



FORS COM

CORRECTIVE ACTION PLAN

Part B

FINAL



3d Inf Div (Mech)

Former Pumphouse #1
Facility ID #9-025085
Former Building 8060
Hunter Army Airfield, Georgia

Prepared for



U.S. ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT

Contract No. DACA21-95-D-0022
Delivery Order 0061

August 2000

DOCUMENT 13



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: Former Pumphouse #1 Site

Street Address: Former Building 8060, near Taxiway 3

City: Hunter Army Airfield **County:** Chatham

Facility ID #: 9-025085

Submitted by UST Owner/Operator:

Name: Thomas C. Fry/Environmental Branch
Company: US Army/HQ 3d Inf. Div (Mech)
Address: Directorate of Public Works, Bldg 1137
1550 Frank Cochran Drive
City: Fort Stewart State: GA
Zip Code: 31314-4927

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: _____ Date: _____

B. Professional Engineer or Professional Geologist

Name: Patricia Stoll

Signature: _____

Date: _____

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:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Soil (Section II.A.1) | <input checked="" type="checkbox"/> Groundwater (Section II.A.2) |
| <input checked="" type="checkbox"/> Free Product (Section II.A.3) | <input checked="" type="checkbox"/> 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 (Figures 19 and 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) _____

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

FINAL

**CORRECTIVE ACTION PLAN
PART B
FORMER PUMPHOUSE #1
FACILITY IDENTIFICATION NUMBER #9-025085
FORMER BUILDING 8060
HUNTER ARMY AIRFIELD, GEORGIA**

Prepared for:
U.S. Army Corps of Engineers
Savannah District
Under Contract Number DACA21-95-D-0022
Delivery Order Number 0061

Prepared by:
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION
800 Oak Ridge Turnpike
Oak Ridge, Tennessee 37831

August 2000

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List of Acronyms

AT123D	Analytical Transient 1-, 2-, 3-Dimensional Model
ACE	Anderson Columbia Environmental, Inc.
ACL	alternate concentration limit
ARAR	applicable or relevant and appropriate requirement
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
ATL	alternate threshold level
BGS	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
CAP	Corrective Action Plan
COPC	chemical of potential concern
DAACG	Departure/Arrival Air Control Group
DAF	dilution attenuation factor
DO	dissolved oxygen
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
M&E	Metcalf & Eddy
MCL	maximum contaminant level
MTBE	methyl tert-butyl ether
NCO	noncommissioned officer
NPDES	National Pollutant Discharge Elimination System
NRC	no regulatory criteria
ORP	oxygen reduction potential
PAH	polynuclear aromatic hydrocarbon
PVC	polyvinyl chloride
RBCA	risk-based corrective action
SAIC	Science Applications International Corporation
SI	Site Investigation
STL	soil threshold level
SVE	soil vapor extraction
TOC	total organic carbon
TPH	total petroleum hydrocarbons
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey
UST	underground storage tank
USTMP	Underground Storage Tank Management Program
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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Insert Georgia Department of Natural Resources Form

II. SITE INVESTIGATION REPORT

This document represents the Site Investigation (SI) Report for the Former Pumphouse #1, Facility ID #9-025085, Former Building 8060, 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 Former Pumphouse #1 site is located along the east-west taxiway of HAAF, as illustrated in Figure 1. The Former Pumphouse #1 site is located within an average or higher groundwater pollution susceptibility area and is greater than 500 feet from a withdrawal point and less than 500 feet from a surface water body. 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 B, Column 1 of GUST Rules 391-5-15 because a surface water body is located less than 500 feet from the site.

According to the operational information provided by the HAAF Directorate of Public Works (DPW), Former Pumphouse #1 was an aviation gas fuel island that was used from about 1953 until the early 1970s and consisted of ten 25,000-gallon underground storage tanks (USTs) and a 50,000-gallon underground defueling tank. The pumphouse was inactive from the 1970s to 1995.

In 1995, eight of the 25,000-gallon USTs were removed by Anderson Columbia Environmental, Inc. (ACE). The 50,000-gallon defueling tank and two of the 25,000-gallon tanks remained in place, partially under the pumphouse structure. The 8-inch cast-iron piping internal to the Former Pumphouse #1 facility was removed prior to the tank removal exercise. During UST closure activities, benzene, toluene, ethylbenzene, and xylenes (BTEX), polynuclear aromatic hydrocarbons (PAHs), and total petroleum hydrocarbons (TPH) were detected in the soil samples. Samples of the groundwater seeping into the excavation also contained the presence of BTEX and PAH constituents in the groundwater at the site. Free product was not observed during tank removal activities.

In 1996, Metcalf & Eddy (M&E) conducted a CAP-Part A investigation. The CAP-Part A Report for Pumphouse #1 (M&E 1997) was submitted to GA EPD in May 1997 and describes the results of 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 and vertical extent of petroleum contamination in soil and groundwater to concentrations below the applicable STL or In-Stream Water Quality Standards (IWQS), and
- assess the potential impact of petroleum contaminants to surface water and sediment in the drainage ditch located south (downgradient) of the site.

Based on the findings of the CAP-Part A, a CAP-Part B SI was conducted by M&E in May 1997 to determine the nature and extent of petroleum contamination. On January 27, 1999, representatives from GA EPD Underground Storage Tank Management Program (USTMP), U.S. Army Corps of Engineers (USACE), Fort Stewart DPW, and M&E met to discuss issues regarding the completion of the CAP-Part B Report. Representatives of GA EPD USTMP confirmed that the surface water drainage feature located south of the Former Pumphouse #1 constitutes a surface water body regulated by the State of Georgia under the IWQS and, as such, should be considered as the most likely receptor. In addition, representatives of GA EPD USTMP concurred that Georgia Rule, Chapter 391-3-15, Table B, Column 1, STLs are the appropriate soil screening criteria for the site. As a result of the meeting, additional surface water sampling locations were determined to be necessary downgradient of the groundwater plume

emanating from the former tank pit area. In addition, it was determined that installing monitoring wells on the south side of the drainage ditch was necessary prior to submitting the CAP-Part B Report to GA EPD. M&E performed the additional work in February and November 1999.

In 1998, Earth Tech, Inc., removed the remaining two 25,000-gallon USTs, closed the 50,000-gallon defueling tank, and removed the pumphouse structure. Soil and groundwater samples were not collected during the 1998 tank removal activities because the tanks were being removed from an area of known soil contamination that was determined during the CAP-Part A investigation. GA EPD approved the request to not conduct soil sampling at the site in correspondence dated June 17, 1998 (White 1998). The piping from the boundary of the pumphouse facility to the bulk fuel farm was also drained, pigged, and grouted in-place.

CAP-Part A and CAP-Part B investigations were conducted at the DAACG Facility in 1995 and 1996, respectively. These investigations covered the active tarmac north of the active taxiway. Various closure activities, CAP-Part A, and CAP-Part B investigations at the Former Pumphouse #1 site were performed between 1995 and 2000. The Former Pumphouse #1 investigations covered an area south of the active taxiway. Review of the analytical data from all of the investigations indicated that it was necessary to combine the DAACG Facility data and the Former Pumphouse #1 data into a single report to document that the nature and extent of contamination has been determined. In order to distinguish well and boring locations between the DAACG Facility and Former Pumphouse #1 investigations, the well/boring identifiers are prefixed with a "D" or "P1," respectively. In some areas of this document, including the boring logs and well construction diagrams, the DAACG Facility wells or borings may be prefixed with "H833," which is the building number associated with the DAACG Facility.

As indicated in correspondence to GA EPD USTMP, which was dated February 29, 2000 (Perez 2000), there are two distinct and separate plumes located within the vicinity of the Former Pumphouse #1 site. Release #1 is an area of soil and groundwater contamination located near the Departure/Arrival Air Control Group (DAACG) Facility that is in the vicinity of Former Fuel Pits 1A and 1B, located approximately 900 feet west of former Building 8060 (i.e., Pumphouse #1). Throughout this document, Release #1 will be referred to as the Former Fuel Pit 1A/DAACG area. Release #2 is an area of soil and groundwater contamination located near the Former Pumphouse #1 facility and Former Fuel Pits 1C and 1D, located approximately 200 feet north of the former tank pits. Throughout this document Release #2 will be referred to as the Former Pumphouse #1 tank pit area. Based on the proximity of the various former fuel pits to the areas of contamination, it appears that a release from Former Fuel Pit 1A is responsible for the contamination associated with Release #1 and that a release from Former Fuel Pit 1C is responsible for the contamination associated with Release #2.

Science Applications International Corporation (SAIC) used the data collected by M&E in 1997 and 1999 to prepare this CAP-Part B Report for the Fort Stewart DPW, Environmental Branch, through the USACE, Savannah District, under contract DACA21-95-D-0022, delivery order 0061. In addition, in 2000, SAIC performed selected groundwater sampling to fill data gaps.

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 UST Closure, CAP-Part A SI, and CAP-Part B SI. The activities associated with each investigation are summarized below.

Pumphouse #1 UST Closure (conducted in 1995 by ACE.)

- Removed eight 25,000-gallon USTs (USTs 32 – 39).

- Collected three soil samples from the side walls of the excavation for BTEX, PAH, and TPH analyses.
- Collected eight groundwater samples from water seeping into the excavation for BTEX and PAH analysis.

Pumphouse #1 CAP-Part A SI (conducted in 1996 by M&E)

- Conducted a soil vapor survey.
- Installed 14 soil borings (P1-SB01 through P1-SB08 and P1-SB19 through P1-SB24) and five well borings (P1-MW01, P1-MW02, P1-MW03, P1-MW11, and P1-MW12) to collect soil samples for BTEX, PAHs, TPH-diesel-range organics (DRO), TPH-gasoline-range organics (GRO), and volatile organic compound (VOC) headspace analyses.
- Installed five monitoring wells (P1-MW01, P1-MW02, P1-MW03, P1-MW11, and P1-MW12) to collect groundwater samples for BTEX and PAH analyses.
- Collected four surface water samples for BTEX and PAH analyses.
- Collected four sediment samples for BTEX, PAHs, TPH-DRO, and TPH-GRO analyses.

Pumphouse #1 CAP-Part B SI (conducted in 1997 by M&E)

- Drilled 17 soil borings (P1-SB25 through P1-SB41) and 12 well borings (P1-MW13 through P1-MW24) to collect soil samples for BTEX, PAHs, TPH-DRO, TPH-GRO, VOC headspace, and geotechnical analyses.
- Installed 12 monitoring wells (P1-MW13 through P1-MW24) to collect groundwater samples for BTEX, PAHs, and water quality analyses.
- Collected a comprehensive round of site water level measurements.

Additional Pumphouse #1 UST Closure Activities (conducted in 1998 by Earth Tech)

- Removed two 25,000-gallon USTs (i.e., USTs 30 & 31).
- Closed in-place one 50,000-gallon underground defueling tank (i.e., UST 50).
- Demolished Pumphouse #1 (Building 8060).
- With GA EPD concurrence, no soil or groundwater samples were collected during these removal activities.

Additional Former Pumphouse #1 CAP-Part B Activities (conducted in 1999 by M&E)

- Collected five surface water samples for BTEX and PAHs from a man-made drainage ditch located downgradient of the site and installed five stream gauges, as requested by GA EPD.
- Installed one monitoring well (P1-MW36) on the south side of the drainage ditch to collect a groundwater sample, as requested by GA EPD.

- Installed one 4-inch monitoring well (P1-MW42) west (i.e., downgradient) of the Former Fuel Pit 1A/DAACG area of contamination to collect a groundwater sample.
- Installed one monitoring well (P1-MW40) to perform an aquifer test.
- Collected 14 groundwater samples for BTEX, PAH, and natural attenuation parameters.
- Collected geochemical information to evaluate natural attenuation of petroleum hydrocarbons at the site.

Data Gap Groundwater Sampling (conducted in 2000 by SAIC)

- Collected groundwater samples from D-MW01, D-MW05, D-MW08, D-MW11, D-MW13, D-MW17, P1-MW11, and P1-MW13.

The CAP-Part A and Part B SI soil/sediment and groundwater/surface water analytical laboratory results are included in Appendices V and VIII, respectively, of this document.

II.A.1. Delineation of Soil Contamination

Petroleum-related contaminants detected in soil at the Former Pumphouse #1 site during the UST closure, CAP-Part A SI, CAP-Part B SI, and the DAACG Facility CAP-Part A and CAP-Part B SI included BTEX, TPH-DRO, TPH-GRO, and numerous PAH compounds. Specifics regarding the concentrations are discussed for each investigation in the following sections.

Results from the various investigations indicate that there were two separate areas of soil contamination. These areas consist of the area in the vicinity of the former tank pits near the former pumphouse and in the vicinity around Former Fuel Pit 1A/DAACG area.

II.A.1.a. Contaminant concentrations

II.A.1.a.1. Former Pumphouse #1 UST Closure (1995)

During the UST closure conducted in 1995, three soil samples were collected from the sidewalls of the excavation. The analytical results are presented in Tables 1a and 1b. BTEX, PAH constituents, and TPH were detected in all three soil samples. The detection limit for benzene in two samples exceeds the STL of 0.017 mg/kg. The concentration of benzo(a)pyrene in one sample exceeded the STL of 0.660 mg/kg. None of the other constituents exceeded their respective STLs.

II.A.1.a.2. DAACG Facility CAP-Part A Site Investigation (March 1995)

The DAACG CAP-Part A SI was initiated after contaminated groundwater was observed during the geotechnical investigation associated with the design of the foundation for the new DAACG building that was to be constructed. The investigation was limited to an area around the current DAACG building. During the CAP-Part A SI, 21 soil samples were collected from 10 soil borings. Low concentrations of toluene, below the STL of 6 mg/kg, were detected in five of the soil samples. All other BTEX, PAH, TPH-DRO, and TPH-GRO constituents were below the detection limits.

II.A.1.a.3. DAACG Facility CAP-Part B Site Investigation (May 1996)

During the CAP-Part B SI, 184 soil samples were collected from 50 soil borings and 32 monitoring wells scattered throughout the DAACG Facility investigation area as presented in Figure 2. This investigation

covered the active area of the tarmac located north of the Former Pumphouses #1 and #2 and west of Pumphouses #3, #4, and #5. The area of this investigation covers more than the areas of contamination associated with the Former Pumphouse #1 tank pit area and Former Fuel Pit 1A/DAACG area. The analytical results were provided in the CAP-Part B Report (M&E 1996) and are summarized in tabular format in Appendix V (beginning on page V-219). The data are presented in Figures 3a through 3e of this report with the Former Pumphouse #1 CAP-Part A and CAP-Part B data. BTEX, acenaphthylene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, chrysene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, pyrene, TPH-DRO, and TPH-GRO were detected in soil samples throughout the investigation area. Results from the CAP-Part B SI at the DAACG Facility indicate that the extent of soil contamination to the south was not determined, but would be investigated as part of the CAP-Part A and CAP-Part B investigations associated with Former Pumphouse #1.

In the vicinity of the Former Fuel Pit 1A/DAACG area, concentrations of benzene, toluene, ethylbenzene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and indeno(1,2,3-cd) exceeded the applicable GUST STLs (i.e., Table B, Column 1) during the CAP-Part B SI.

In the vicinity of the Former Pumphouse #1 tank pit area, concentrations of benzene and ethylbenzene exceeded the applicable GUST STLs (i.e., Table B, Column 1) during the CAP-Part B SI.

II.A.1.a.4. Former Pumphouse #1 CAP-Part A Site Investigation (November 1996)

During the CAP-Part A SI, 38 soil samples were collected from 19 soil borings and monitoring wells (P1-SB01 through P1-SB08, P1-SB19 through P1-SB24, P1-MW01, P1-MW02, P1-MW03, P1-MW11, and P1-MW12) as presented in Figure 2. The analytical results are presented in Tables 2a and 2b and Figures 3a and 3b. The results of soil samples collected during the CAP-Part A investigation are summarized below.

- Benzene was detected in 11 of the 38 soil samples at concentrations ranging from 0.16J mg/kg to 5.5J mg/kg; however, there were 7 samples with detection limits above the benzene STL of 0.017 mg/kg.
- Toluene was detected in 21 of the 38 soil samples at concentrations ranging from 0.0041J mg/kg to 160 mg/kg. Only one of the concentrations exceeded the toluene STL of 115 mg/kg.
- Ethylbenzene was detected in 23 of the 38 soil samples at concentrations ranging from 0.0067 mg/kg to 96J mg/kg. Only four of the concentrations exceeded the ethylbenzene STL of 18 mg/kg.
- Xylenes were detected in 34 of the 38 soil samples at concentrations ranging from 0.0015J mg/kg to 260J mg/kg. These concentrations did not exceed the xylenes STL of 700 mg/kg.
- Twelve PAH compounds were detected in 16 of the 38 soil samples with concentrations of benzo(a)pyrene, benzo(b)fluoranthene, and chrysene exceeding the STL of 0.660 mg/kg.
- TPH-DRO was detected in 29 of the 38 soil samples at concentrations ranging from 4.2 mg/kg to 550 mg/kg.
- TPH-GRO was detected in 28 of the 38 soil samples at concentrations ranging from 0.51 mg/kg to 21,000J mg/kg.

Results from the CAP-Part A SI indicate that there were two areas of soil contamination where concentrations of benzene, toluene, ethylbenzene, benzo(a)pyrene, benzo(b)fluoranthene, and chrysene, exceeded the applicable GUST STLs (i.e., Table B, Column 1) during the CAP-Part A SI. These areas consist of the

area in the vicinity of the Former Pumphouse #1 tank pit and the vicinity around the Former Fuel Pit 1A/DAACG area. The areas of soil contamination are shown in Figures 3b through 3e.

II.A.1.a.5. Former Pumphouse #1 CAP-Part B Site Investigation (May 1997 and November 1999)

During the CAP-Part B SI, 58 soil samples were collected for geochemical analysis from 29 soil borings and monitoring wells (P1-SB25 through P1-SB41, and P1-MW13 through P1-MW24) installed in May 1997, as presented in Figure 2. Three additional monitoring wells (P1-MW36, P1-MW40, and P1-MW42) were installed in September 1999. Well P1-MW36 was installed to determine the extent of groundwater contamination on the south side of the drainage ditch, and with GA EPD concurrence, no soil samples were collected from this boring. Well P1-MW40 was installed to be used for aquifer testing, and two soil samples were collected from this well. Well P1-MW42 was installed west of the area of contamination in the vicinity of Former Fuel Pit 1A/DAACG to determine the extent of groundwater contamination west of this area, and with GA EPD concurrence, no soil samples were collected from this boring. Analytical results are presented in Tables 2a and 2b. Sample locations and analytical results are presented in Figures 3a and 3b. Fourteen of the 32 soil borings were converted to shallow monitoring wells to delineate the extent of contamination, and one of the soil borings was converted to a deep monitoring well (P1-MW24). 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 3a. The results exceeding applicable GUST STLs are presented in the cross-sections in Figure 3b. The results of soil samples collected during the CAP-Part B investigation are summarized below.

- Benzene was detected in 5 of the 60 soil samples at concentrations ranging from 0.0014 mg/kg to 5.1J mg/kg; however, there were 13 samples with detection limits above the benzene STL of 0.017 mg/kg.
- Toluene was detected in 25 of the 60 soil samples at concentrations ranging from 0.0078 mg/kg to 180 mg/kg, and there were 9 samples with detection limits above the reporting limit. Only two of the concentrations exceeded the toluene STL of 115 mg/kg. None of the elevated detection limits exceeded the STL.
- Ethylbenzene was detected in 26 of the 60 soil samples at concentrations ranging from 0.0062 mg/kg to 82J mg/kg, and there were 5 samples with detection limits above the reporting limit. Only six of the concentrations exceeded the ethylbenzene STL of 18 mg/kg. None of the elevated detection limits exceeded the STL.
- Xylenes were detected in 35 of the 60 soil samples at concentrations ranging from 0.0062 mg/kg to 530 mg/kg. These concentrations did not exceed the xylenes STL of 700 mg/kg.
- Fourteen PAH compounds were detected in 32 of the 60 soil samples with concentrations of chrysene exceeding the STL of 0.660 mg/kg.
- TPH-DRO was detected in 31 of the 60 soil samples at concentrations ranging from 11 mg/kg to 390 mg/kg.
- TPH-GRO was detected in 31 of the 60 soil samples at concentrations ranging from 0.24 mg/kg to 9900 mg/kg.

Concentrations of benzene, ethylbenzene, and chrysene exceeded the applicable GUST STLs (i.e., Table B, Column 1) in the vicinity of the Former Pumphouse #1 tank pit area and the Fuel Pit 1A/DAACG area during the CAP-Part B SI.

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 various investigations. For each 2-foot-length soil sample collected, VOC headspace readings were measured with an organic vapor analyzer. The field screening results for the various site investigations are presented on each boring log presented in Appendix IV.

II.A.1.c. Conclusions of the Site Soil Contamination

In the vicinity of the Former Fuel Pit 1A/DAACG area (Release #1), benzene, toluene, ethylbenzene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene exceeded the applicable GUST STLs (i.e., Table B, Column 1) and benzene, benzo(a)pyrene, chrysene, and indeno(1,2,3-cd)pyrene exceeded their respective alternate threshold levels (ATLs).

In the vicinity of the Former Pumphouse #1 tank pit area (Release #2), benzene, toluene, ethylbenzene, benzo(a)pyrene, benzo(b)fluoranthene, and chrysene exceeded the applicable GUST STLs (i.e., Table B, Column 1), and benzene and chrysene exceeded their respective ATLs.

II.A.2. Delineation of Groundwater Contamination

Petroleum-related contaminants detected in groundwater at the Former Pumphouse #1 site during the previous investigations, CAP-Part A SI, and CAP-Part B SI included BTEX and numerous PAH compounds.

