-03
          SUBLAYER  2
                                    SOIL MOISTURE (UG/ML)  3.549E-01
                                    ADSORBED SOIL (UG/G)   8.447E-01
                                    SOIL AIR (UG/ML)       7.130E-03
     LOWER SOIL ZONE:
          SUBLAYER  1
                                    SOIL MOISTURE (UG/ML)  5.991E-01
                                    ADSORBED SOIL (UG/G)   1.426E+00
                                    SOIL AIR (UG/ML)       1.203E-02
          SUBLAYER  2
                                    SOIL MOISTURE (UG/ML)  8.194E-01
                                    ADSORBED SOIL (UG/G)   1.950E+00
                                    SOIL AIR (UG/ML)       1.646E-02

                                    MAX. POLL. DEPTH (M)   1.067E+00
****************************************EXECUTION COMPLETED****************************************
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