Results from the various investigations indicate that there are two separate areas of groundwater contamination. These areas consist of the area in the vicinity of the former tank pits near the former pumphouse and the vicinity around Former Fuel Pit 1A/DAACG.

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

II.A.2.a.1. UST Closure (1995)

During the 1995 UST closure activities, eight groundwater samples were collected from each of the UST tank pits as groundwater seeped into the excavation. The analytical results are presented in Tables 1c and 1d. BTEX and numerous PAH compounds were detected in all of the groundwater samples. The benzene concentrations exceeded the IWQS of 71.28 µg/L in all of the samples. Concentrations of benzo(a)anthracene, benzo(a)pyrene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, and indeno(1,2,3-cd)pyrene exceeded their respective IWQS.

II.A.1.a.2. DAACG Facility CAP-Part A Site Investigation (March 1995)

The DAACG CAP-Part A SI was initiated after contaminated groundwater was observed during the geotechnical investigation associated with the design of the foundation for the new DAACG building that was to be constructed. The investigation was limited to an area around the current DAACG building. During the CAP-Part A SI, two groundwater samples were collected from two piezometers. BTEX constituents and naphthalene were detected in both groundwater samples. As a result, a site investigation plan for a CAP-Part B investigation was developed.

II.A.2.a.3. DAACG Facility CAP-Part B Site Investigation (May 1996)

During the CAP-Part B SI, 31 groundwater samples were collected from 32 monitoring wells scattered throughout the DAACG Facility investigation area as presented in Figure 2. The wells associated with this investigation have a D prefix. This investigation covered the active area of the tarmac located north of the Former Pumphouses #1 and #2 and west of Pumphouses #3, #4, and #5. The analytical results were provided in the CAP-Part B Report (M&E 1996) and are summarized in tabular format in Appendix VIII (page VIII-147). The data are presented in Figures 4 through 8 of this report with the Former Pumphouse #1 CAP-Part A and CAP-Part B data. BTEX, 1-methylnaphthalene, 2-methylnaphthalene, acenaphthene, acenaphthylene, fluorene, and naphthalene were detected in groundwater samples throughout the investigation area. Results from the 1996 CAP-Part B SI at the DAACG Facility indicated that the extent of groundwater contamination to the south of the tarmac was not determined, but would be investigated as part of the CAP-Part A and CAP-Part B investigations associated with Former Pumphouse #1.

In the vicinity of the Former Fuel Pit 1A/DAACG area, concentrations of benzene exceeded the applicable IWQS during the 1996 DAACG CAP-Part B SI.

In the vicinity of the Former Pumphouse #1 tank pit area, concentrations of benzene exceeded the applicable IWQS during the 1996 DAACG CAP-Part B SI.

II.A.2.a.4. Former Pumphouse #1 CAP-Part A & Part B Site Investigation (December 1996 and May 1997)

During the Former Pumphouse #1 CAP-Part A SI in December 1996, five groundwater samples were collected for chemical analysis from five monitoring wells, as presented in Tables 3a and 3b, to determine the horizontal extent of groundwater contamination at the site. To delineate the dissolved benzene contamination plume, a CAP-Part B SI was conducted in May 1997. Twelve wells were installed during the Former Pumphouse #1 CAP-Part B SI in 1997, and 12 groundwater samples were collected. Because these two sampling events were conducted within six months of each other, they have been combined to provide sufficient aerial coverage for plume delineation. The results of the 1999 and 2000 CAP-Part B SI sampling events are discussed in Section II.A.2.a.4.

Benzene was identified in 10 groundwater samples, including a detection limit above the reporting limit, during the 1996 and 1997 investigations. Benzene concentrations ranged from 4.2J µg/L to 1100 µg/L, as illustrated in Figure 4. The concentrations in seven samples exceed the Georgia IWQS of 71.28 µg/L. The concentrations in nine samples exceed the federal maximum contaminant level (MCL) of 5 µg/L. The concentrations in 10 samples exceed the risk-based screening level of 0.36 µg/L. The concentrations in three samples were above the site alternate concentration limit (ACL) for benzene of 285 µg/L (Appendix VI). The analytical detection limit for benzene was 2.2 µg/L in all samples except for sample HT4-MW01 from well P1-MW01.

Toluene was identified in 11 groundwater samples during the 1996 and 1997 investigations at concentrations ranging from 40 µg/L to 25,000 µg/L, as illustrated in Figure 5. The concentrations did not exceed the Georgia IWQS of 200,000 µg/L; however, five of the concentrations exceeded the federal MCL of 1,000 µg/L and the risk-based screening level of 750 µg/L. None of the concentrations was above the site ACL for toluene of 800,000 µg/L (Appendix VI). The analytical detection limit for toluene was 1 µg/L in all samples.

Ethylbenzene was identified in 12 groundwater samples during the 1996 and 1997 investigations. Ethylbenzene concentrations ranged from 2.3 µg/L to 2000 µg/L, as illustrated in Figure 6. The

concentrations did not exceed the Georgia IWQS of 28,718 µg/L; however, five of the concentrations exceeded the federal MCL of 700 µg/L, and three of the concentrations exceeded the risk-based screening level of 1,300 µg/L. None of the concentrations was above the site ACL for ethylbenzene of 114,800 µg/L (Appendix VI). The analytical detection limit for ethylbenzene was 1 µg/L in all samples.

Total xylenes were identified in 11 groundwater samples during the 1996 and 1997 investigations. Total xylene concentrations ranged from 110 µg/L to 9500 µg/L, as illustrated in Figure 7. 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 1 µg/L in all samples.

During the 1996 and 1997 investigations, several PAH compounds were estimated or detected at concentrations at or below 10 µg/L in several groundwater samples. The compounds include acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene. Concentrations of benzo(a)anthracene, benzo(a)pyrene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene exceeded their IWQS of 0.0311 µg/L for all compounds. None of the PAH compounds exceeded their respective ACLs (Appendix VI).

Naphthalene was identified in eight groundwater samples during the 1996 and 1997 investigations. Naphthalene concentrations ranged from 1.5 µg/L to 16 µg/L, as illustrated in Figure 8. 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. None of the concentrations was above the site ACL for naphthalene of 260 µg/L (Appendix VI).

II.A.2.a.5. Former Pumphouse #1 CAP-Part B Site Investigation (September 1999 and February 2000)

As a result of the January 1999 meeting with GA EPD, three additional monitoring wells were installed in September 1999 to determine the vertical and horizontal extent of the dissolved benzene contamination plume that was not determined in 1997. Groundwater samples were collected from selected wells within the Former Pumphouse #1 tank pit area in November 1999. In February 2000, groundwater samples were collected from selected wells within the Former Fuel Pit 1A/DAACG Area. Twenty-two groundwater samples were collected for geochemical analysis, as presented in Tables 3a and 3b. Monitoring well locations are presented in Figure 2.

Benzene was identified in 14 groundwater samples during the 1999 and 2000 investigations. Benzene concentrations ranged from 50.3 µg/L to 4580 µg/L, as illustrated in Figure 9. The concentrations in 13 samples exceed the Georgia IWQS of 71.28 µg/L. The concentrations in 14 samples exceed the federal MCL of 5 µg/L and the risk-based screening level of 0.36 µg/L. The concentrations in nine samples were above the site ACL for benzene of 285 µg/L (Appendix VI). With the exception of two samples, the analytical detection limit for benzene was less than 1 µg/L.

Toluene was identified in 16 groundwater samples during the 1999 and 2000 investigations. Toluene concentrations ranged from 31 µg/L to 19,000 µg/L, as illustrated in Figure 10. The concentrations did not exceed the Georgia IWQS of 200,000 µg/L. However, the concentrations in seven samples exceeded the federal MCL of 1,000 µg/L and the risk-based screening level of 750 µg/L. None of the concentrations was above the site ACL for toluene of 800,000 µg/L (Appendix VI). The analytical detection limit for toluene was less than 1 µg/L.

Ethylbenzene was identified in 19 groundwater samples during the 1999 and 2000 investigations. Ethylbenzene concentrations ranged from 100 µg/L to 1800 µg/L, as illustrated in Figure 11. The concentrations did not exceed the Georgia IWQS of 28,718 µg/L. The concentrations in 6 samples exceeded the risk-based screening level of 1,300 µg/L, and the concentrations in 11 samples exceeded the MCL of 700 µg/L. None of the concentrations was above the site ACL for ethylbenzene of 114,800 µg/L (Appendix VI). The analytical detection limit for ethylbenzene was less than 1 µg/L.

Total xylenes were identified in 19 groundwater samples during the 1999 and 2000 investigations. Total xylene concentrations ranged from 404 µg/L to 10,000 µg/L, as illustrated in Figure 12. 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 2 µg/L.

During the 1999 and 2000 investigations, PAHs were only analyzed from the groundwater samples associated with the three wells installed in September 1999. Naphthalene was the only PAH compound detected at a concentration of 2.1 µg/L in well P1-MW40. This compound does not have a Georgia IWQS or federal MCL; however, the concentration in the sample was below the current risk-based screening level of 6.5 µg/L and the site ACL for naphthalene of 260 µg/L (Appendix VI).

II.A.2.a.6. Conclusions of the Horizontal Extent of Site Groundwater Contamination

Figures 4 through 12 demonstrate that the horizontal and vertical extent of petroleum contaminants in groundwater has been delineated to the appropriate analytical detection. Petroleum contaminants identified in groundwater at the Former Pumphouse #1 site include BTEX constituents as well as PAH constituents. The results of the CAP-Part B SI indicate that there are two separate plumes related to the operation of the Former Pumphouse #1 that are known as the Former Fuel Pit 1A/DAACG area (Release #1) and the Former Pumphouse #1 tank pit area (Release #2).

The Former Pumphouse #1 tank pit area plume is located in the vicinity of Former Fuel Pits 1C and 1D and the former tank pits located at former Building 8060. The horizontal extent of this plume was defined during the CAP-Part B SI. The groundwater is migrating toward the drainage ditch located to the south of the former tank pits; however, the dissolved plume does not migrate beyond the drainage ditch to the south. Several PAH compounds exceeded their respective IWQS or risk-based screening criteria, but the concentrations did not exceed their respective ACLs. Benzene was the only contaminant to exceed its IWQS and ACL during the various investigations.

Another plume of groundwater contamination is located in the vicinity of the Former Fuel Pit 1A/DAACG area. The horizontal extent of this plume was defined during the CAP-Part B SI. The groundwater is migrating toward the underground storm drain located to the northwest of the Former Fuel Pit 1A. The dissolved plume appears to migrate beyond the storm drain to the northwest. Several PAH compounds exceeded their respective IWQS or risk-based screening criteria, but the concentrations did not exceed their respective ACLs. Benzene was the only contaminant to exceed its IWQS and ACL during the various investigations.

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

In the Former Pumphouse #1 tank pit area, the vertical extent of groundwater contamination was delineated through soil sampling at P1-MW40 and D-SB23. Soil samples were collected from 2-foot intervals to the total boring depth, and VOC headspace readings were measured for each interval. Boring D-SB23 was drilled to 20.0 feet below ground surface (BGS) and soil samples were collected from 1.5 – 3.5, 8.0 – 10.0, 13.0 – 15.0, and 18.0 – 20.0 feet BGS; the results are presented in Appendix V (page V-238).

The sample collected at 8.0 – 10.0 feet contained the highest concentrations of BTEX compounds, and benzene was detected at 0.091 mg/kg in the 18.0 – 20.0 foot sample, which is above the STL. Well P1-MW40 was drilled to 60.0 feet BGS and soil samples were collected from 8.0 – 10.0 and 48.0 – 50.0 feet BGS. The results are presented in Table 2a. The sample collected at 10.0 – 12.0 feet contained concentrations of BTEX, PAHs, TPH-DRO, and TPH-GRO. No BTEX, PAHs, TPH-DRO, or TPH-GRO constituents were detected in the 48.0 – 50.0 feet BGS sample interval, but the interval did contain a benzene detection limit of 0.029 mg/kg that is slightly above the STL. Since there was no estimated concentration of benzene below the elevated detection limit, benzene is probably not present above the STL at that depth. Thus, the vertical extent of groundwater contamination has been delineated and is confined to the Surficial Aquifer (i.e., less than 50.0 feet BGS). In addition, well P1-MW24 was installed near the downgradient perimeter of the plume and screened from 29.5 – 34.5 feet BGS. BTEX and PAH constituents were not detected in the groundwater sample from this well.

Within the Former Fuel Pit 1A/DAACG area, the vertical extent of groundwater contamination was delineated through soil sampling at D-SB02, D-SB06, and D-SB10. Soil samples were collected from 2-foot intervals to the total boring depth and VOC headspace readings were measured for each interval. Each boring was drilled to 20.0 feet BGS and soil samples were collected from 1.5 – 3.5, 8.0 – 10.0, 13.0 – 15.0, and 18.0 – 20.0 feet BGS; the results are presented in Appendix V (pages V-230, V-231, V-232, and V-233, respectively). In boring D-SB02, no BTEX compounds were detected in any of the samples; however, several PAH compounds were detected at the 8.0 – 10.0-foot interval. In boring D-SB06, BTEX compounds were detected at the 8.0 – 10.0-foot interval and no PAH compounds were detected in any of the samples. In boring D-SB10, BTEX compounds were detected in the three lower samples with the highest concentrations at the 8.0 – 10.0 foot interval. Benzene was present in the 18.0 – 20.0-foot interval at a concentration of 0.22 mg/kg. The vertical extent of groundwater contamination has been delineated to 20 feet BGS within the Surficial Aquifer at the Former Fuel Pit 1A/DAACG area; however, there may be some minor contamination below 20 feet BGS.

II.A.3. Delineation of Free Product Plume

Free product was identified at the Former Fuel Pit 1A/DAACG area in February 2000. The free product was observed in wells D-MW1, D-MW2, D-MW6, D-MW8, D-MW11, D-MW13, and D-MW17 at thicknesses ranging from a sheen to 0.88 feet, as shown in Figure 13 and Table 8.

Interim corrective action consisted of free product recovery in the wells via absorbent socks, which were installed on February 22, 2000. The absorbent socks were removed and replaced on May 24, 2000, and July 24, 2000.

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

II.A.4.a. CAP-Part A Investigation (December 1996)

Surface water and sediment samples were collected from four locations around the Former Pumphouse #1 site (Figure 14 and Tables 4 and 5). The sampling points were located in the drainage ditch that is approximately 300 feet south of the former tank pits of the Former Pumphouse #1 site. Surface water flow is to the west toward Lamar Canal.

BTEX constituents were detected in three of the four surface water samples and no PAH constituents were detected in any of the surface water samples. At location P1-SWE07, located 325 feet southwest of the former tank pits, benzene was detected at 19J µg/L, toluene was detected at 230J µg/L, ethylbenzene was detected at 30J µg/L, and xylenes were detected at 270 µg/L. At location P1-SWE08, located 500 feet southwest of the former tank pits, benzene was detected at 5.2J µg/L, toluene was detected at 50J µg/L,

ethylbenzene was detected at 3.8J µg/L, and xylenes were detected at 55 µg/L. At location P1-SWE09, located 1900 feet west of the former tank pits, toluene was detected at 1.8J µg/L and xylenes were detected at 3.1J µg/L. Each of these concentrations was below its respective IWQS.

No BTEX constituents were detected in any of the four sediment samples although P1-SWE07 had a benzene detection limit of 0.62 mg/kg. At P1-SWE07, TPH-GRO was detected at 130J mg/kg and total PAHs were 0.6 mg/kg. At P1-SWE09, TPH-DRO was detected at 24 mg/kg and total PAHs were 12.3 mg/kg. At P1-SWE10, TPH-GRO was detected at 0.98J mg/kg and total PAHs were 15.7 mg/kg. Elevated TPH-DRO detection limits above 10 mg/kg were observed in sediment samples from P1-SWE07, P1-SWE08, and P1-SWE10. These sediment locations are southwest of the site.

II.A.4.b. CAP-Part B Investigation (February 1999)

As a result of the January 1999 meeting with GA EPD, five additional surface water samples were collected at locations east of P1-SWE08, which were more directly downgradient of the Former Pumphouse #1 tank pit area (Figure 15 and Table 4) than the CAP-Part A locations and more likely to intercept the dissolved groundwater plume. GA EPD approved the surface water sample locations during the January 1999 meeting. No BTEX or PAH constituents were detected at locations P1-SW5 and PW-SW6. Benzene was detected at 11.1 µg/L at P1-SW7, 9 µg/L at P1-SW8, and 8.5 µg/L at P1-SW9. Toluene was detected at 96 µg/L at P1-SW7, 144 µg/L at P1-SW8, and 185 µg/L at P1-SW9. Ethylbenzene was detected at 36.4 µg/L at P1-SW7, 5.4 µg/L at P1-SW8, and 32 µg/L at P1-SW9. Total xylenes were detected at 76.8 µg/L at P1-SW7, 133.8 µg/L at P1-SW8, and 182.5 µg/L at P1-SW9. No PAH constituents were detected in any of the surface water samples. Each of these concentrations was below its respective IWQS. As a result of this surface water sampling, it appears that the dissolved groundwater plume emanating from Former Pumphouse #1 tank pit area is impacting the drainage ditch, but at concentrations below the respective IWQS.

With GA EPD concurrence, sediment samples were not collected in February 1999.

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 Former Pumphouse #1 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 16 and 17). 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 procurement met 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 the 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 17). 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 Lightning Drive, 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 diameter 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 cleaning 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 17. 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 Former Pumphouse #1 site is located approximately 4,200 feet southwest (downgradient) of HAAF Well 2, which is located at Building 1205 on Lightning Road. Well 3, which is located at Building 8455, is approximately 6,700 feet southwest (downgradient) of the Former Pumphouse #1 site. Therefore, the Former Pumphouse #1 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 people 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 B 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 18). 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.

There is a groundwater divide at the Former Fuel Pit 1A/DAACG area with groundwater flowing to the south-southwest and to the northwest. To the southwest, there is an underground storm drain located 510 feet south-southwest of D-MW2, which is connected to a drainage ditch located south of the former tank pit area. To the northwest, there is an underground storm drain located 450 feet northwest of D-MW2 and a drainage ditch located 1000 feet northwest of D-MW2. At the Former Pumphouse #1 tank pit area, a drainage ditch is located approximately 300 feet south of the former tank pits and may receive some of the groundwater from the site. Based on the surface water features discussed in Appendix III, the Former Pumphouse #1 site, Facility ID #9-025085, is classified as being located less than 500 feet to a surface water body.

There are numerous underground water, electrical, and abandoned fuel lines that connect the former fuel pits located at the edge of the taxiway north of the former tank pits. These underground lines are located upgradient of the area of contamination around the former tank pits and are located within the area of contamination near the Former Fuel Pit 1A/DAACG area. The invert depth of the former fuel transfer line in the vicinity of Fuel Pit 1A is approximately 6.4 feet BGS. There are two monitoring wells that are located in the vicinity of Fuel Pit 1A, and in November 1999, the depths to groundwater in these wells were 8.74 feet in P1-MW11 and 9.22 feet in P1-MW13. Thus, the invert depth of the former fuel transfer line is

located approximately 2.0 feet above the water table. The water and electrical lines run adjacent to the former fuel transfer line. It is estimated that the invert depths of these utilities are no more than 5 feet BGS.

The invert depth of the former fuel transfer line in the vicinity of Fuel Pit 1C, which is located north of the former tank pit area, is approximately 7.6 feet BGS. There are two monitoring wells that are located in the vicinity of Fuel Pit 1C, and in November 1999, the depths to groundwater in these wells were 8.71 feet in P1-MW3 and 8.83 feet in P1-MW22. Thus, the invert depth of the former fuel transfer line is located approximately 1.0 feet above the water table. The water and electrical lines run adjacent to the former fuel transfer line. It is estimated that the invert depths of these utilities are no more than 5 feet BGS.

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 result 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 site appear to correlate with the regional stratigraphic section. CAP-Part A and CAP-Part B soil boring logs are located in Appendix IV. The lithology encountered is predominantly a white, pale brown, or light gray, very fine to medium-grained sand, with variable silt and clay content. Generally, the samples with higher silt and clay content were within a few feet of the surface. Less silt and clay content was noted with depth. The boring log of the deep well P1-MW40 indicates an increasing clay content from approximately 26 feet BGS to 30 feet BGS, becoming a clayey, coarse grained sand/gravel at 30 feet BGS.

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' (west/east from Former Fuel Pit 1A to the former tank pit area), B-B' (north/south through the former tank pit area), and C-C' (southeast/northeast through the Former Fuel Pit 1A/DAACG area), presented in Figure 3a, show the site geology as determined by drilling and sampling activities.

II.B.4. Referenced or Documented Calculations

Referenced or documented calculations performed to support the CAP-Part B SI include those used in developing and interpreting the results of geotechnical analysis and groundwater slug testing.

II.B.4.a. Geotechnical Analysis

Disturbed soil samples were collected from wells P1-MW13, P1-MW14, P1-MW17, P1-MW18, P1-MW19, P1-MW20, P1-MW23, and P1-MW24 for grain size analysis. In addition, undisturbed soil samples were collected from wells P1-MW15, P1-MW16, P1-MW21, and P1-MW22 and soil boring P1-SB33 in order to determine selected engineering properties of the saturated zone underlying the Former Pumphouse #1 site. The engineering properties measured included moisture content, porosity, specific gravity, bulk density, and permeability, as presented in Table 6 and Attachment A. Geotechnical samples were not collected from the five additional well borings drilled in 1999.

II.B.4.b. Slug Testing

Slug-out tests were conducted on shallow wells P1-MW01, P1-MW02, and P1-MW24 (i.e., deep well) on November 2, 1999. The slug test data were evaluated using the Bouwer and Rice method in the AQTESOLVE Professional v.4.5 (1999) software. Calculated hydraulic conductivity values are 1.32×10^{-2} ft/min (6.7×10^{-3} cm/s), 1.75×10^{-2} ft/min (8.9×10^{-3} cm/s), and 4.5×10^{-3} ft/min (2.3×10^{-3} cm/s), respectively. The average hydraulic conductivity of the surficial aquifer near Former Pumphouse #1, based on slug test data, is 1.17×10^{-2} ft/min (6.0×10^{-3} cm/s). Calculations for determining the hydraulic conductivity and transmissivity from the slug test data are presented in Attachment A.

II.B.4.c. Aquifer Testing

Aquifer testing was performed at the Former Pumphouse #1 site on November 2-5, 1999. An 8-hour step test was performed using well P1-MW40 to determine the optimum pumping rate for this well, which turned out to be 3 gallons per minute (gpm). Static water levels and barometric pressure was monitored for a 24-hour period (steady state) before the 24-hour aquifer test was conducted. The 24-hour aquifer test was conducted with P1-MW40 as the pumping well and wells P1-MW02, P1-MW03, P1-MW22, P1-MW23, and D-MW5 as observation wells. Water levels were also recorded during the recovery period after pumping stopped. Water levels and barometric pressure were measured using electronic data loggers. All aquifer test data and methodologies are discussed in Attachment A.

Discharge water generated during the step drawdown and 24-hour aquifer pumping tests was containerized in an above ground, 21,000-gallon-capacity frac tank. Two samples of the water in the tank were used to characterize the liquid for proper disposal. A total of 5,678 gallons of waste water was generated from well pumping activities. All fluids were removed from the frac tank on December 9, 1999, and were transported to Industrial Water Services, Inc., in Jacksonville, Florida, for recycling. A manifest documenting the proper disposal of all fluids generated at the site in November is provided in Attachment A (page A-60).

The drawdown data were corrected for barometric influence. Both drawdown data and the pumping well recovery data were then evaluated using AQTESOLVE Professional v.4.5 (1999) groundwater test data analysis software for unconfined aquifers. After correcting for barometric influences, only the data from P1-MW03 yielded sufficient response to enable evaluation with the software. Figure 18 provides a summary of water level and barometric measurements over the pumping period. As illustrated, water level measurements from wells P1-MW02 and P1-MW22 changed so little over the testing period that evidence of pumping influence could not be accurately determined. Therefore, data from these wells

were not evaluated quantitatively. In addition to the aquifer withdrawal data analysis, the recovery data for P1-MW40 (the pumping well) were also evaluated quantitatively. Details of calculations performed on the data are provided in Attachment A.

The computer program generated a match line for P1-MW03 using the Neuman solution yielding a transmissivity (T) of $0.4035 \text{ ft}^2/\text{min}$ ($6.25 \text{ cm}^2/\text{s}$) assuming a saturated aquifer thickness of 60 feet. A hand-picked visual straight line in the Theis recovery solution was selected to match the last portion of the recovery data for MW40, which would be representative of the aquifer and not the sand pack. This straight-line solution produced a transmissivity of $0.089 \text{ ft}^2/\text{min}$ ($1.38 \text{ cm}^2/\text{s}$), assuming a saturated aquifer thickness of 60 feet.

II.B.5. Direction of Groundwater Flow

II.B.5.a. Well construction details

Each monitoring well casing consisted of 2-inch inside diameter schedule 40 flush-thread polyvinyl chloride (PVC) risers with a 10-foot screen set across the water table. The well screen slot size was 0.010 inches. Exceptions to the typical monitoring well construction were P2-MW24, which is a 2-inch well screened from 29.5 – 34.5 feet to determine groundwater quality at depth, and P2-MW40, which is a 4-inch well screened from 3.8 – 33.8 in order to conduct aquifer testing. Table 7 summarizes construction details for all 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 2 feet above the top of the well screen.

Well seals were composed of bentonite pellets and allowed to hydrate before filling the annular space above the seal. The well seal extended to a measured level of at least 2.0 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 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 placed 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. Data obtained from these measurements are presented in Table 8. During the CAP-Part A SI in December 1996, there was a groundwater divide at the site with groundwater flowing to the south-southwest and the northwest with an average gradient of 0.004 ft/ft.

Water level measurements were collected during the CAP-Part B SI in May 1997, November 1999, and February 2000. Data obtained from these measurements are presented in Table 8. Figure 19 shows the potentiometric surface at the site in November 1999. Groundwater in the study area is under water table conditions and is encountered between 6.06 to 12.29 feet BGS, averaging 9.21 feet BGS. Groundwater flow at the Former Pumphouse #1 tank pit area is generally to the southwest with the man-made ditches affecting localized flow, and the flow gradient is approximately 0.012 ft/ft. At the far western edge of the site near the Former Fuel Pit 1A/DAACG area, the groundwater flow changes to a more northwest direction at a gradient of approximately 0.0086 ft/ft. Figure 20 shows the potentiometric surface at the site in February 2000, and the flow in the former tank pit area is to the southwest with an average gradient of

0.0067 ft/ft. At the far western edge of the site near the Former Fuel Pit 1A/DAACG area, the groundwater flow changes to a more northwest direction at a gradient of approximately 0.0067 ft/ft.

II.B.5.c. Equipotential flow net

An equipotential flow net based on the February 2000 water level measurements and the contoured potentiometric surface is presented in Figure 21.

III. REMEDIAL ACTION PLAN

III.A. CORRECTIVE ACTION COMPLETED OR IN PROGRESS

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

The contractor responsible for investigating the site from 1996 through 1999 did not use a product probe for free product measurements and, as a result, the presence of free product was not identified during this time period. During sampling activities in February 2000, free product was measured in wells D-MW1, D-MW2, D-MW8, D-MW11, D-MW13, and D-MW17 at a thickness of 0.01 feet, 0.88 feet, 0.15 feet, 0.74 feet, 0.15 feet, and a sheen, respectively. Absorbent socks were placed in each well following these measurements on February 24, 2000. The free product covered an area of approximately 400 feet × 500 feet at the Former Fuel Pit 1A/DAACG area (Release #1). GA EPD was notified of the free product in correspondence dated March 8, 2000 (Stanley 2000). The absorbent socks were removed and replaced in May and July 2000.

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

During UST closure activities in 1995, all contaminated soil removed during the project was tested in accordance with disposal facility requirements and transported to Kedesh, Inc., Highway 84, Ludowici, GA 31316. The Closure Report for Former Pumphouse #1 was not submitted to GA EPD in 1995 because review of the closure analytical data indicated that a CAP-Part A would be required (i.e., per requirements of GUST-9, Item 15, page 12, dated August 1995). However, the analytical data presented in the closure report is summarized in Table 1 of this CAP-Part B Report. Approximately 913 cubic yards of contaminated soil were excavated from the site.

During the UST closure activities in 1998, the excavated soil was returned to the tank pit with the concurrence of GA EPD. The 1998 Closure Report for Former Pumphouse #1 (Earth Tech 1998) was not submitted to GA EPD because the CAP-Part A Report, which incorporated the area of the removal activities, had already been submitted to GA EPD.

III.B. OBJECTIVES OF CORRECTIVE ACTION

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

Former Fuel Pit 1A/DAACG Area (Release #1)

During the CAP-Part A and Part B investigations in 1996 through 1999, free product was not observed in the wells at the Former Fuel Pit 1A/DAACG area (Release #1) since a oil/water interface probe was not used during water level measurements. However, additional sampling and product/water level measurements conducted in February 2000 indicated free product, exceeding 1/8 inch in thickness, exists at the site. Removal of the free product is recommended; however, the amount of recoverable free product and the best method for removal are not known. Thus, additional investigation activities are necessary to determine this information.

Former Pumphouse #1 Tank Pit Area (Release #2)

The previous investigations, CAP-Part A SI, and CAP-Part B SI determined that there is no evidence of free product at the Former Pumphouse #1 tank pit area (Release #2) that exceeds an eighth of an inch;

therefore, no recovery/removal of free product has been performed, nor was it required based on known site conditions.

III.B.2. Remediate Groundwater Contamination

Former Fuel Pit 1A/DAACG Area (Release #1)

The CAP-Part A and CAP-Part B investigations documented groundwater contamination that exceeded IWQS. In May 1996, the maximum benzene concentration at the site was 700 µg/L in well D-MW2, located north of the Former Fuel Pit 1A. This concentration was the maximum concentration observed for Release #1 during the CAP-Part A and CAP-Part B investigations. Well D-MW2 was not sampled in February 2000; however, other wells in the vicinity had similar concentrations in 2000 as they had in 1996, which indicates that the free product is providing a continuous source for contamination in the groundwater. The dissolved benzene plume appears to be impacting an underground storm drain, which is located approximately 450 feet northwest of well D-MW2. This is evidenced by low concentrations of benzene in well D-MW18 located on the northwest side of the storm drain.

Groundwater in the vicinity of the Former Fuel Pit 1A/DAACG area is generally flowing to the northwest, but groundwater in the southern portion of the plume is flowing to the south-southwest. The man-made drainage ditches are affecting the localized flow. 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) should be exceeding its IWQS at the underground storm drain located 450 feet northwest of well D-MW2. The model results for this compound indicate that there is minimal groundwater impact at a distance of 1,000 feet from the center of the Former Fuel Pit 1A/DAACG area of contamination. Concentrations of benzene in the vicinity of the Former Fuel Pit 1A/DAACG area exceed the benzene ACL of 285 µg/L. Therefore, corrective action consisting of remediation or monitored natural attenuation of the groundwater plume in the vicinity of the Former Fuel Pit 1A/DAACG area should be considered once the free product has been removed.

Former Pumphouse #1 Tank Pit Area (Release #2)

The CAP-Part A and CAP-Part B investigations documented groundwater contamination that exceeded IWQS. In February 2000, the maximum benzene concentration at the site was 4850 µg/L in well D-MW2, located 250 feet north of the former tank pit area near Fuel Pit 1C. This concentration was the maximum concentration observed during the CAP-Part A and CAP-Part B investigations. As with the Former Fuel Pit 1A/DAACG area, the concentrations in 2000 are similar to those observed in 1996, indicating that residual contamination in the soil is acting as a source. The dissolved benzene appears to be impacting a man-made drainage ditch, which is located approximately 300 feet southeast of the former tank pits. This is evidenced by low concentrations of benzene in the drainage ditch surface water and a lack of benzene in the monitoring wells located on the south and southeast side (i.e., downgradient) of the drainage ditch.

Groundwater in the vicinity of the former tank pits is generally flowing to the southwest with a man-made drainage ditch affecting the localized flow. Conservative fate and transport modeling using the AT123D (Attachment B) predicts that benzene (the most conservative representative compound) should be exceeding its IWQS at the drainage ditch located 300 feet southeast of the site. The model results for this compound indicate that there is minimal groundwater impact at a distance of 1,000 feet from the former tank pits. Concentrations of benzene in the vicinity of the former tank pit exceed the benzene ACL of 285 µg/L. Therefore, corrective action consisting of remediation or monitored natural attenuation of the groundwater plume in the vicinity of the former tank pits is recommended.

III.B.3. Remediate Soil Contamination

Former Fuel Pit 1A/DAACG Area (Release #1)

The results from the various CAP-Part A and CAP-Part B investigations for the DAACG Facility and Former Pumphouse #1 indicate that 20 soil samples exceeded the GUST STL (i.e., 0.017 mg/kg) for benzene, 1 soil sample exceeded the GUST STL (i.e., 115 mg/kg) for toluene, and 5 soil samples exceeded the GUST STL (i.e., 18 mg/kg) for ethylbenzene. As discussed in Section III.B.4, the toluene concentrations were below the risk-based screening level (i.e., 408,800 mg/kg) that is protective of soil exposure during industrial land use and below the ATL for toluene of 479 mg/kg that was developed based on fate and transport modeling (Appendix VI). The ethylbenzene concentrations were below the risk-based screening level (i.e., 204,400 mg/kg) that is protective of soil exposure during industrial land use and below the ATL for ethylbenzene of 187 mg/kg that was developed based on fate and transport modeling (Appendix VI).

As discussed in Section III.B.4, the benzene concentrations are below the risk-based screening criteria (i.e., 197.4 mg/kg) that is protective of soil exposure during industrial land use in all but two samples that were collected from well D-MW17 and boring D-SB10. The benzene concentrations exceed the ATL of 9.3 mg/kg, which was developed based on fate and transport modeling, in six boring locations. These soil samples are located above the soil/water interface near the area of free product; thus, corrective action consisting of remediation or monitored natural attenuation for leaching of soil contaminants to groundwater is recommended for this area.

Former Pumphouse #1 Tank Pit Area (Release #2)

The results from the various CAP-Part A and CAP-Part B investigations for the DAACG Facility and Former Pumphouse #1 indicate that 26 soil samples exceeded the GUST STL (i.e., 0.017 mg/kg) for benzene, 3 soil samples exceeded the GUST STL (i.e., 115 mg/kg) for toluene, and 5 soil samples exceeded the GUST STL (i.e., 18 mg/kg) for ethylbenzene. As discussed in Section III.B.4, the toluene concentrations were below the risk-based screening level (i.e., 408,800 mg/kg) that is protective of soil exposure during industrial land use and below the ATL for toluene of 479 mg/kg that was developed based on fate and transport modeling (Appendix VI). The ethylbenzene concentrations were below the risk-based screening level (i.e., 204,400 mg/kg) that is protective of soil exposure during industrial land use and below the ATL for ethylbenzene of 187 mg/kg that was developed based on fate and transport modeling (Appendix VI).

As discussed in Section III.B.4, the benzene concentrations are below the risk-based screening criteria (i.e., 197.4 mg/kg) that is protective of soil exposure during industrial land use in all of the samples. The benzene concentrations exceed the ATL of 9.3 mg/kg, which was developed based on fate and transport modeling, in two boring locations. These soil samples are located above the soil/water interface north of Former Fuel Pit 1C; thus, corrective action consisting of remediation or monitored natural attenuation for leaching of soil contaminants to groundwater is recommended for this area.

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

A risk-based approach was used to determine the need for further action at the Former Pumphouse #1 site. Due to the nature of the contamination (petroleum hydrocarbon contamination of soil and groundwater), the risk-based approach was limited to human health concerns. Ecological risk concerns are minimal because of the land use surrounding the Former Pumphouse #1 site. The site is located within an active airfield at HAAF, and the primary purpose of the drainage ditch located south is to collect and divert storm water away from the airfield.

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 Former Pumphouse #1 site.

The Former Pumphouse #1 site is located within an active military installation and within an access-controlled fence of an active airfield. The land use at the site is currently military industrial. Installation housing areas are located more than 0.5 miles to the northeast. A man-made drainage ditch is located approximately 300 feet southeast of the former tank pits. The man-made surface water drainage feature eventually empties into Springfield Canal, which flows southwest and joins the Little Ogeechee River more than 3.8 miles downstream of the site. The drainage ditch is located adjacent to the flight line and aircraft taxiway and access to the area is restricted; thus the drainage ditch is not used for recreational purposes.

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. One of the HAAF's current water supply wells (i.e., Well 3) is located approximately 6,700 feet downgradient of the Former Pumphouse #1 site.

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. Due to the restricted access to the site, no near-term, on-site receptors are likely to come into contact with groundwater even though 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 has been applied to the data collected for the Former Pumphouse #1 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 Former Pumphouse #1 site data have been taken from the following sources based on GA EPD guidance (GA EPD 1996):

- Georgia IWQS (GA EPD 1998b),
- GUST STLs (i.e., Table B, column 1),
- 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; EPA 1999; ASTM 1995). Based on GA EPD guidance, risk-based screening levels reflect residential land use for groundwater and industrial land use for surface and subsurface 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 surface and subsurface soils 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 Former Pumphouse #1 site.

If applicable or relevant and appropriate requirement (ARAR)- or risk-based values are not available, it generally means that (1) the constituent 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 identify site-related COPCs. Constituent concentrations below risk- or regulatory-based screening levels are not considered COPCs and are not evaluated further. Analytical results for the DAACG Facility and Former Pumphouse #1 investigations were combined based on the location of the sample with respect to the two separate releases. Tables 9 and 10 present the results of the risk-based screening for the Former Fuel Pit 1A/DAACG Area (Release #1), soil and groundwater, respectively. Tables 11 through 14 present the results of the risk-based screening for the Former Pumphouse #1 Tank Pit Area (Release #2) soil, sediment, groundwater, and surface water, respectively.

Former Fuel Pit 1A/DAACG Area (Release #1)

In the vicinity of the Former Fuel Pit 1A/DAACG Area, 138 soil samples were collected from 66 borehole locations between 1996 and 1999. Benzene, ethylbenzene, toluene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene were detected in soil at concentrations above their respective STLs. BTEX, benzo(a)pyrene, and benzo(b)fluoranthene were detected in soil at concentrations above their respective leaching to groundwater screening. Benzene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were detected in soil at concentrations above the risk-based screening criteria. BTEX and several PAHs were detected at concentrations below their respective screening values. As a result, BTEX, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene were identified as COPCs for soil at the Former Fuel Pit 1A/DAACG Area (Release #1) site.

The detection limits for the benzene, toluene, and/or several PAHs exceeded STLs and/or risk-based screening levels in several samples during the various investigations. Many results were estimated due to detections below the detection limits. The results for several PAHs were rejected (R qualified) based on low surrogate recoveries in one sample (H833-SB0301 from boring D-SB03). No COPCs for soils were selected for the site based on the detection limit screening or qualifier screening.

In the vicinity of the Former Fuel Pit 1A/DAACG Area, 38 groundwater samples were collected from 30 monitoring wells between 1996 and 2000. Benzene, benzo(a)pyrene, and chrysene were detected in groundwater at concentrations above their respective IWQS. Benzene, ethylbenzene, toluene, and naphthalene were detected in groundwater at concentrations above their risk-based screening levels. BTEX and several PAHs were detected at concentrations below their respective screening values. As a results, benzene, ethylbenzene, toluene, benzo(a)pyrene, chrysene, and naphthalene were identified as COPCs for groundwater at the Former Fuel Pit 1A/DAACG Area (Release #1) site.

The groundwater detection limit for benzene exceeded the risk-based screening level during the various investigations. The detection limit for benzene exceeded the IWQS in one sample. Detection limits achieved for several PAHs during the various investigations 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. No groundwater data were rejected. No additional COPCs were selected for groundwater based on the detection limit or qualifier screening.

Former Pumphouse #1 Tank Pit Area (Release #2)

In the vicinity of the Former Pumphouse #1 Tank Pit Area, 92 soil samples were collected from 45 borehole locations between 1996 and 1999. Benzene, ethylbenzene, toluene, benzo(b)fluoranthene, and chrysene were detected in soil at concentrations above their respective STLs. Benzene, ethylbenzene, toluene, and xylenes were detected in soil at concentrations above their respective leaching to groundwater screening. Toluene, ethylbenzene, xylenes, and several PAHs were detected at concentrations below their respective screening values. As a result, benzene, ethylbenzene, toluene, xylenes, benzo(b)fluoranthene, and chrysene, were identified as COPCs for soil at the Former Pumphouse #1 Tank Pit Area (Release #2) site.

The detection limits for the benzene, toluene, and/or several PAHs exceeded STLs and/or risk-based screening levels in several samples during the various investigations. Many results were estimated due to detections below the detection limits. No soil data were rejected. No COPCs for soils were selected for the site based on the detection limit screening or qualifier screening.

In the vicinity of the Former Pumphouse #1 Tank Pit Area, 29 groundwater samples were collected from 17 monitoring wells between 1996 and 1999. Benzene, benzo(a)anthracene, benzo(a)pyrene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene were detected in groundwater at concentrations above their respective IWQS. Benzene, ethylbenzene, toluene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene were detected in groundwater at concentrations above their risk-based screening levels. Toluene, ethylbenzene, xylenes, and several PAHs were detected at concentrations below their respective screening values. As a result, benzene, ethylbenzene, toluene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene were identified as COPCs for groundwater at the Former Pumphouse #1 Tank Pit Area (Release #2) site.

The groundwater detection limit for benzene exceeded the risk-based screening level during the various investigations. The detection limit for benzene exceeded the IWQS in two samples. Detection limits achieved for several PAHs during the various investigations 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. Acenaphthene and fluorene data were rejected in two samples (MW1701 and MW1901) based on low surrogate recoveries. No additional COPCs were selected for groundwater based on the detection limit or qualifier screening.

No constituents were detected above their respective IWQS for surface water data collected during the 1996 CAP-Part A investigation and 1999 CAP-Part B investigation. Benzene, ethylbenzene, toluene, and xylenes were detected below screening levels during both investigations. The detection limits for several PAHs exceeded their respective IWQS. These standards represent values below analytically achievable levels. No COPCs for surface water were selected for the Former Pumphouse #1 Tank Pit Area (Release #2) site.

Benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene were detected in sediment at concentrations above their respective STLs during the 1996 CAP-Part A investigation. Several PAHs were detected in sediment at concentrations below their respective screening levels. Sediment data were not collected during the 1999 CAP-Part B investigation. The detection limit for benzene in sample HT4-SE07 and several PAHs in sample HT4-SE08 exceeded screening values, but no COPCs were selected based on this screen. Benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene were identified as COPCs for sediments for the Former Pumphouse #1 Tank Pit Area (Release #2) site.

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

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

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

Benzene, ethylbenzene, toluene, xylenes, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene were identified as COPCs for soil at the Former Fuel Pit 1A/DAACG Area (Release #1) site. Benzene, ethylbenzene, toluene, xylenes, benzo(b)fluoranthene, and chrysene, were identified as COPCs for soil at the Former Pumphouse #1 Tank Pit Area (Release #2) site. The COPCs for both areas of contamination are the same except for indeno(1,2,3-cd)pyrene, which is located only at the Former Fuel Pit 1A/DAACG Area (Release #1) site. Due to the close proximity of both releases to each other, the most conservative fate and transport modeling results were utilized for developing one set of ATLs for both areas of contamination. ATL calculations for the constituents are presented in Appendix VI and are based on the results of the AT123D modeling for the Former Fuel Pit 1A/DAACG Area (Release #1) site. The ATLs for soil at the Former Pumphouse #1 site, Release #1 and Release #2, were determined to be as follows:

- 9.3 mg/kg for benzene,
- 479 mg/kg for toluene,
- 187 mg/kg for ethylbenzene,
- 893 mg/kg for total xylenes,
- 1.4 mg/kg for benzo(a)pyrene,
- 5.8 mg/kg benzo(b)fluoranthene,
- 2.1 mg/kg chrysene, and
- 0.66 mg/kg indeno(1,2,3-cd)pyrene.

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

Benzene, ethylbenzene, toluene, benzo(a)pyrene, chrysene, and naphthalene were identified as COPCs for groundwater at the Former Fuel Pit 1A/DAACG Area (Release #1) site. Benzene, ethylbenzene, toluene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene were identified as COPCs for groundwater at the Former Pumphouse #1 Tank Pit Area (Release #2) site. The COPCs for both areas of contamination are the same except for benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, which are located only at the Former Pumphouse #1 tank pit area (Release #2) site.

To be conservative, the chemical properties of benzene were used to evaluate contaminant migration from each plume. Benzene was modeled to a potential downgradient location where a receptor may come in contact with migrating site contamination. The receptors were determined to be a storm drain located 230 feet downgradient of the center of the source area for the Former Fuel Pit 1A/DAACG Area (Release #1) and a drainage ditch located 325 feet downgradient of the center of the source area for the Former Pumphouse #1 Tank Pit Area (Release #2). Fate and transport modeling was used to develop a site-specific DAF between each source and the receptor location (see III.B.4.c.3 below). The modeling results estimated a DAF for benzene of 4 for the storm drain for Release #1 and a DAF for benzene of 5.25 for the drainage ditch for Release #2. As discussed in Appendix VI, the DAF for PAH constituents was estimated to be 40. Due to the close proximity of both releases to each other, the most conservative fate

and transport modeling results (i.e., Release #1) were utilized for developing one set of ACLs for both areas of contamination. Compound specific regulatory levels or risk-based screening criteria were used in conjunction with the site-specific DAF 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 for both areas of contamination were determined to be as follows:

- 285 µg/L for benzene (i.e., 4×71.28 µg/L),
- 800,000 µg/L for toluene (i.e., $4 \times 200,000$ µg/L),
- 114,800 µg/L for toluene (i.e., $4 \times 28,718$ µg/L),
- 1.2 µg/L for benzo(a)anthracene (i.e., 40×0.0311 µg/L),
- 1.2 µg/L for benzo(a)pyrene (i.e., 40×0.0311 µg/L),
- 3.6 µg/L for benzo(b)fluoranthene (i.e., 40×0.092 µg/L),
- 1.2 µg/L for benzo(k)fluoranthene (i.e., 40×0.0311 µg/L),
- 1.2 µg/L for chrysene (i.e., 40×0.0311 µg/L),
- 1.2 µg/L for dibenzo(a,h)anthracene (i.e., 40×0.0311 µg/L),
- 1.2 µg/L for indeno(1,2,3-cd)pyrene (i.e., 40×0.0311 µg/L), and
- 260 µg/L for naphthalene (i.e., 40×6.5 µg/L).

Benzene was the only compound to exceed its respective ACL. At the Former Fuel Pit 1A/DAACG area (Release #1), the benzene concentrations exceeded the ACL in wells D-MW2, D-MW8, D-MW11, D-MW17, and D-MW19. At the Former Pumphouse #1 tank pit area (Release #2), the benzene concentrations exceeded the ACL in wells D-MW5, P1-MW2, and P1-MW3. In 1996/1997, benzene also exceeded the ACL in wells P1-MW1 and P1-MW19, but in 1999/2000, the benzene concentrations in these two wells were below the ACL.

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).

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.

There are two areas of soil and groundwater contamination at the Former Pumphouse #1 site. One area of contamination surrounds the former fuel pit labeled 1A, referred to as Release #1, and the former tank pits associated with the former pumphouse building, referred to as Release #2. The fate and transport modeling was conducted for both sites and the results are provided in Attachment B.

Former Fuel Pit 1A/DAACG Area (Release #1)

At the Former Fuel Pit 1A/DAACG area, there is a large area of free product and soil contamination located 1 to 2 feet above the water table. As a result, the source dimension was assumed to be the area of soil contamination, which is approximately 350 feet \times 640 feet with the center of the source area located near D-SB06. The maximum soil concentration of benzene (i.e., 410 mg/kg in D-MW17 at 8.0 – 10.0 ft) in this area was above the soil/water interface. The majority of the soil contamination with the highest concentrations is located under 18 inches of concrete; thus, leaching of contaminants to groundwater will be more a result of fluctuations in the water table than percolating rainwater. In order to predict the maximum concentration in groundwater, leaching to groundwater by percolating rainwater was modeled with SESOIL to determine the predicted maximum concentration in the leachate at the water table interface. Since the predicted leachate concentration (i.e., 12,500 $\mu\text{g/L}$) was above the maximum observed groundwater concentration (i.e., 700 $\mu\text{g/L}$ in D-MW2) within the source area, the steady-state model was developed by calibrating the model against the maximum predicted concentration (i.e., 12,500 $\mu\text{g/L}$). Modeling of the lateral migration to the receptor was performed using AT123D. An underground storm drain is located approximately 230 feet northwest (downgradient) from the center of the source area. This is the nearest potential preferential pathway that might encounter migrating groundwater contamination due to a possible hydraulic connection between the surficial groundwater and the storm drain.

The fate and transport modeling results are presented in Attachment B. The steady-state (i.e., continuous concentration at the source) model was developed by calibrating the model against the maximum predicted benzene concentration at the site, which occurred in well D-MW17 (i.e., 12,500 $\mu\text{g/L}$) in 1996 based on leaching of soil contamination to groundwater. In reality, the source of benzene will deplete due to biodegradation and natural attenuation. The modeling results indicate that benzene should reach the storm drain at a concentration of 3100 $\mu\text{g/L}$, which is above the state IWQS of 71.28 $\mu\text{g/L}$. Actual groundwater results indicate that the surficial groundwater contamination near the IWQS reaches the storm drain.

Based on modeling results, the Former Fuel Pit 1A/DAACG Area estimated a DAF for benzene at the drainage ditch is 4.0. Simulations were also performed to predict the maximum concentrations of benzene over a simulation period of two years in the monitoring wells at the Former Fuel Pit 1A/DAACG Area. The predicted maximum benzene concentrations are presented in Table 15.

Former Pumphouse #1 Tank Pit Area (Release #2)

At the Former Pumphouse #1 tank pit area, there is a large area of soil contamination located 1 to 2 feet above the water table. As a result, the source dimension was assumed to be the area of soil contamination, which is approximately 325 feet \times 575 feet with the center of the source area located near P1-SB30. The maximum soil concentration of benzene (i.e., 160 mg/kg in D-SB22 at 7.3 – 9.3 ft) in this area was above the soil/water interface. The majority of the soil contamination with the highest concentrations is located under 18 inches of concrete; thus, leaching of contaminants to groundwater will be more a result of fluctuations in the water table than percolating rainwater. In order to predict the maximum concentration in groundwater, leaching to groundwater by percolating rainwater was modeled with SESOIL to determine the predicted maximum concentration in the leachate at the water table interface. Since the predicted leachate concentration (i.e., 5990 $\mu\text{g/L}$) was above the maximum observed groundwater concentration (i.e., 4580 $\mu\text{g/L}$) within the source area, the steady-state model was developed by calibrating the model against the maximum predicted concentration (i.e., 5990 $\mu\text{g/L}$). Modeling of the lateral migration to the receptor was performed using AT123D. A man-made drainage ditch is located approximately 375 feet southwest (downgradient) from the center of the source area. This is the nearest potential receptor that might encounter migrating groundwater contamination due to a possible hydraulic connection between the surficial groundwater and the surface water body.

The fate and transport modeling results are presented in Attachment B. The steady-state (i.e., continuous concentration at the source) model was developed by calibrating the model against the maximum predicted benzene concentration at the site, which occurred in well D-SB22 (i.e., 5990 $\mu\text{g/L}$) in 1996 based on leaching of soil contamination to groundwater. In reality, the source of benzene will deplete due to biodegradation and natural attenuation. The modeling results indicate that benzene should reach the man-made drainage ditch at a concentration of 1140 $\mu\text{g/L}$, which is above the state IWQS of 71.28 $\mu\text{g/L}$. Actual groundwater and surface water results indicate that the groundwater is discharging into the drainage ditch; however, the benzene concentrations in the surface water do not exceed the IWQS. Therefore, the surface water body adjacent to the Former Pumphouse #1 site, Facility ID #9-025085, site is being impacted from former UST operations, but at concentrations below the IWQS of 71.28 $\mu\text{g/L}$.

Based on modeling results, the estimated DAF for benzene at the drainage ditch is 5.25. 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 maximum benzene concentrations are presented in Table 15.

ATLs and ACLs for the Former Pumphouse #1 site were calculated using the smallest DAF (i.e., most conservative) of the two separate plumes. Thus, the DAF for benzene associated with the Former Pumphouse #1 tank pit area was not used.

III.B.4.d. Conclusions and recommendations

The conclusions below are based on a review of the results of the various investigations conducted between 1996 and 2000 at the Former Pumphouse #1 site using a risk-based approach:

- Free product was detected at the Former Fuel Pit 1A/DAACG Area (Release #1) in February 2000. An oil/water interface probe was not used at either plume prior to February 2000.
- The horizontal and vertical extent of soil contamination below applicable GUST STLs was delineated during the various investigations.

- The horizontal and vertical extent of groundwater contamination associated with the former pumphouse operations (Release #1 and Release #2) was delineated to below federal MCLs during the various investigations.
- Risk-based screening results show that concentrations of benzene, ethylbenzene, toluene, xylenes, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene in soil exceeded their respective initial screening levels.
- Using the results of the fate and transport modeling, only the benzene, benzo(a)pyrene, chrysene, and indeno(1,2,3-cd)pyrene concentrations in soil exceeded the site-specific ATLS of 9.3 mg/kg, 1.4 mg/kg, 2.1 mg/kg, and 0.66 mg/kg, respectively, at the Former Fuel Pit 1A/DAACG area (Release #1).
- Using the results of the fate and transport modeling, only the benzene and chrysene concentrations in soil exceeded the site-specific ATLS of 9.3 mg/kg and 2.1 mg/kg, respectively, at the Former Pumphouse #1 tank pit area (Release #2).
- Risk-based screening results show that concentrations of benzene, ethylbenzene, toluene, xylenes, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene in groundwater exceeded their respective initial screening levels. However, benzene was the only constituent where concentrations in groundwater exceeded its ACL of 285 µg/L .
- Contaminant concentrations detected in the surface water samples collected downgradient of the site indicate that contaminated groundwater is discharging into the man-made drainage ditch, but the concentrations do not exceed IWQS.
- 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 for each plume, the storm drain for Release #1 and the drainage ditch for Release #2. However, surface water sampling data indicates that contamination in the surface water does not exceed the respective IWQS.
- Based on the CAP-Part B data, the environmental site ranking score for the Former Pumphouse #1 tank pit area is 25,750 (Appendix X) and the environmental site ranking score for Former Fuel Pit 1A/DAACG area is 53,500 (Appendix X).

Considering the site characteristics, it is recommended that the free product, soil contamination above ATLS, and groundwater contamination above ACLs in the area around the vicinity of the Former Fuel Pit 1A/DAACG area be addressed. However, additional information is necessary to determine the amount of recoverable free product at the Former Fuel Pit 1A/DAACG area prior to proposing remediation systems for the site. For the area in the vicinity of Former Pumphouse #1 tank pit area, the soil contamination above ATLS and groundwater contamination above ACLs need to be addressed. Monitored natural attenuation is recommended for the Former Pumphouse #1 tank pit area. In addition, Fort Stewart/HAAF will evaluate “hot-spot” treatment pending a cost effective analysis and availability of funding.

III.C. DESIGN AND OPERATION OF CORRECTIVE ACTION SYSTEMS

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

The presumed remedies evaluated for aromatic hydrocarbons in soil and groundwater at this site include monitored natural attenuation, oxygen injection enhanced bioremediation, air sparging with soil vapor extraction, six-phase heating, and PHOSter® II enhanced bioremediation. A three-step screening process was used to select the preferred remedy for the Former Pumphouse #1 site. This alternative selection process is illustrated in Figure 23. At the Former Fuel Pit 1A/DAACG area, additional information on the amount of recoverable free product is necessary prior to the design and implementation of a corrective action system. At the Former Pumphouse #1 tank pit area, monitored natural attenuation is proposed. Fort Stewart/HAAF will evaluate “hot-spot” treatment pending a cost effective analysis and availability of funding.

III.C.1.a. Theory and feasibility

Former Fuel Pit 1A/DAACG Area (Release #1)

Free product was identified in several wells in the area in February 2000. The wells in this area are spaced over 200 feet apart. Ten additional 4-inch monitoring wells are proposed to delineate the free product area around the Former Fuel Pit 1A/DAACG as shown in Figure 24. Following the installation and development of these wells, free-phase product thickness evaluations will be conducted in the 3 of the 10 wells having the most measurable free product.

The free-phase product testing proposed for the three wells selected will be conducted to determine the actual amount of product on the groundwater surface in the vicinity of the wells. The procedure to be used to determine the free-phase product thickness will be the field bailout test method (Gruszczenski 1987). Free-phase product and groundwater level measurements will be taken using an oil/water interface probe, which detects product and water, by different conductivity values. The test method includes the following steps:

- Measure the static product surface level and groundwater surface to determine the thickness of a product and depth to groundwater in the well. A free-phase product level will be recorded as the interface probe is lowered into the well.
- Remove the free-phase product and groundwater from the well using a disposable top-filling bailer (or peristaltic pump). All measurable free-phase product will be extracted from the groundwater surface in each well. The interface probe will be lowered into the screened interval or near the bottom of the well to confirm the removal of the product.
- Measure the volume of product and groundwater extracted from the well and record the results.
- Measure the free-phase product surface and groundwater surface levels in each well and record the results at 10-minute intervals for the first hour and periodically thereafter while recovery from purging is occurring in the well (maximum duration of 48 hours). The extracted free-phase product and water will be placed in containers for later disposal.

The results of the free-phase product testing using the field bailout test method are similar to a rising head slug test. The results of the test yield two basic curve types, depending on the amount of free-phase product accumulation in the well. A Type I curve is associated with free-phase product accumulations of

less than 12 inches and indicates a one-to-one correspondence between the measured and actual formation free-phase product thickness. Type II curves are associated with free-phase product accumulations greater than 12 inches and result in interpretation of an inflection point prior to stabilization of water and free-phase product levels. This inflection point will be used to interpret the measured and actual formation of free-phase product thickness.

Graphs of the water/free-phase product levels versus time will be generated to observe the slope of the water/free-phase product interface and to determine inflection points. The actual product thickness is determined by measuring the difference between the product line and the water/free-phase product interface line at the inflection point. The difference between the water/free-phase product interface level at the time of inflection and the stabilized top of the free-phase product level is the sum of the actual product thickness and capillary fringe. The height of the capillary fringe is determined by subtracting this difference from the actual product thickness measured at the inflection point. Graphs will be generated with a depth measurement on the y axis and the time of the test along the x axis. The graphs will indicate the top of the free-phase product and the top of the water table. These curves will be used to generate and determine the apparent product thickness on the groundwater as a sum of the actual thickness and capillary fringe.

Using the test bailout method by Gruszczenski can result in reasonable determination of the actual free-phase product thickness in any particular formation. The procedure uses principles similar to the bailout slug test and interpretation of the groundwater surface as impacted by free-phase product accumulation. The information is used to determine the thickness of the actual free-phase product.

The results of the free-phase product testing will be combined with existing site data in order to evaluate remedial alternatives for Release #1. The corrective action recommendations will be summarized in a CAP-Part B Addendum Report that will be submitted to GA EPD USTMP for review and approval.

Former Pumphouse #1 Tank Pit Area (Release #2)

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 Former Pumphouse #1 tank pit area (e.g., shallow water table, permeable silty sand). In fact, the conditions at this site are similar to other sites that are ideal for biodegradation (Abou-Rizk et al. 1995). Finally, the source has been removed; therefore, subsurface conditions (dissolved oxygen, oxidation-reduction potential, background nutrient availability) will steadily improve with time.

In order to determine if natural attenuation of hydrocarbons was occurring, nine groundwater samples were collected from nine wells (P1-MW1, P1-MW2, P1-MW3, P1-MW19, P1-MW21, P1-MW22, P1-MW23, D-MW5, and D-MW6) in 1999. The groundwater samples were analyzed for BTEX, oxygen reduction potential, total organic carbon, sulfate, nitrate, ferrous iron, methane, ethane, ethene, alkalinity, dissolved oxygen, temperature, and pH. The results of the natural attenuation evaluation are presented in Attachment C. The results of the preliminary screening for aerobic and anaerobic biodegradation suggest that conditions are favorable for natural attenuation of aromatic hydrocarbons. The benzene concentrations at the downgradient perimeter of the plume decreased between 1996 and 1999. However, the benzene concentrations near the source, north of Former Fuel Pit 1C, have remained constant between 1996 and 2000.

During the 1999 and 2000 investigations, the Georgia IWQS for benzene of 71.28 µg/L was exceeded in seven monitoring wells. However, only four of the wells contained benzene concentrations that exceeded the benzene ACL of 285 µg/L. Fort Stewart proposes to implement monitored natural attenuation as a corrective action for this site. In addition, Fort Stewart/HAAF will evaluate “hot-spot” treatment

alternatives to be implemented upon availability of funding. Any future corrective action measures will be submitted in an addendum to this CAP-Part B Report.

III.D. IMPLEMENTATION

III.D.1. Milestone Schedule

A milestone schedule for the proposed corrective action and additional investigation 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 presented in Figure 25. Therefore, Fort Stewart will notify GA EPD USTMP of any significant changes to the proposed remediation time and/or investigation time and will provide GA EPD USTMP an updated Gantt chart, as necessary.

III.D.2. Progress Reporting

For the Former Fuel Pit 1A/DAACG area (Release #1), the progress reporting requirements will be discussed in an addendum to the CAP-Part B Report that describes the corrective action to be implemented.

For the Former Pumphouse #1 tank pit area, annual monitoring reports will be submitted to GA EPD that will summarize all previous sampling events for that period.

III.D.3. Certificate of Completion Report

Petition for permanent closure will be submitted with the final progress report (i.e., completion report) for the first release to reach closure criteria. An addendum to the completion report will be submitted for the second release to reach the closure criteria. GA EPD will provide final approval for decommissioning the monitoring wells, which will be requested in the final completion addendum 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, Former Pumphouse #1 site, Facility ID 9-025085, including any and all certified amendments/addenda 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

For the Former Fuel Pit 1A/DAACG area (Release #1), the inspection schedule and preventative maintenance program will be discussed in an addendum to the CAP-Part B Report that describes the corrective action to be implemented.

For the Former Pumphouse #1 tank pit area (Release #2), the wells will be visually inspected for changes or damage during each sampling event. 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

For the Former Fuel Pit 1A/DAACG area (Release #1), the periodic monitoring requirements will be discussed in an addendum to the CAP-Part B Report that describes the corrective action to be implemented.

For the Former Pumphouse #1 tank pit area (Release #2), groundwater samples will be collected semiannually from D-MW5, D-MW6, P1-MW1, P1-MW2, P1-MW18, P1-MW19, P1-MW22, and P1-MW23 and analyzed for BTEX. PAH compounds that were observed during the CAP-Part A and CAP-Part B investigations were detected at concentrations below their respective ACLs. Thus, it is recommended that PAH analysis not be performed during the semiannual sampling. Monitoring will continue at the site until the benzene concentrations in groundwater are below the ACL of 285 µg/L for two sampling events or until a “hot-spot” treatment is completed at the site.

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 and PAH analysis using EPA Methods 8100/8270C/8310.

III.D.6. Effectiveness of Corrective Action

The corrective action to be implemented at the Former Fuel Pit 1A/DAACG area will be determined in an addendum to this CAP-Part B Report. Once the corrective action is implemented and the remedial objectives met, the corrective action will be discontinued. The objectives of the corrective action are to reduce the benzene concentrations in groundwater to below the ACL of 285 µg/L and to reduce the benzene, benzo(a)pyrene, chrysene, and indeno(1,2,3-cd)pyrene to below the ATLS of 9.3 mg/kg, 4.2 mg/kg, 8.6 mg/kg, and 2.7 mg/kg, respectively.

For the Former Pumphouse #1 tank pit area (Release #2), the corrective action will be discontinued once the objectives of the monitoring only plan have been achieved. That is the benzene concentrations in groundwater will be reduced below the ACL of 285 µg/L, and the benzene and chrysene concentrations in soil will be reduced below their ATLS of 9.3 mg/kg and 2.2 mg/kg, respectively.

III.D.7. Confirmatory Soil Sampling Plan

For the Former Fuel Pit 1A/DAACG area (Release #1), the confirmatory soil sampling plan will be discussed in an addendum to the CAP-Part B Report that describes the corrective action to be implemented.

For the Former Pumphouse #1 tank pit area (Release #2), no excavation of soil is planned under the monitoring only plan; therefore, confirmatory sampling associated with excavation of soil will not be performed. However, since there is an area of soil contamination that exceeds the benzene ATL of 9.3 mg/kg and the chrysene ATL of 2.2 mg/kg, three confirmatory soil samples will be collected from the area of soil contamination. The soil samples will be collected once the benzene concentrations in groundwater are approaching the ACL. The soil samples will only be analyzed for benzene and chrysene.

The location of these samples will be determined during the monitoring only program and will be submitted to GA EPD in a letter or annual monitoring only report for approval.

III.D.8. Stockpiled Bulk Soil Sampling

For the Former Fuel Pit 1A/DAACG area (Release #1), stockpiled bulk soil sampling, if necessary, will be discussed in an addendum to the CAP-Part B Report that describes the corrective action to be implemented.

For the Former Pumphouse #1 tank pit area (Release #2), no stockpiled soil will be generated with this corrective action; therefore, no soil sampling will be conducted.

III.D.9. Corrective Action Termination Conditions

For the Former Fuel Pit 1A/DAACG area (Release #1), termination conditions will be provided in an addendum to the CAP-Part B Report that describes the corrective action to be implemented.

For the Former Pumphouse #1 tank pit area (Release #2), concentrations of benzene in groundwater must be at or below the ACL, and concentrations of benzene and chrysene in soil must be at or below their respective ATLS prior to terminating the monitoring only program. Once the benzene ACL and the benzene and chrysene ATLS are achieved, the remedial system and monitoring may be terminated regardless of the site ranking score.

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

After termination has been granted for either release, equipment and debris related to the corrective action will be removed from the site.

III.E. PUBLIC NOTIFICATION

The Former Pumphouse #1 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 DPW has complied with the public notice requirements defined by GA EPD guidance by publishing an announcement in the *Savannah Morning News* on April 16 and 23, 2000. A copy of the newspaper announcement used for public notification is presented in Appendix XI of this report.

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IV. CLAIM FOR REIMBURSEMENT

HAAF is a federally owned facility and has funded the investigation for the Former Pumphouse #1 site, Facility ID #9-025085, 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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APPENDIX I

REPORT FIGURES

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Figure 1. Location Map for the Former Pumphouse #1 Site, Facility ID #9-025085

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Figure 2. Site Map of the Former Pumphouse #1 Site, Facility ID #9-025085

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**Figure 3a. CAP-Part A and CAP-Part B Soil Sampling Analytical Results at the
Former Pumphouse #1 Site, Facility ID #9-025085**

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**Figure 3b. CAP-Part A and CAP-Part B Soil Sampling Analytical Results at the
Former Pumphouse #1 Site, Facility ID #9-025085**

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**Figure 3c. CAP-Part A and CAP-Part B Soil Sampling Analytical Results at the
Former Pumphouse #1 Site, Facility ID #9-025085**

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**Figure 3d. CAP-Part A and CAP-Part B Soil Sampling Analytical Results at the
Former Pumphouse #1 Site, Facility ID #9-025085**

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**Figure 3e. CAP-Part A and CAP-Part B Soil Sampling Analytical Results at the
Former Pumphouse #1 Site, Facility ID #9-025085**

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Figure 4. Benzene Contamination in Groundwater Determined During the CAP-Part A Site Investigation at the Former Pumphouse #1 Site, Facility ID #9-025085

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Figure 5. Toluene Contamination in Groundwater Determined During the CAP-Part A Site Investigation at the Former Pumphouse #1 Site, Facility ID #9-025085

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Figure 6. Ethylbenzene Contamination in Groundwater Determined During the CAP-Part A Site Investigation at the Former Pumphouse #1 Site, Facility ID #9-025085

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Figure 7. Total Xylenes Contamination in Groundwater Determined During the CAP-Part A Site Investigation at the Former Pumphouse #1 Site, Facility ID #9-025085

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**Figure 8. Naphthalene Contamination in Groundwater Determined During the CAP-Part A Site Investigation
at the Former Pumphouse #1 Site, Facility ID #9-025085**

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Figure 9. Benzene Contamination in Groundwater Determined During the CAP-Part B Site Investigation at the Former Pumphouse #1 Site, Facility ID #9-025085

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Figure 10. Toluene Contamination in Groundwater Determined During the CAP-Part B Site Investigation at the Former Pumphouse #1 Site, Facility ID #9-025085

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Figure 11. Ethylbenzene Contamination in Groundwater Determined During the CAP-Part B Site Investigation at the Former Pumphouse #1 Site, Facility ID #9-025085

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Figure 12. Total Xylenes Contamination in Groundwater Determined During the CAP-Part B Site Investigation at the Former Pumphouse #1 Site, Facility ID #9-025085

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**Figure 13. Delineation of Free Product (February 2000) at the Former Pumphouse #1 Site,
Facility ID #9-025085**

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**Figure 14. CAP-Part A Surface Water and Sediment Analytical Results at the Former Pumphouse #1 Site,
Facility ID #9-025085**

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**Figure 15. CAP-Part B Surface Water Analytical Results at the Former Pumphouse #1 Site,
Facility ID #9-025085**

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Figure 16. Locations of Public and Non-Public Supply Wells at Hunter Army Airfield and Surrounding Area

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Figure 17. Locations of Surface Water Bodies and Water Supply Wells at Hunter Army Airfield

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Figure 18. P1-MW40 Aquifer Test Results (November 1999) at the Former Pumphouse #1 Site, Facility ID #9-025085

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**Figure 19. Groundwater Potentiometric Surface Map (November 1999) for the Former Pumphouse #1 Site,
Facility ID #9-025085**

8.5 x 11

**Figure 20. Groundwater Potentiometric Surface Map (February 2000) for the Former Pumphouse #1 Site,
Facility ID #9-025085**

8.5 x 11

Figure 21. Equipotential Flow Net (February 2000) for the Former Pumphouse #1 Site, Facility ID #9-025085

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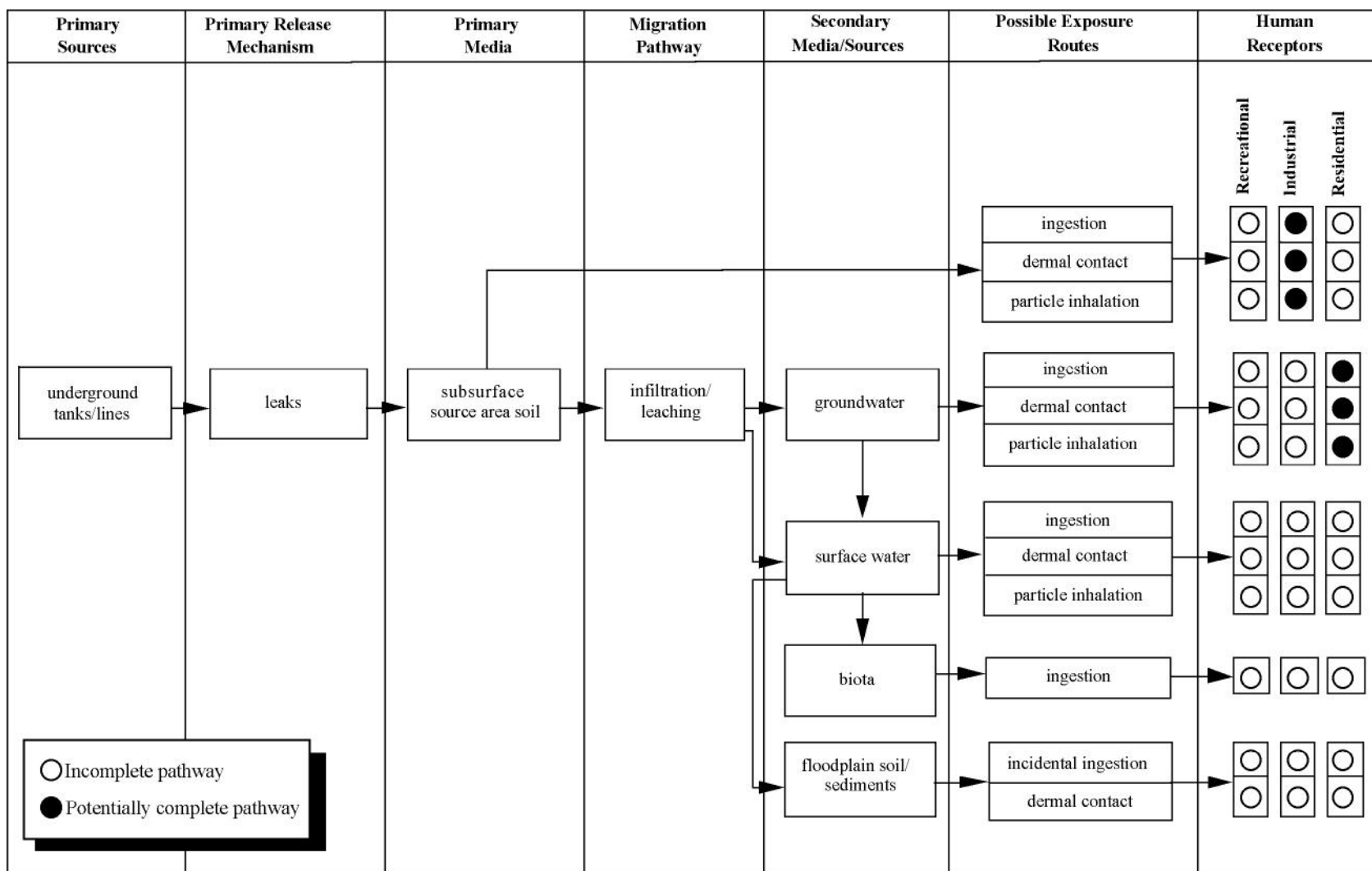


Figure 22. Conceptual Exposure Model for the Former Pumphouse #1 Site, Facility ID #9-025085

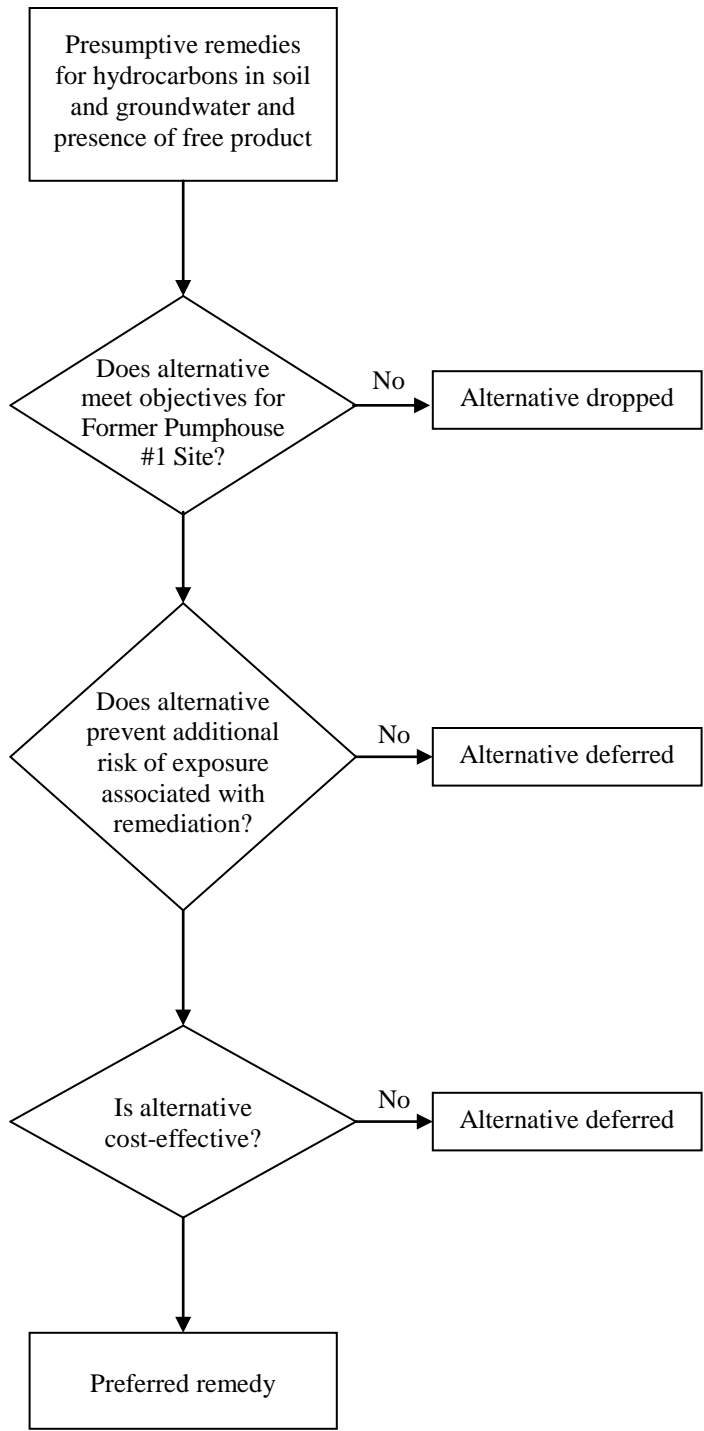


Figure 23. Remedial Alternatives Selection Process for the Former Pumphouse #1 Site, Facility ID #9-025085

Figure 24. Proposed Product Delineation Wells for Release #1 at the Former Pumphouse #1 Site, Facility ID #9-025085

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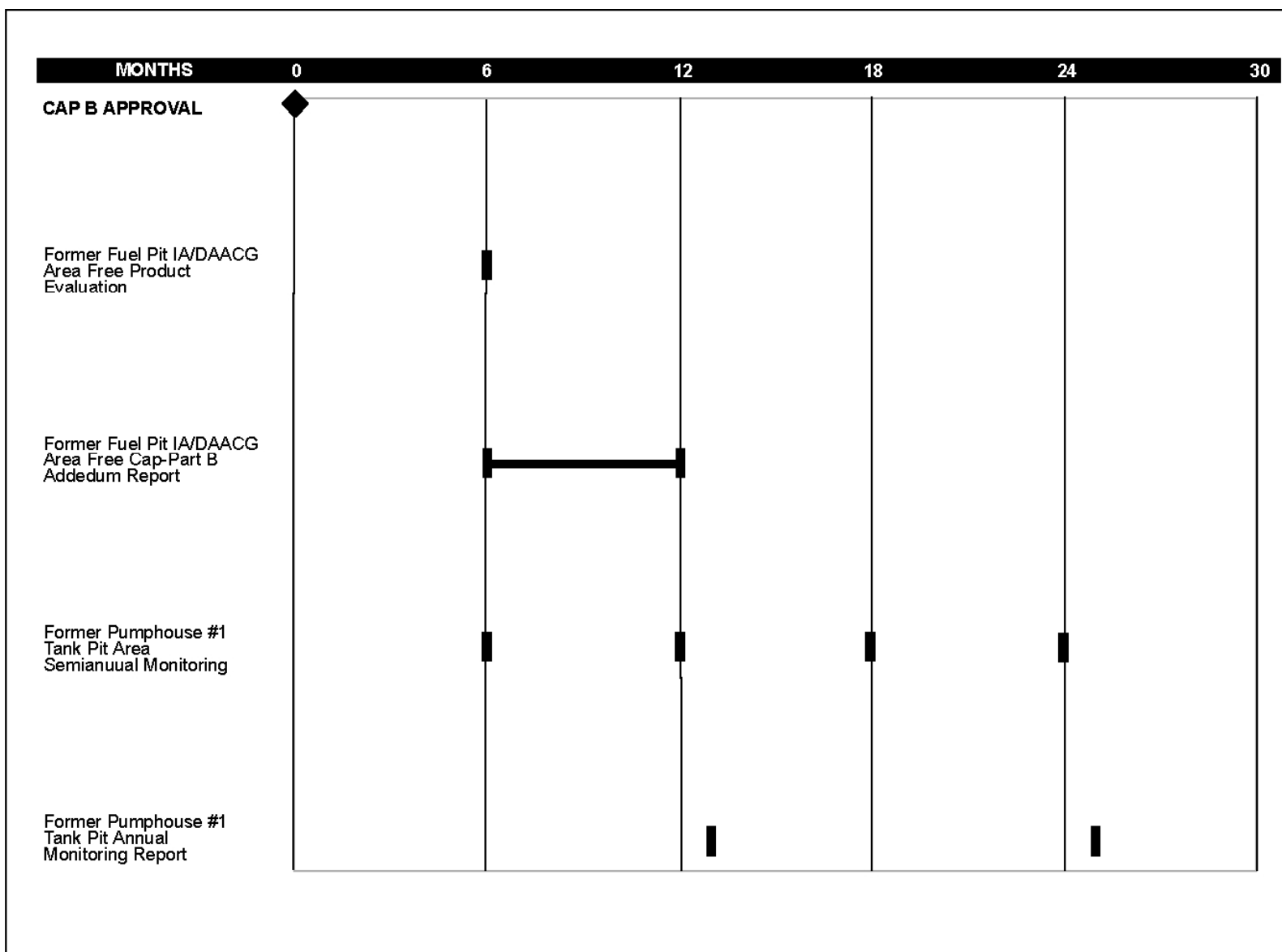


Figure 25. Milestone Schedule for the Remedial Action at the Former Pumphouse #1 Site, Facility ID #9-025085

APPENDIX II

REPORT TABLES

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

Sample Location	Depth (ft BGS)	Date Sampled	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH (mg/kg)
1995 UST Removal Activities (Anderson Columbia Environmental)								
8060-N.S.W		3/20/95	0.301 U	3.28 =	15.5 =	71.2 =	89.98	12 U
8060-W.S.W		3/21/95	2.81 U	29.1 =	14.9 =	188.4 =	232.4	67 =
8060-E.S.W		3/23/95	0.00638	0.00108 U	0.00108 U	0.00659 =	0.01297	254 =
1998 UST Removal Activities (Earth Tech) USTs 30, 31, & 50 were removed in 1998. In correspondence dated June 17, 1998 (White to Brown), GA EPD approved the request not to conduct soil sampling at the site because the tanks removed in 1998 were located within the area of soil contamination previously defined at the site during the CAP-Part A investigation in 1997.								
GUST Soil Threshold Levels (Table B, Column 1)			0.017	115	18	700	NRC	NRC

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

Sample Location	Depth (ft BGS)	Date Sampled	Detected PAH Compounds (mg/kg)						Total PAHs (mg/kg)
			benzo (a) pyrene	fluoranthene	naphthalene	pyrene			
1995 UST Removal Activities (Anderson Columbia Environmental)									
8060-N.S.W		3/20/95							ND
8060-W.S.W		3/21/95	2.83 =	0.840 =	0.734 =	1.17 =			5.574
8060-E.S.W		3/23/95		2.39 =		3.14 =			5.53
1998 UST Removal Activities (Earth Tech)									
USTs 30, 31, & 50 were removed in 1998. In correspondence dated June 17, 1998 (White to Brown), GA EPD approved the request not to conduct soil sampling at the site because the tanks removed in 1998 were located within the area of soil contamination previously defined at the site during the CAP-Part A investigation in 1997.									
GUST Soil Threshold Levels (Table B, Column 1)			0.660	NRC	NRC	NRC			NRC

NOTES:

¹ Underground storage tank system closure performed by Anderson Columbia, Inc. (1995).

Bold values exceed STLs.

BGS Below ground surface.

BTEX Benzene, toluene, ethylbenzene, and xylenes.

NRC No regulatory criteria.

TPH Total petroleum 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 1c. UST System Closure – Groundwater Analytical Results
(VOLATILE ORGANIC COMPOUNDS)

Sample Location	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
1995 UST Removal Activities (Anderson Columbia Environmental)						
8060-T2-GW	3/23/95	100 U	100 =	230 =	1140 =	1470
8060-T3-GW	3/22/95	100 =	290 =	1120 =	5010 =	6520
8060-T4-GW	3/22/95	88 =	600 =	2050 =	6280 =	9018
8060-T5-GW	3/22/95	180 =	730 =	1730 =	6670 =	9310
8060-T7-GW	3/21/95	180 =	340 =	2400 =	3690 =	6610
8060-T8-GW	3/21/95	280 =	370 =	2150 =	5110 =	7910
8060-T9-GW	3/21/95	370 =	1620 =	3040 =	12270 =	17300
8068-T10-GW	3/20/95	780 =	2890 =	6220 =	21410 =	31300
1998 UST Removal Activities (Earth Tech)						
USTs 30, 31, & 50 were removed in 1998. No groundwater sampling was conducted because the tanks removed in 1998 were located within the area of contamination previously defined at the site during the CAP-Part A investigation in 1997.						
In-Stream Water Quality Standards (Chapter 391-3-6)		71.28	200,000	28,718	NRC	NRC

NOTES:

Bold values exceed In-stream Water Quality Standard (IWQS).

BTEX Benzene, toluene, ethylbenzene, and xylenes.

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

Sample Location	Date Sampled	Detected PAH Compounds (µg/L)															Total PAHs (µg/L)
		acenaphthene	anthracene	benzo (a) anthracene	benzo(a) pyrene	benzo (b) fluoranthene	benzo(g,h,i) perylene	benzo(k) fluoranthene	chrysene	dibenzo(a,h) anthracene	fluoranthene	fluorene	indeno(1,2,3-cd) pyrene	naphthalene	phenanthrene	pyrene	
1995 UST Removal Activities (Anderson Columbia Environmental)																	
8060-T2-GW	3/23/95	6720 =	24700 =	11300 =	10800 =	4750 =	2460 =	4750 =	11300 =	1660 =	33600 =	6450 =	1660 =	3300 =	24700 =	35500 =	
8060-T3-GW	3/22/95	259 =	901 =	556 =		352 =		352 =	556 =		1190 =	260 =		339 =	901 =	1230 =	
8060-T4-GW	3/22/95		2340 =	1160 =		1030 =		1030 =	1160 =		2260 =				2340 =	2960 =	
8060-T5-GW	3/22/95	1200 =	4290 =	2460 =		1930 =		1930 =	2460 =		5470 =	1280 =			4290 =	5590 =	
8060-T7-GW	3/21/95		2280 =	1700 =		1220 =		1220 =	1700 =		2360 =				2280 =	2730 =	
8060-T8-GW	3/21/95		1660 =	1420 =					1420 =		2480 =				1660 =	2520 =	
8060-T9-GW	3/21/95		28700 =	12400 =					12400 =		31600 =				28700 =	36100 =	
8068-T10-GW	3/20/95	421 =	2340 =	2030 =	651 =	1080 =		1080 =	2030 =		3640 =	525 =		348 =	2340 =	3280 =	
1998 UST Removal Activities (Earth Tech)																	
USTs 30, 31, & 50 were removed in 1998. No groundwater sampling was conducted because the tanks removed in 1998 were located within the area of contamination previously defined at the site during the CAP-Part A investigation in 1997.																	
In-Stream Water Quality Standards (Chapter 391-3-6)		NRC	110,000	0.0311	0.0311	NRC	NRC	0.0311	0.0311	0.0311	370	14,000	0.0311	NRC	NRC	11,000	NRC

NOTE:

Bold values exceed IWQS.

BGS Below ground surface.

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.

Hunter Army Airfield UST CAP-Part B Report
Former Pumphouse #1, Former Building 8060, Facility ID #9-025085

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- 1996										
Former Fuel Pit 1A/DAACG (Release #1)										
P1-MW11	WB1101	8.0 - 10.0	11/21/96	3.1 U	41 U	71 J	84 J	199.1	150 J	20000 J
P1-MW11	WB1102	13.0 - 15.0	11/21/96	0.57 U	7.6 U	14 J	13 J	35.17	15 =	7800 J
P1-MW12	WB1201	8.0 - 10.0	11/21/96	0.048 U	0.77 U	0.72 U	1.9 J	3.438	33 =	200 U
P1-MW12	WB1202	13.0 - 15.0	11/21/96	0.0003 U	0.004 U	0.0037 U	0.0014 U	ND	12 U	0.22 U
P1-SB19	SB1901	4.0 - 6.0	11/20/96	0.0056 U	0.0056 U	0.0056 U	0.0056 U	ND	22 =	0.28 U
P1-SB19	SB1902	6.0 - 8.0	11/20/96	0.0063 U	0.0063 U	0.0063 U	0.0063 U	ND	4.2 =	0.51 =
P1-SB20	SB2001	4.0 - 6.0	11/20/96	0.18 J	0.22 J	5.9 =	46 =	52.3	140 =	800 J
P1-SB20	SB2002	6.0 - 8.0	11/20/96	6.2 U	1.3 J	34 =	220 =	261.5	550 =	4000 J
P1-SB21	SB2101	1.0 - 3.0	11/20/96	0.0052 U	0.038 =	0.0052 U	0.0082 =	0.0462	5.3 =	0.26 U
P1-SB21	SB2102	9.0 - 11.0	11/20/96	0.0066 U	0.0078 =	0.0066 U	0.008 =	0.0158	11 =	1400 J
P1-SB22	SB2201	6.0 - 8.0	11/20/96	0.0052 U	0.0052 U	0.0052 U	0.0052 U	ND	8.3 =	0.26 U
P1-SB22	SB2202	8.0 - 10.0	11/20/96	0.26 J	10 J	5.3 J	38 J	53.56	23 =	630 J
P1-SB23	SB2301	5.0 - 7.0	11/21/96	0.00027 U	0.003 U	0.0033 U	0.0026 J	0.0026	13 =	0.2 U
P1-SB23	SB2302	7.0 - 9.0	11/21/96	0.00028 U	0.0037 U	0.0035 U	0.0015 J	0.0015	18 =	0.21 U
P1-SB24	SB2401	5.0 - 7.0	11/21/96	0.00026 U	0.008 J	0.0033 U	0.0041 J	0.0121	11 U	0.2 U
P1-SB24	SB2402	9.0 - 11.0	11/21/96	0.0003 U	0.004 U	0.0037 U	0.0023 J	0.0023	12 U	0.22 U
Former Pumphouse #1 Tank Area (Release #2)										
P1-MW01	WB0101	8.0 - 10.0	11/18/96	3 J	15 J	19 J	130 J	167	50 =	4000 J
P1-MW01	WB0102	13.0 - 15.0	11/18/96	0.0030 U	0.45 =	0.062 =	0.37 =	0.882	15 =	3.4 =
P1-MW02	WB0201	8.0 - 10.0	11/18/96	0.59 J	1.3 J	1.4 =	8.4 =	11.69	11 U	1200 J
P1-MW02	WB0202	13.0 - 15.0	11/18/96	0.0015 U	0.07 J	0.53 J	1.2 J	1.8	12 U	200 J
P1-MW03	WB0301	8.0 - 10.0	11/19/96	2.9 U	160 J	96 J	260 J	518.9	23 J	21000 J
P1-MW03	WB0302	13.0 - 15.0	11/19/96	0.03 U	9.8 J	6.1 J	19 J	34.93	27 J	1400 J
P1-SB01	SB0101	4.0 - 6.0	11/18/96	0.16 J	0.63 =	0.67 =	5.7 =	7.16	85 =	210 J
P1-SB01	SB0102	8.0 - 10.0	11/18/96	0.0014 U	0.019 J	0.052 =	0.082 =	0.153	45 =	17 =
P1-SB02	SB0201	4.0 - 6.0	11/18/96	0.062 U	0.82 U	0.77 U	0.9 J	2.552	140 J	370 J
P1-SB02	SB0202	8.0 - 10.0	11/18/96	0.0014 U	0.019 U	0.07 J	0.032 J	0.102	44 J	99 J
P1-SB03	SB0301	4.0 - 6.0	11/18/96	2.1 J	16 J	8.2 J	34 J	60.3	26 =	4700 J
P1-SB03	SB0302	8.0 - 10.0	11/18/96	5.5 J	9.7 J	16 J	68 J	99.2	18 J	2100 J
P1-SB04	SB0401	4.0 - 6.0	11/18/96	0.26 J	2.6 J	1.5 =	10 =	14.36	11 U	1000 J
P1-SB04	SB0402	8.0 - 10.0	11/18/96	3 J	53 J	14 J	73 J	143	24 =	7200 J
P1-SB05	SB0501	4.0 - 6.0	11/18/96	0.0015 U	0.59 =	0.1 =	0.61 =	1.3	52 =	5.6 J
P1-SB05	SB0502	8.0 - 10.0	11/18/96	0.13 J	0.3 U	0.29 U	0.37 J	1.09	180 J	88 J
P1-SB06	SB0601	4.0 - 6.0	11/18/96	0.00029 U	0.0041 J	0.0032 J	0.0084 =	0.0157	130 J	1.2 J
P1-SB06	SB0602	10.0 - 12.0	11/18/96	1.6 J	3.1 J	6.3 J	30 J	41	24 =	5000 J
P1-SB07	SB0701	4.0 - 6.0	11/19/96	0.00028 U	0.0038 U	0.0067 =	0.046 =	0.0527	92 J	0.31 =
P1-SB07	SB0702	10.0 - 12.0	11/19/96	0.00029 U	0.022 =	0.022 =	0.13 =	0.174	12 UJ	1.8 =
P1-SB08	SB0801	4.0 - 6.0	11/19/96	0.00028 U	0.0038 U	0.0036 U	0.0039 J	0.0039	12 UJ	4.2 =
P1-SB08	SB0802	10.0 - 12.0	11/19/96	0.0003 U	0.0040 U	0.0037 U	0.0012 J	0.0012	12 UJ	0.22 U
GUST Soil Threshold Levels (Table B, Column 1)				0.017	115	18	700	NRC	NRC	NRC
Alternate Threshold Levels				9.3	479	187	893	—	—	—

See page II-8 for footnotes.

Hunter Army Airfield UST CAP-Part B Report
Former Pumphouse #1, Former Building 8060, Facility ID #9-025085

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 B Investigation - 1997										
Former Fuel Pit 1A/DAACG (Release #1)										
P1-MW13	WB1301	8.0 - 10.0	5/12/97	0.022 U	0.5 J	5.8 J	5.1 J	11.4	55 =	190 J
P1-MW13	WB1302	13.0 - 15.0	5/12/97	0.0014 J	0.39 =	1.0 =	1.7 =	3.0314	34 =	700 =
P1-MW14	WB1401	4.0 - 6.0	5/12/97	0.0056 =	0.0056 U	0.0056 U	0.0056 U	0.0056	11 U	0.2 U
P1-MW14	WB1402	8.0 - 10.0	5/12/97	0.0059 =	0.05 =	0.014 =	0.059 =	0.1288	12 U	0.21 U
P1-MW15	WB1501	4.0 - 6.0	5/12/97	0.0059 U	0.0094 =	0.0059 U	0.0062 =	0.0156	17 =	0.21 U
P1-MW15	WB1502	8.0 - 10.0	5/12/97	0.0062 U	0.0062 U	0.0062 U	0.0072 =	0.0072	12 U	0.22 U
P1-MW16	WB1601	4.0 - 6.0	5/12/97	0.0061 U	0.017 =	0.0062 =	0.026 =	0.0492	12 U	0.22 U
P1-MW16	WB1602	8.0 - 10.0	5/12/97	0.0062 U	0.0062 U	0.0062 U	0.0062 U	ND	12 U	0.22 U
P1-SB25	SB2501	4.0 - 6.0	5/13/97	0.021 U	2.6 J	23 J	47 J	72.6	180 =	950 J
P1-SB25	SB2502	8.0 - 10.0	5/13/97	0.29 UJ	64 J	82 J	190 J	336	17 =	140 J
P1-SB26	SB2601	4.0 - 6.0	5/13/97	0.0054 U	0.011 =	0.0085 =	0.071 =	0.0905	20 =	0.38 J
P1-SB26	SB2602	8.0 - 10.0	5/13/97	0.022 UJ	0.29 U	2 =	3.1 =	5.1	22 =	72 J
Former Pumphouse #1 Tank Area (Release #2)										
P1-MW17	WB1701	4.0 - 6.0	5/5/97	0.0057 UJ	0.0057 U	0.0057 U	0.0057 U	ND	11 U	0.2 U
P1-MW17	WB1702	8.0 - 10.0	5/5/97	0.0060 UJ	0.0060 U	0.0060 U	0.0060 U	ND	12 U	0.21 U
P1-MW18	WB1801	8.0 - 10.0	5/5/97	0.0013 UJ	0.018 UJ	0.017 UJ	0.4 =	0.4	11 U	2.4 =
P1-MW18	WB1802	13.0 - 15.0	5/5/97	0.0063 U	0.0063 U	0.0063 U	0.0063 U	ND	13 U	22 J
P1-MW19	WB1901	8.0 - 10.0	5/5/97	0.0053 UJ	0.0053 U	0.0053 U	0.0053 U	ND	17 =	0.19 U
P1-MW19	WB1902	13.0 - 15.0	5/5/97	0.0062 UJ	0.0062 U	0.0062 U	0.0062 U	ND	12 U	0.22 U
P1-MW20	WB2001	4.0 - 6.0	5/13/97	0.0058 U	0.0058 U	0.0058 U	0.0058 U	ND	12 U	0.21 UJ
P1-MW20	WB2002	8.0 - 10.0	5/13/97	0.0056 U	0.0056 U	0.0056 U	0.0056 U	ND	11 U	0.2 UJ
P1-MW21	WB2101	8.0 - 10.0	5/6/97	0.0054 U	0.0054 U	0.015 =	0.11 =	0.125	61 =	2.0 =
P1-MW21	WB2102	13.0 - 15.0	5/6/97	0.0060 U	0.01 =	0.0060 U	0.0060 U	0.01	12 U	0.24 =
P1-MW22	WB2201	4.0 - 6.0	5/6/97	0.0013 UJ	0.079 =	0.17 =	4.1 =	4.349	64 =	4.6 =
P1-MW22	WB2202	8.0 - 10.0	5/6/97	0.9 J	1.2 =	3.3 =	55 =	60.4	150 =	750 J
P2-MW23	WB2301	8.0 - 10.0	5/13/97	0.0056 U	0.0056 U	0.0056 U	0.0056 U	ND	11 U	21 J
P1-MW23	WB2302	13.0 - 15.0	5/13/97	0.0062 U	0.0062 U	0.0062 U	0.0062 U	ND	12 U	0.22 UJ
P1-MW24	WB2401	8.0 - 10.0	5/6/97	0.0056 U	0.007 =	0.011 =	0.14 =	0.158	68 =	1.0 =
P1-MW24	WB2402	13.0 - 15.0	5/6/97	0.0060 U	0.017 =	0.0060 U	0.0078 =	0.0248	12 U	0.22 U
P1-SB27	SB2701	2.0 - 4.0	5/13/97	0.0059 U	0.013 =	0.0083 =	0.043 =	0.0643	13 =	0.53 J
P1-SB27	SB2702	8.0 - 10.0	5/13/97	0.12 U	8.5 J	20 J	37 J	65.5	66 =	730 J
P1-SB28	SB2801	4.0 - 6.0	5/13/97	0.0056 U	0.0056 U	0.0056 U	0.0056 U	ND	11 U	0.2 U
P1-SB28	SB2802	8.0 - 10.0	5/13/97	0.0060 U	0.0060 U	0.0060 U	0.0060 U	ND	12 U	0.22 U
P1-SB29	SB2901	4.0 - 6.0	5/13/97	0.0021 UJ	0.64 =	2.7 =	4.4 =	7.74	24 =	74 J
P1-SB29	SB2902	8.0 - 10.0	5/13/97	0.0022 UJ	1.1 =	2.3 =	9.6 =	13.0	18 =	65 J
P1-SB30	SB3001	4.0 - 6.0	5/13/97	0.0055 U	0.0055 U	0.0055 U	0.12 =	0.12	240 =	0.57 J
P1-SB30	SB3002	8.0 - 10.0	5/13/97	0.023 UJ	7 J	21 J	64 J	92.0	50 =	15 UJ
P1-SB31	SB3101	4.0 - 6.0	5/13/97	0.0013 UJ	0.017 UJ	0.016 UJ	0.016 UJ	<0.017	11 =	2.8 J
P1-SB31	SB3102	8.0 - 10.0	5/13/97	0.022 UJ	0.32 UJ	2.5 J	6.3 J	8.8	18 =	110 J
GUST Soil Threshold Levels (Table B, Column 1)				0.017	115	18	700	NRC	NRC	NRC
Alternate Threshold Levels				9.3	479	187	893	—	—	—

See page II-8 for footnotes.

Hunter Army Airfield UST CAP-Part B Report
Former Pumphouse #1, Former Building 8060, Facility ID #9-025085

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)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)
P1-SB32	SB3201	4.0 - 6.0	5/12/97	0.0054 U	0.0054 U	0.0054 U	0.0054 U	ND	11 U	0.2 U
P1-SB32	SB3202	8.0 - 10.0	5/12/97	0.0060 U	0.0060 U	0.0060 U	0.0060 U	ND	12 U	0.22 U
P1-SB33	SB3301	4.0 - 6.0	5/12/97	0.0058 U	0.0058 U	0.016 =	0.107 =	0.123	15 =	0.21 U
P1-SB33	SB3302	10.0 - 12.0	5/12/97	0.0015 UJ	0.22 J	0.098 J	0.05 J	0.368	20 =	50 =
P1-SB34	SB3401	8.0 - 6.0	5/12/97	0.0060 U	0.011 =	0.0060 U	0.06 =	0.071	12 U	0.71 =
P1-SB34	SB3402	8.0 - 10.0	5/12/97	0.0014 UJ	0.028 UJ	0.028 UJ	0.75 J	0.75	19 =	5.9 J
P1-SB35	SB3501	4.0 - 6.0	5/8/97	0.0057 U	0.0057 U	0.0057 U	0.0057 U	ND	11 U	0.2 U
P1-SB35	SB3502	10.0 - 12.0	5/8/97	0.097 U	0.44 U	1.6 =	18 =	19.6	11 U	260 J
P1-SB36	SB3601	4.0 - 6.0	5/8/97	0.0056 U	0.0056 U	0.0056 U	0.0056 U	ND	6.2 J	0.2 U
P1-SB36	SB3602	10.0 - 12.0	5/8/97	0.0059 U	0.0059 U	0.0059 U	0.0059 U	ND	12 U	0.21 U
P1-SB37	SB3701	4.0 - 6.0	5/8/97	0.0060 U	0.0060 U	0.0060 U	0.0060 U	ND	390 =	0.091 J
P1-SB37	SB3702	10.0 - 12.0	5/8/97	0.0014 U	0.39 U	7.6 =	6.2 =	13.8	9.7 J	240 J
P1-SB38	SB3801	4.0 - 6.0	5/13/97	0.0058 U	0.012 =	0.022 =	0.082 =	0.116	35 =	0.2 U
P1-SB38	SB3802	8.0 - 10.0	5/13/97	0.0058 U	0.0058 U	0.0058 U	0.0058 U	ND	14 =	0.2 U
P1-SB39	SB3901	4.0 - 6.0	5/8/97	0.0059 U	0.022 =	0.026 =	0.26 =	0.308	29 =	0.7 J
P1-SB39	SB3902	8.0 - 10.0	5/8/97	0.0062 U	0.28 U	0.28 U	0.56 U	<0.28	25 =	35 J
P1-SB40	SB4001	4.0 - 6.0	5/8/97	0.067 U	0.77 =	0.99 =	6.5 =	8.26	21 =	86 J
P1-SB40	SB4002	8.0 - 10.0	5/8/97	0.32 U	180 =	44 =	220 =	444	35 J	3700 J
P1-SB41	SB4101	4.0 - 6.0	5/8/97	0.0058 U	0.0058 U	0.0058 U	0.012 =	0.012	7.8 J	0.052 J
P1-SB41	SB4102	8.0 - 10.0	5/8/97	0.0062 U	0.0062 U	0.0062 U	0.0062 U	ND	12 U	0.22 U
CAP-Part B Investigation – 1999										
Former Pumphouse #1 Tank Area (Release #2)										
P1-MW40	WB4001	8.0 - 10.0	9/29/99	5.1 J	190 =	110 =	530 =	835.1	43 =	9900 =
P1-MW40	WB4002	48.0 - 50.0	2/29/99	0.029 U	0.029 U	0.029 U	0.058 U	<0.029	3.8 U	1.4 U
GUST Soil Threshold Levels (Table A, Column 2)				0.017	115	18	700	NRC	NRC	NRC
Alternate Threshold Levels				9.3	479	187	893	—	—	—

NOTES:

1996 soil analytical results from the soil borings and monitoring wells at the DAACG Facility are presented in the DAACG Facility Area CAP-Part B Report (M&E 1996) and are summarized in Appendix V.

Bold values exceed soil threshold levels (STLs).

BGS Below ground surface.

BTEX Benzene, toluene, ethylbenzene, and xylenes.

DRO Diesel range organics.

GRO Gasoline range organics.

ND Not detected.

NRC No regulatory criteria.

TPH Total petroleum 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
(POLYNUCLEAR AROMATIC HYDROCARBONS)

Sample Location	Sample ID	Depth (ft BGS)	Date Sampled	Detected PAH Compounds (mg/kg)												Total PAHs (mg/kg)
				acenaphthalene	acenaphthylene	benzo (a) pyrene	benzo (b,k) fluoranthene ¹	benzo (g,h,i) perylene	chrysene + benzo(a)anthracene ¹	fluoranthene	fluorene	indeno (1,2,3-cd) pyrene + dibenzo(a,h) anthracene ¹	naphthalene	phenanthrene + anthracene ¹	pyrene	
CAP-Part A Investigation - 1996																
Former Fuel Pit 1A/DAACG (Release #1)							3.9 J		5.4 J							9.3
P1-MW11	WB1101	8.0 - 10.0	11/21/96													ND
P1-MW11	WB1102	13.0 - 15.0	11/21/96													ND
P1-MW12	WB1201	8.0 - 10.0	11/21/96													ND
P1-MW12	WB1202	13.0 - 15.0	11/21/96													ND
P1-SB19	SB1901	4.0 - 6.0	11/20/96													ND
P1-SB19	SB1902	6.0 - 8.0	11/20/96													ND
P1-SB20	SB2001	4.0 - 6.0	11/20/96													ND
P1-SB20	SB2002	6.0 - 8.0	11/20/96									1.1 =				2.63
P1-SB21	SB2101	1.0 - 3.0	11/20/96													ND
P1-SB21	SB2102	9.0 - 11.0	11/20/96													ND
P1-SB22	SB2201	6.0 - 8.0	11/20/96													ND
P1-SB22	SB2202	8.0 - 10.0	11/20/96													ND
P1-SB23	SB2301	5.0 - 7.0	11/21/96													ND
P1-SB23	SB2302	7.0 - 9.0	11/21/96													ND
P1-SB24	SB2401	5.0 - 7.0	11/21/96			0.97 =	1.8 =	0.71 =	2.2 =	2.4 =	0.73 =	0.57 =		2.9 =	1.8 =	14.08
P1-SB24	SB2402	9.0 - 11.0	11/21/96					0.55 =								0.55
Former Pumphouse #1 Tank Area (Release #2)																
P1-MW01	WB0101	8.0 - 10.0	11/18/96						0.42 =	0.84 =				1.1 =	0.65 =	3.01
P1-MW01	WB0102	13.0 - 15.0	11/18/96													ND
P1-MW02	WB0201	8.0 - 10.0	11/18/96													ND
P1-MW02	WB0202	13.0 - 15.0	11/18/96													ND
GUST Soil Threshold Levels (Table B, Column 1)				NRC	NRC	0.66	0.66	NRC	0.66	NRC	NRC	0.66	NRC	NRC	NRC	NRC
Soil Threshold Levels				—	—	1.4	5.8	—	2.1	—	—	0.66	—	—	—	—

See page II-13 for footnotes.

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)
				acenaphthalene	acenaphthylene	benzo (a) pyrene	benzo (b,k) fluoranthene ¹	benzo (g,h,i) perylene	chrysene + benzo(a)anthracene ¹	fluoranthene	fluorene	indeno (1,2,3-cd) pyrene + Dibenzo(a,h) anthracene ¹	naphthalene	phenanthrene + anthracene ¹	pyrene	
P1-MW03	WB0301	8.0 - 10.0	11/19/96							0.42 =						0.42
P1-MW03	WB0302	13.0 - 15.0	11/19/96				0.61 =		0.60 =	1.1 =				0.58 =	0.70 =	3.59
P1-SB01	SB0101	4.0 - 6.0	11/18/96				0.52 =			0.47 =				0.52 =		1.51
P1-SB01	SB0102	8.0 - 10.0	11/18/96						0.55 =	0.47 =				0.42 =	0.39 =	1.83
P1-SB02	SB0201	4.0 - 6.0	11/18/96				0.76 J			0.46 J						1.22
P1-SB02	SB0202	8.0 - 10.0	11/18/96											0.53 J		0.53
P1-SB03	SB0301	4.0 - 6.0	11/18/96													ND
P1-SB03	SB0302	8.0 - 10.0	11/18/96													ND
P1-SB04	SB0401	4.0 - 6.0	11/18/96													ND
P1-SB04	SB0402	8.0 - 10.0	11/18/96													ND
P1-SB05	SB0501	4.0 - 6.0	11/18/96													ND
P1-SB05	SB0502	8.0 - 10.0	11/18/96													ND
P1-SB06	SB0601	4.0 - 6.0	11/18/96				0.62 =									0.62
P1-SB06	SB0602	10.0 - 12.0	11/18/96				1.1 =			0.74 =		0.53 =				2.37
P1-SB07	SB0701	4.0 - 6.0	11/19/96				1.6 =	0.55 =								2.15
P1-SB07	SB0702	10.0 - 12.0	11/19/96						0.52 =							0.52
P1-SB08	SB0801	4.0 - 6.0	11/19/96				1.6 =	1.5 =	1.2 =							4.3
P1-SB08	SB0802	10.0 - 12.0	11/19/96													ND
CAP-Part B Investigation - 1997																
Former Fuel Pit 1A/DAACG (Release #1)																
P1-MW13	WB1301	8.0 - 10.0	5/12/97													ND
P1-MW13	WB1302	13.0 - 15.0	5/12/97													ND
P1-MW14	WB1401	4.0 - 6.0	5/12/97												0.064 J	0.064
P1-MW14	WB1402	8.0 - 10.0	5/12/97													ND
GUST Soil Threshold Levels (Table B, Column 1)				NRC	NRC	0.66	0.66	NRC	0.66	NRC	NRC	0.66	NRC	NRC	NRC	NRC
Soil Threshold Levels				—	—	1.4	5.8	—	2.1	—	—	0.66	—	—	—	—

See page II-13 for footnotes.

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)
				acenaphthalene	acenaphthylene	benzo (a) pyrene	benzo (b,k) fluoranthene ¹	benzo (g,h,i) perylene	chrysene + benzo(a)anthracene ¹	fluoranthene	fluorene	indeno (1,2,3-cd) pyrene + dibenzo(a,h) anthracene ¹	naphthalene	phenanthrene + anthracene ¹	pyrene	
P1-MW15	WB1501	4.0 - 6.0	5/12/97			0.24 J		0.23 J		0.31 J	0.058 J	0.2 J			0.12 J	1.158
P1-MW15	WB1502	8.0 - 10.0	5/12/97													ND
P1-MW16	WB1601	4.0 - 6.0	5/12/97			0.13 J	0.13 J	0.24 J		0.096 J						0.596
P1-MW16	WB1602	8.0 - 10.0	5/12/97							0.073 J						0.073
P1-SB25	SB2501	4.0 - 6.0	5/13/97	10.0 J	2.5 J	1.9 J			10.0 J	2.7 J	5.8 J			11.0 J	16.0 J	59.9
P1-SB25	SB2502	8.0 - 10.0	5/13/97							0.18 J					0.13 J	0.31
P1-SB26	SB2601	4.0 - 6.0	5/13/97							0.14 J					0.066 J	0.206
P1-SB26	SB2602	8.0 - 10.0	5/13/97						0.079 J	0.14 J			0.069 J	0.082 J	0.10 J	0.470
Former Pump House #1 Tank Area (Release #2)																
P1-MW17	WB1701	4.0 - 6.0	5/5/97													ND
P1-MW17	WB1702	8.0 - 10.0	5/5/97													ND
P1-MW18	WB1801	8.0 - 10.0	5/5/97	0.059 J		0.17 J			0.21 J	0.12 J	0.054 J			0.11 J	0.09 J	1.344
P1-MW18	WB1802	13.0 - 15.0	5/5/97						0.1 J	0.066 J						0.166
P1-MW19	WB1901	8.0 - 10.0	5/5/97	0.053 J											0.051 J	0.104
P1-MW19	WB1902	13.0 - 15.0	5/5/97	0.14 J												0.14
P1-MW20	WB2001	4.0 - 6.0	5/13/97													ND
P1-MW20	WB2002	8.0 - 10.0	5/13/97													ND
P1-MW21	WB2101	8.0 - 10.0	5/6/97			0.13 J			0.48 =	0.2 J	0.31 J			1.0 =		2.12
P1-MW21	WB2102	13.0 - 15.0	5/6/97		0.063 J									0.22 J		0.283
P1-MW22	WB2201	4.0 - 6.0	5/6/97										0.14 J		0.053 J	0.193
P1-MW22	WB2202	8.0 - 10.0	5/6/97		0.12 J					0.15 J	0.063 J		0.19 J	0.11 J	0.068 J	0.701
P1-MW23	WB2301	8.0 - 10.0	5/13/97	0.05 J		0.097 J			0.16 J	0.42 =					0.31 J	1.037
P1-MW23	WB2302	13.0 - 15.0	5/13/97													ND
GUST Soil Threshold Levels (Table B, Column 1)				NRC	NRC	0.66	0.66	NRC	0.66	NRC	NRC	0.66	NRC	NRC	NRC	NRC
Soil Threshold Levels				—	—	1.4	5.8	—	2.1	—	—	0.66	—	—	—	—

See page II-13 for footnotes.

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)	
				acenaphthalene	acenaphthylene	benzo (a) pyrene	benzo (b,k) fluoranthene ¹	benzo (g,h,i) perylene	chrysene + benzo(a)anthracene ¹	fluoranthene	fluorene	indeno (1,2,3-cd) pyrene + dibenzo(a,h)anthracene ¹	naphthalene	phenanthrene + anthracene ¹	pyrene		
P1-MW24	WB2401	8.0 - 10.0	5/6/97	0.047 J	0.4 J					0.069 J				0.085 J			0.601
P1-MW24	WB2402	13.0 - 15.0	5/6/97														ND
P1-SB27	SB2701	2.0 - 4.0	5/13/97			0.21 J			0.43 =	1.2 =			0.062 J		0.82 =		2.722
P1-SB27	SB2702	8.0 - 10.0	5/13/97	0.071 J					0.12 J	0.34 J			0.2 J		0.27 J		1.001
P1-SB28	SB2801	4.0 - 6.0	5/13/97														ND
P1-SB28	SB2802	8.0 - 10.0	5/13/97														ND
P1-SB29	SB2901	4.0 - 6.0	5/13/97	0.13 J						0.024 J				0.23 J			0.6
P1-SB29	SB2902	8.0 - 10.0	5/13/97							0.15 J					0.094 J		0.244
P1-SB30	SB3001	4.0 - 6.0	5/13/97	2.2 =	0.54 =					0.14 J	1.2 =						4.08
P1-SB30	SB3002	8.0 - 10.0	5/13/97	0.082 J						0.054 J	0.07 J						0.206
P1-SB31	SB3101	4.0 - 6.0	5/13/97	0.074 J						0.32 J					0.22 J		0.614
P1-SB31	SB3102	8.0 - 10.0	5/13/97							0.29 J				0.2 J	0.22 J		0.71
P1-SB32	SB3201	4.0 - 6.0	5/12/97														ND
P1-SB32	SB3202	8.0 - 10.0	5/12/97														ND
P1-SB33	SB3301	4.0 - 6.0	5/12/97														ND
P1-SB33	SB3302	10.0 - 12.0	5/12/97							0.35 J					0.37 J		0.72
P1-SB34	SB3401	4.0 - 6.0	5/12/97			0.35 J	0.15 J			0.062 J				0.095 J	0.061 J		0.718
P1-SB34	SB3402	8.0 - 10.0	5/12/97														ND
P1-SB35	SB3501	4.0 - 6.0	5/8/97														ND
P1-SB35	SB3502	10.0 - 12.0	5/8/97														ND
P1-SB36	SB3601	4.0 - 6.0	5/8/97														ND
P1-SB36	SB3602	10.0 - 12.0	5/8/97														ND
GUST Soil Threshold Levels (Table B, Column 1)				NRC	NRC	0.66	0.66	NRC	0.66	NRC	NRC	0.66	NRC	NRC	NRC	NRC	NRC
Soil Threshold Levels				—	—	1.4	5.8	—	2.1	—	—	0.66	—	—	—	—	—

See page II-13 for footnotes.

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)	
				acenaphthalene	acenaphthylene	benzo (a) pyrene	benzo (b,k) fluoranthene ¹	benzo (g,h,i) perylene	chrysene + benzo(a)anthracene ¹	fluoranthene	fluorene	indeno (1,2,3-cd) pyrene + dibenzo(a,h) anthracene ¹	naphthalene	phenanthrene + anthracene ¹	pyrene		
P1-SB37	SB3701	4.0 - 6.0	5/8/97										2.4 =				2.4
P1-SB37	SB3702	10.0 - 12.0	5/8/97														ND
P1-SB38	SB3801	4.0 - 6.0	5/13/97	0.18 J		0.31 J			1.3 =	0.14 J	0.42 =			1.3 =	1.3 =		4.95
P1-SB38	SB3802	8.0 – 10.0	5/13/97														ND
P1-SB39	SB3901	4.0 - 6.0	5/8/97														ND
P1-SB39	SB3902	8.0 – 10.0	5/8/97														ND
P1-SB40	SB4001	4.0 - 6.0	5/8/97														ND
P1-SB40	SB4002	8.0 – 10.0	5/8/97														ND
P1-SB41	SB4101	4.0 - 6.0	5/8/97														ND
P1-SB41	SB4102	8.0 – 10.0	5/8/97														ND
P1-MW40	WB4001	8.0 – 10.0	9/29/99							0.021 =			0.10 =	0.17 =	0.36 =		0.651
P1-MW40	WB4002	48.0 - 50.0	2/29/99														
GUST Soil Threshold Levels (Table B, Column 1)				NRC	NRC	0.66	0.66	NRC	0.66	NRC	NRC	0.66	NRC	NRC	NRC	NRC	NRC
Soil Threshold Levels				—	—	1.4	5.8	—	2.1	—	—	0.66	—	—	—	—	—

NOTES:

1996 soil analytical results from the soil borings and monitoring wells at the DAACG Facility are presented in the DAACG Facility Area CAP-Part B Report (M&E 1996) and are summarized in Appendix V.

¹ PAH compounds co-elute and could not be individually confirmed.

ND Not detected; refer to tables in Appendix V 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 3a. CAP-Part A/B – Groundwater Analytical Results
(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)
CAP-Part A Investigation - 1996								
Former Fuel Pit 1A/DAACG (Release #1)								
P1-MW11	HT4-MW02	7.0-17.0	12/10/96	40 =	610 =	1000 =	4200 =	5850
P1-MW12	HT4-MW02	6.5-16.5	12/10/96	10 U	40 =	130 =	500 =	670
Former Pumphouse #1 Tank Area (Release #2)								
P1-MW01	HT4-MW01	6.8-16.8	12/9/96	500 U	16000 =	1900 =	9500 =	27400
P1-MW02	HT4-MW02	7.0-17.0	12/9/96	1100 =	25000 =	1400 =	5900 =	33400
P1-MW03	HT4-MW03	6.0-16.0	12/9/96	740 =	19000 =	2000 =	7400 =	29140
CAP-Part B Investigation - 1997								
Former Fuel Pit 1A/DAACG (Release #1)								
P1-MW13	MW1301	7.0-17.0	5/30/97	62 =	1100 =	170 =	630 =	1962
P1-MW14	MW1401	7.0-17.0	5/30/97	1 U	1 U	1 U	2 U	ND
P1-MW15	MW1501	6.0-16.0	5/30/97	1 U	1 U	1 U	2 U	ND
P1-MW16	MW1601	6.0-16.0	5/30/97	1 U	1 U	1 U	2 U	ND
Former Pumphouse #1 Tank Area (Release #2)								
P1-MW17	MW1701	6.5-16.5	5/29/97	1 U	1 U	2.3 =	2 U	2.3
P1-MW18	MW1801	9.5-19.5	5/30/97	4.2 J	57 =	19 =	110 =	190.2
P1-MW19	MW1901	9.0-19.0	5/29/97	630 =	1900 =	530 =	2400 =	5460
P1-MW20	MW2001	7.0-17.0	5/30/97	1 U	1 U	1 U	2 U	ND
P1-MW21	MW2101	7.0-17.0	5/30/97	100 =	380 =	860 =	3400 =	4740
P1-MW22	MW2201	6.0-16.0	5/29/97	160 =	80 J	200 =	6200 =	6660
P1-MW23	MW2301	7.0-17.0	5/30/97	110 =	62 =	180 =	1100 =	1452
P1-MW24	MW2401	29.5-34.5	5/30/97	1 U	1 U	1 U	2 U	ND
CAP-Part B Investigation - 1999								
Former Fuel Pit 1A/DAACG (Release #1)								
P1-MW42	PH1MW4201	5.6-15.6	11/3/99	1 U	1 U	1 U	2 U	ND
Former Pumphouse #1 Tank Area (Release #2)								
P1-MW01	PH1MW0102	6.8-16.8	11/3/99	17 J	6500 =	1800 =	10000 =	16800
P1-MW02	PH1MW0202	7.0-17.0	11/3/99	1000 =	19000 =	1600 =	7700 =	28300
P1-MW03	PH1MW0302	6.0-16.0	11/3/99	360 =	6800 J	1400 =	6600 =	14360
P1-MW18	PH1MW1802	9.5-19.5	11/3/99	25 U	530 =	370 =	1650 =	2300
P1-MW19	PH1MW1902	9.0-19.0	11/3/99	200 =	6400 =	1800 =	7800 =	15100
P1-MW20	PH1MW2002	7.0-17.0	11/3/99	1 U	1 U	1 U	2 U	ND
P1-MW22	PH1MW2202	6.0-16.0	11/3/99	250 U	250 U	150 J	8300 =	8250
In-Stream Water Quality Standards (GA Chapter 391-3-6)				71.28	200,000	28,718	NRC	NRC
Alternate Concentration Limits				285	800,000	114,800	—	—

NOTES:

1996 groundwater analytical results from the monitoring wells at the DAACG Facility are presented in the DAACG Facility Area CAP-Part B Report (M&E 1996) and are summarized in Appendix VIII.

Bold values exceed In-stream Water Quality Standard (IWQS).

Italic values exceed alternate concentration limits (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 3a. 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)
P1-MW23	PH1MW2302	7.0-17.0	11/3/99	330 =	110 =	830 =	3720 =	4360
P1-MW36	PH1MW3601	7.7-17.7	11/2/99	1 U	1 U	1 U	1 U	ND
P1-MW40	PH1MW4001	3.8 – 33.8	11/3/99	160 =	200 =	1200 =	5520 =	6460
P1-MW40	PH1MW4002	3.8 – 33.8	11/4/99	540 =	45 J	410 =	3030 =	3652
P1-MW40	PH1MW4003	3.8 – 33.8	11/5/99	490 =	100 U	370 =	3020 =	3560
P1-MW40	PH1MW4004	3.8 – 33.8	11/5/99	500 =	55 U	400 =	3230 =	3855
D-MW05	H833MW0502	6.5 – 16.5	11/3/99	3400 =	2000 =	1200 =	5250 =	11850
D-MW16	H833MW1602	4.9 – 14.9	11/3/99	1 U	1 U	1 U	2 U	ND
CAP-Part B Investigation – 2000								
Former Fuel Pit 1A/DAACG (Release #1)								
D-MW01	AK0112	7.0 – 17.0	2/22/00	105 =	312 =	215 =	1130 =	1762
D-MW08	AK0812	7.0 – 17.0	2/22/00	418 =	31 =	827 =	3120 =	4396
D-MW11	AK1112	6.0 – 16.0	2/22/00	398 =	16200 =	973 =	3880 =	21451
D-MW13	AK1312	5.0 – 15.0	2/22/00	10 U	113 =	1440 =	4940 =	6493
D-MW17	AK1712	6.5 – 16.5	2/22/00	138 =	1850 =	374 =	2630 =	4992
P1-MW11	AN1112	7.0 – 17.0	2/23/00	50.3 =	337 =	1210 =	5110 =	6707.3
P1-MW13	AN1312	7.0 – 17.0	2/23/00	10 U	319 =	100 =	404 =	823
Former Pumphouse #1 Tank Area (Release #2)								
D-MW05	AK0512	6.5 – 16.5	2/23/00	4580 =	6860 =	1560 =	5800 =	18800
In-Stream Water Quality Standards (GA Chapter 391-3-6)				71.28	200,000	28,718	NRC	NRC
Alternate Concentration Limits				285	800,000	114,800	—	—

NOTES:

1966 groundwater analytical results from the monitoring wells at the DAACG Facility are presented in the DAACG Facility Area CAP-Part B Report (M&E 1996) and are summarized in Appendix VIII.

Bold values exceed IWQS.

Italic 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 3b. CAP-Part A/B – Groundwater Analytical Results
(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)anthraene	benzo(a)pyrene	benzo(b) fluoranthene	benzo(g,h,i) perylene	benzo(k) fluoranthene	chrysene	dibenzo(a,h) anthracene	fluoranthene	fluorene	indeno(1,2,3-cd) pyrene	naphthalene	phenanthrene		pyrene
CAP-Part A Investigation - 1996																			
Former Fuel Pit 1A/DAACG (Release #1)																			
P1-MW11	HT4-MW02	7.0-17.0	12/10/96												9.8 =			9.8	
P1-MW12	HT4-MW02	6.5-16.5	12/10/96															ND	
Former Pumphouse #1 Tank Area (Release #2)																			
P1-MW01	HT4-MW01	6.8-16.8	12/9/96		0.58 =							0.6 =	0.6 =		16.0 =	2.2 =		19.98	
P1-MW02	HT4-MW02	7.0-17.0	12/9/96												7.0 =			7.0	
P1-MW03	HT4-MW02	6.0-16.0	12/9/96				0.21 =	0.28 =		0.26 =		0.76 J			9.2 =	0.42 J		11.13	
CAP-Part B Investigation - 1997																			
Former Fuel Pit 1A/DAACG (Release #1)																			
P1-MW13	MW1301	7.0-17.0	5/30/97					0.0099 J			0.0081J		0.058 J				0.042 J	0.118	
P1-MW14	MW1401	7.0-17.0	5/30/97								0.012 J		0.14 J				0.098 J	0.35	
P1-MW15	MW1501	6.0-16.0	5/30/97				0.026 J	0.023 J	0.026 J		0.032 =		0.15 J				0.054 J	0.511	
P1-MW16	MW1601	6.0-16.0	5/30/97														0.025 J	0.10	
Former Pumphouse #1 Tank Area (Release #2)																			
P1-MW17	MW1701	6.5-16.5	5/29/97			0.066 =	0.094 =	0.077 J	0.068 J	0.036=	0.12 =		0.26 J		0.048 =		0.024 J	0.814	
P1-MW18	MW1801	9.5-19.5	5/30/97	0.31 J	0.022 J	0.014 J		0.022 J			0.024 J		0.16 J	0.18 J			0.14 J	0.947	
P1-MW19	MW1901	9.0-19.0	5/29/97					0.011 J					0.049 J			1.5 =	0.078 J	1.638	
P1-MW20	MW2001	7.0-17.0	5/30/97		0.076 J	0.29 =	0.29 =	0.19 J	0.43 J	0.42 =	0.96 =	0.73 =	0.15 J		0.32 =		0.048 J	4.034	
P1-MW21	MW2101	7.0-17.0	5/30/97	2.4 J	0.7 J								1.4 J	2.7 J		11 =	8.2 J	26.4	
P1-MW22	MW2201	6.0-16.0	5/29/97	0.92 J	0.0092 J			0.0092 J			0.015 J		0.056 J	0.15 J		11 =	0.12 J	12.288	
P1-MW23	MW2301	7.0-17.0	5/30/97	0.36 J	0.08 J	0.022 J	0.038 =	0.044 J	0.062 J	0.026 J	0.045 =		0.39 J	0.43 J	0.039 =		0.72 =	2.516	
P1-MW24	MW2401	29.5-34.5	5/30/97															ND	
In-Stream Water Quality Standards (GA Chapter 391-3-6)				NRC	110,000	0.0311	0.0311	NRC	NRC	0.0311	0.0311	0.0311	370	14,000	0.0311	NRC	NRC	11,000	NRC
Alternate Concentration Limits				—	—	1.2	1.2	3.6	—	1.2	1.2	1.2	—	—	1.2	260	—	—	—

See page II-17 for footnotes.

Table 3b. CAP-Part A/B – Groundwater Analytical Results
(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)anthraene	benzo(a)pyrene	benzo(b)fluoranthene	benzo(g,h,i)perylene	benzo(k)fluoranthene	chrysene	dibenzo(a,h)anthracene	fluoranthene	fluorene	indeno(1,2,3-cd)pyrene	naphthalene	phenanthrene		pyrene
CAP-Part B Investigation – 1999/2000																			
Former Fuel Pit 1A/DAACG (Release #1)																			
P1-MW42	PH1MW4201	5.6-15.6	11/3/99															ND	
Former Pumphouse #1 Tank Area (Release #2)																			
P1-MW01	PH1MW0102	6.8-16.8	11/3/99															NA	
P1-MW02	PH1MW0202	7.0-17.0	11/3/99															NA	
P1-MW03	PH1MW0302	6.0-16.0	11/3/99															NA	
P1-MW18	PH1MW1802	9.5-19.5	11/3/99															NA	
P1-MW19	PH1MW1902	9.0-19.0	11/3/99															NA	
P1-MW20	PH1MW2002	7.0-17.0	11/3/99															NA	
P1-MW22	PH1MW2202	6.0-16.0	11/3/99															NA	
P1-MW23	PH1MW2302	7.0-17.0	11/3/99															NA	
P1-MW36	PH1MW3601	7.7 – 17.7	11/2/99															ND	
P1-MW40	PH1MW4001	3.8 – 33.8	11/3/99												2.1 =			2.1	
P1-MW40	PH1MW4002	3.8 – 33.8	11/4/99															NA	
P1-MW40	PH1MW4003	3.8 – 33.8	11/5/99															NA	
P1-MW40	PH1MW4004	3.8 – 33.8	11/5/99															NA	
In-Stream Water Quality Standards (GA Chapter 391-3-6)				NRC	110,000	0.0311	0.0311	NRC	NRC	0.0311	0.0311	0.0311	370	14,000	0.0311	NRC	NRC	11,000	NRC
Alternate Concentration Limits				—	—	1.2	1.2	3.6	—	1.2	1.2	1.2	—	—	1.2	260	—	—	—

NOTES:

1966 groundwater analytical results from the monitoring wells at the DAACG Facility are presented in the DAACG Facility Area CAP-Part B Report (Metcalf & Eddy 1996) and are summarized in Appendix VIII.

Bold values exceed In-stream Water Quality Standard (IWQS).

Italic values exceed alternate concentration limits (ACLs).

BGS Below ground surface.

NRC No regulatory criteria.

ND Not detected.

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 4. CAP-Part A/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)
<i>CAP-Part A Investigation – 1996</i>								
P1-SWE07	HT4-SW07	12/10/96	19 J	230 J	30 J	270 J	549	ND
P1-SWE08	HT4-SW08	12/10/96	5.2 J	50 J	3.8 J	55 J	114	ND
P1-SWE09	HT4-SW09	12/10/96	1 J	1.8 J	1 U	3.1 J	4.9	ND
P1-SWE10	HT4-SW10	12/10/96	1 U	1 U	1 U	2 U	ND	ND
<i>CAP-Part B Investigation – 1999</i>								
P1-SW5	PH1-SW1	2/17/99	1 U	1 U	1 U	2 U	ND	ND
P1-SW6	PH1-SW2	2/17/99	1 U	1 U	1 U	2 U	ND	ND
P1-SW7	PH1-SW3	2/17/99	11.1 =	96 =	36.4 =	76.8 =	222.1	ND
P1-SW8	PH1-SW4	2/17/99	9 =	144 =	5.4 =	133.8 =	292.2	ND
PW-SW9	PH1-SWE07	2/17/99	8.5 =	185 =	32 =	182.5 =	408	ND
In-Stream Water Quality Standard (GA Chapter 391-3-6)			71.28	200,000	28,718	NRC	NRC	NRC

NOTES:

BTEX Benzene, toluene, ethylbenzene, and xylenes.
 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 A/B – Sediment Analytical Results

Sample Location	Sample ID	Date Sampled	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	Total PAH (mg/kg)
<i>CAP-Part A Investigation - 1996</i>										
P1-SWE07	HT4-SE07	12/10/96	0.62 U	0.62 U	0.62 U	0.62 U	ND	15 U	130 J	0.6
P1-SWE08	HT4-SE08	12/10/96	0.011 U	0.011 U	0.011 U	0.011 U	ND	21 U	0.38 U	ND
P1-SWE09	HT4-SE09	12/10/96	0.0094 U	0.0094 U	0.0094 U	0.0094 U	ND	24 =	0.34 U	12.4
P1-SWE10	HT4-SE10	12/10/96	0.013 U	0.013 U	0.013 U	0.013 U	ND	26 U	0.98 J	15.7
<i>CAP-Part B Investigation - 1999</i>										
			With GA EPD concurrence, no sediment samples were collected as part of the CAP-Part B investigation							
GA UST Soil Threshold Levels (Table A, Column 2)			0.017	115	18	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 6. CAP-Part B – Geotechnical Results

Boring ID	Depth Interval (ft BGS)	Grain size analysis - % Fines	Grain size analysis - % Sand	Grain size analysis - % Gravel	Volumetric Moisture Content	Porosity	Specific Gravity	Bulk Density (lb/ft ³)	Permeability (cm/sec)
P1-MW13	8.0 – 10.0	28.2	71.8	0	-	-	-	-	-
P1-MW14	13.0 – 15.0	9.3	90.7	0	-	-	-	-	-
P1-MW15	7.0 – 9.0	18.9	81.1	0	0.476	0.47	2.56	100.9	4.5×10^{-6}
P1-MW15	13.0 – 15.0	7.2	92.8	0	-	-	-	-	-
P1-MW16	7.0 – 9.0	9.8	80.2	0	0.436	0.45	2.64	108.9	1.7×10^{-5}
P1-MW16	8.0 – 10.0	97.1	2.9	0	-	-	-	-	-
P1-MW17	13.0 – 15.0	4.6	95.4	0	-	-	-	-	-
P1-MW18	18.0 – 20.0	4.2	95.8	0	-	-	-	-	-
P1-MW19	18.0 – 20.0	4.9	95.1	0	-	-	-	-	-
P1-MW20	13.0 – 15.0	2.3	97.7	0	-	-	-	-	-
P1-MW21	10.0 – 12.0	2.1	97.9	0	0.445	0.50	2.88	106.8	7.1×10^{-3}
P1-MW21	13.0 – 15.0	2.4	97.6	0	-	-	-	-	-
P1-MW22	8.0 – 10.0	8.4	91.6	0	0.466	0.48	2.54	90.7	5.0×10^{-4}
P1-MW22	13.0 – 15.0	1.8	98.2	0	-	-	-	-	-
P1-MW23	13.0 – 15.0	2.7	97.3	0	-	-	-	-	-
P1-MW24	33.0 – 35.0	6.5	93.5	0	-	-	-	-	-
P1-SB33	8.0 – 10.0	3.6	96.4	0	0.632	0.31	2.59	111.6	7.1×10^{-3}

BGS = below ground surface.

Hunter Army Airfield UST CAP-Part B Report
Former Pumphouse #1, Former Building 8060, Facility ID #9-025085

Table 7. CAP-Part B – Well Construction Details

Boring/Well Number	Date Installed	Boring Depth (ft BGS)	Screened Interval (ft BGS)	Type of Completion	Coordinates ¹		Ground Surface Elevation	Top of Casing Elevation
					Northing	Easting		
CAP-Part A Investigation - 1996								
P1-MW01	11/18/96	18.0	6.8 – 16.8	2" PVC	733935.0	817911.5	36.5	36.28
P1-MW02	11/18/96	18.0	7.0 – 17.0	2" PVC	734125.0	818043.2	37.5	37.34
P1-MW03	11/19/96	17.0	6.0 – 16.0	2" PVC	734348.0	817939.8	37.5	37.24
P1-MW11	11/21/96	18.0	7.0 – 17.0	2" PVC	734548.3	817124.4	37.2	36.99
P1-MW12	11/21/96	18.0	6.5 – 16.5	2" PVC	734498.2	816797.1	35.9	35.70
CAP-Part B Investigation – 1997, 1999								
P1-MW13	5/12/97	18.0	7.0 – 17.0	2" PVC	734625.6	816812.3	36.7	36.41
P1-MW14	5/12/97	18.0	7.0 – 17.0	2" PVC	734447.5	816667.0	35.5	35.39
P1-MW15	5/12/97	17.0	6.0 – 16.0	2" PVC	734374.0	816946.1	36.0	35.81
P1-MW16	5/12/97	17.0	6.0 – 16.0	2" PVC	734397.0	817151.7	35.5	35.34
P1-MW17	5/5/97	17.0	6.5 – 16.5	2" PVC	734194.6	817691.7	36.0	35.78
P1-MW18	5/5/97	20.0	9.5 – 19.5	2" PVC	733920.9	817691.6	36.1	35.92
P1-MW19	5/5/97	20.0	9.0 – 19.0	2" PVC	733840.7	817960.5	37.9	37.76
P1-MW20	5/13/97	18.0	7.0 – 17.0	2" PVC	734011.2	818147.9	37.2	36.98
P1-MW21	5/6/97	18.0	7.0 – 17.0	2" PVC	734079.8	817393.4	37.4	destroyed in 1998
P1-MW22	5/6/97	17.5	6.0 – 16.0	2" PVC	734290.7	817947.1	37.4	37.28
P1-MW23	5/13/97	18.0	7.0 – 17.0	2" PVC	734295.5	818167.6	37.9	37.75
P1-MW24	5/6/97	35.0	29.5 – 34.5	2" PVC	733910.8	817722.4	36.2	36.12
P1-MW36	9/28/99	19.0	7.7 – 17.7	2" PVC	733746.1	817940.7	37.9	37.58
P1-MW40	9/30/99	60.0	3.8 – 33.8	4" PVC	734330.2	817998.7	37.6	37.30
P1-MW42	9/27/99	18.0	5.6 – 15.6	2" PVC	734930.9	816558.1	35.0	34.84
DAACG Facility Investigation Wells								
D-MW1	4/23/96	17.4	7.0 – 17.0	2" PVC	734764.4	816843.9	37.0	36.83
D-MW2	4/23/96	18.0	7.6 – 17.6	2" PVC	734653.3	817002.2	37.6	37.45
D-MW3	4/24/96	16.5	6.0 – 16.0	2" PVC	734558.8	817390.9	37.8	37.55
D-MW4	4/24/96	16.0	7.0 – 17.0	2" PVC	734518.3	817549.5	38.1	37.87
D-MW5	4/25/96	17.5	6.5 – 16.5	2" PVC	734426.0	817923.2	38.3	37.98
D-MW6	4/25/96	16.5	6.0 – 16.0	2" PVC	734468.9	818043.9	37.9	37.71
D-MW7	4/28/96	16.2	5.8 – 15.8	2" PVC	734384.4	818228.9	38.5	38.16
D-MW8	4/24/96	17.5	7.0 – 17.0	2" PVC	734706.9	817205.1	37.4	37.10
D-MW9	4/24/96	16.5	6.0 – 16.0	2" PVC	734686.7	817446.9	37.0	36.76
D-MW10	4/24/96	16.5	6.0 – 16.0	2" PVC	734636.4	817649.4	37.3	37.15
D-MW11	4/23/96	17.0	6.0 – 16.0	2" PVC	734929.5	817031.9	34.8	34.66
D-MW12	4/22/96	16.0	5.6 – 15.6	2" PVC	734813.6	817216.5	36.6	36.40
D-MW13	4/22/96	15.5	5.0 – 15.0	2" PVC	734844.6	817383.1	36.9	36.75
D-MW14	4/22/96	15.5	5.0 – 15.0	2" PVC	734811.4	817527.8	35.8	35.62
D-MW15	4/25/96	15.0	4.7 – 14.7	2" PVC	74748.4	817786.1	35.9	35.74
D-MW16	4/25/96	15.0	4.9 – 14.9	2" PVC	734785.4	817569.7	36.3	36.06
D-MW17	4/22/96	17.0	6.5 – 16.5	2" PVC	734966.3	817301.8	36.1	35.88
D-MW18	4/23/96	17.0	6.6 – 16.6	2" PVC	735141.9	817067.6	35.6	35.40
D-MW19	4/22/96	16.5	6.0 – 16.0	2" PVC	735089.4	817265.9	35.8	35.46
D-MW20	4/23/96	17.5	7.0 – 17.0	2" PVC	735006.5	817524.6	37.0	36.81

NOTES:

1 Survey coordinates were provided by M&E. No reference datum was provided; however, the datum is assumed to be NAD27 and NGVD29.

BGS = below ground surface.

PVC = polyvinyl chloride.

Table 7. CAP-Part B – Well Construction Details (continued)

Boring/Well Number	Date Installed	Boring Depth (ft BGS)	Screened Interval (ft BGS)	Type of Completion	Coordinates ¹		Ground Surface Elevation ¹	Top of Casing Elevation ¹
					Northing	Easting		
D-MW21	4/23/96	16.5	6.0 – 16.0	2" PVC	735141.4	817205.0	36.0	35.82
D-MW22	4/23/96	16.5	6.0 – 16.0	2" PVC	735111.3	817403.4	35.7	35.44
D-MW23	4/23/96	15.5	5.0 – 15.0	2" PVC	735340.33	817538.6	34.6	34.37
D-MW24	4/23/96	15.3	5.0 – 15.0	2" PVC	735455.0	817520.8	34.9	34.79
D-MW25	4/24/96	15.2	4.8 – 14.8	2" PVC	735402.8	817697.5	35.3	35.09
D-MW26	4/24/96	15.0	4.7 – 14.7	2" PVC	735393.6	817866.7	36.4	36.17
D-MW27	4/24/96	15.0	4.5 – 14.5	2" PVC	735558.3	817642.3	35.0	34.79
D-MW28	4/25/96	25.0	14.5 – 24.5	2" PVC	735976.9	817164.0	35.3	35.18
D-MW29	4/29/96	15.0	4.5 – 14.5	2" PVC	735682.6	818408.2	36.7	36.57
D-MW30	4/29/96	14.0	2.9 – 12.9	2" PVC	735747.03	818433.6	36.9	36.76
D-MW31	5/9/96	15.0	4.0 – 14.0	2" PVC	734378.3	819001.9	37.0	36.79
D-MW32	4/29/96	15.0	4.6 – 14.6	2" PVC	734427.7	819055.6	36.6	36.40

NOTES:

1 Survey coordinates were provided by M&E. No reference datum was provided; however, the datum is assumed to be NAD27 and NGVD29.

BGS = below ground surface.

PVC = polyvinyl chloride.

Table 8. CAP-Part A/B – Groundwater Elevations

Well Number	Date Measured	Ground Surface Elevation (ft MSL)	Top of Casing Elevation (ft MSL)	Screened Interval (ft BGS)	Depth of Free Product (ft BTOC)	Water Depth (ft BTOC)	Product Thickness (ft)	Corrected Groundwater Elevation. (ft MSL)
<i>CAP-Part A Investigation - 1996</i>								
P1-MW01	12/9/96	36.5	36.28	6.8 – 16.8	N/A	10.52	0	25.76
P1-MW02	12/9/96	37.5	37.34	7.0 – 17.0	N/A	10.28	0	27.06
P1-MW03	12/9/96	37.5	37.24	6.0 – 16.0	N/A	9.39	0	27.85
P1-MW11	12/9/96	37.2	36.99	7.0 – 17.0	N/A	9.66	0	27.33
P1-MW12	12/9/96	35.9	35.70	6.5 – 16.5	N/A	8.87	0	26.83
<i>CAP-Part B Investigation- 1997</i>								
P1-MW01	5/29/97	36.5	36.28	6.8 – 16.8	N/A	10.66	0	25.62
P1-MW02	5/29/97	37.5	37.34	7.0 – 17.0	N/A	10.46	0	26.88
P1-MW03	5/29/97	37.5	37.24	6.0 – 16.0	N/A	9.65	0	27.59
P1-MW11	5/29/97	37.2	36.99	7.0 – 17.0	N/A	10.09	0	26.90
P1-MW12	5/29/97	35.9	35.70	6.5 – 16.5	N/A	9.29	0	26.41
P1-MW13	5/29/97	36.7	36.41	7.0 – 17.0	N/A	10.48	0	25.93
P1-MW14	5/29/97	35.5	35.39	7.0 – 17.0	N/A	9.08	0	26.31
P1-MW15	5/29/97	36.0	35.81	6.0 – 16.0	N/A	8.48	0	27.33
P1-MW16	5/29/97	35.5	35.34	6.0 – 16.0	N/A	7.70	0	27.64
P1-MW17	5/29/97	36.0	35.78	6.5 – 16.5	N/A	8.60	0	27.18
P1-MW18	5/29/97	36.1	35.92	9.5 – 19.5	N/A	10.93	0	24.99
P1-MW19	5/29/97	37.9	37.76	9.0 – 19.0	N/A	12.78	0	24.98
P1-MW20	5/29/97	37.2	36.98	7.0 – 17.0	N/A	10.47	0	26.51
P1-MW21	5/29/97	37.4	37.29	7.0 – 17.0	N/A	10.80	0	26.49
P1-MW22	5/29/97	37.4	37.28	6.0 – 16.0	N/A	9.90	0	27.38
P1-MW23	5/29/97	37.9	37.75	7.0 – 17.0	N/A	10.31	0	27.44
P1-MW24	5/29/97	36.2	36.12	29.5 – 34.5	N/A	10.36	0	25.76
<i>CAP-Part B Investigation- 1999</i>								
P1-MW01	11/1/99	36.5	36.28	6.8 – 16.8	N/A	10.81	0	25.47
P1-MW02	11/1/99	37.5	37.34	7.0 – 17.0	N/A	10.31	0	27.03
P1-MW03	11/1/99	37.5	37.24	6.0 – 16.0	N/A	8.71	0	28.53
P1-MW11	11/1/99	37.2	36.99	7.0 – 17.0	N/A	8.74	0	28.25
P1-MW12	11/1/99	35.9	35.70	6.5 – 16.5	N/A	7.84	0	27.86
P1-MW13	11/1/99	36.7	36.41	7.0 – 17.0	N/A	9.22	0	27.19
P1-MW14	11/1/99	35.5	35.39	7.0 – 17.0	N/A	7.53	0	27.86
P1-MW15	11/1/99	36.0	35.81	6.0 – 16.0	N/A	6.59	0	29.22
P1-MW16	11/1/99	35.5	35.34	6.0 – 16.0	N/A	6.06	0	29.28
P1-MW17	11/1/99	36.0	35.78	6.5 – 16.5	N/A	7.36	0	28.42
P1-MW18	11/1/99	36.1	35.92	9.5 – 19.5	N/A	10.47	0	25.45
P1-MW19	11/1/99	37.9	37.76	9.0 – 19.0	N/A	12.29	0	25.47
P1-MW20	11/1/99	37.2	36.98	7.0 – 17.0	N/A	9.80	0	27.18
P1-MW21	11/1/99	37.4	destroyed	7.0 – 17.0	N/A	destroyed	0	destroyed
P1-MW22	11/1/99	37.4	37.28	6.0 – 16.0	N/A	8.83	0	28.45

BGS = below ground surface.

BTOC = below top of casing.

MSL = mean sea level.

N/A = not available.

Table 8. CAP-Part A/B – Groundwater Elevations (continued)

Well Number	Date Measured	Ground Surface Elevation (ft MSL)	Top of Casing Elevation (ft MSL)	Screened Interval (ft BGS)	Depth of Free Product (ft BTOC)	Water Depth (ft BTOC)	Product Thickness (ft)	Corrected Groundwater Elevation. (ft MSL)
P1-MW23	11/1/99	37.9	37.75	7.0 – 17.0	N/A	9.55	0	28.20
P1-MW24	11/1/99	36.2	36.12	29.5 – 34.5	N/A	9.76	0	26.36
P1-MW36	11/1/99	37.9	37.58	7.7 – 17.7	N/A	12.04	0	25.54
P1-MW40	11/1/99	37.6	37.30	3.8 – 33.8	N/A	9.01	0	28.29
P1-MW42	11/1/99	35.0	34.84	5.6 – 15.6	N/A	10.06	0	24.78
D-MW1	11/1/99	37.0	36.83	7.0 – 17.0	N/A	10.81	0	26.02
D-MW2	11/1/99	37.6	37.45	7.6 – 17.6	N/A	10.31	0	27.14
D-MW3	11/1/99	37.8	37.55	6.0 – 16.0	N/A	9.05	0	28.50
D-MW4	11/1/99	38.0	37.87	7.0 – 17.0	N/A	9.19	0	28.68
D-MW5	11/1/99	38.3	37.98	6.5 – 16.5	N/A	9.48	0	28.50
D-MW6	11/1/99	37.9	37.71	6.0 – 16.0	N/A	9.36	0	28.35
D-MW7	11/1/99	38.5	38.16	5.8 – 15.8	N/A	9.92	0	28.24
D-MW8	11/1/99	37.4	37.10	7.0 – 17.0	N/A	9.88	0	27.22
D-MW9	11/1/99	37.0	36.76	6.0 – 16.0	N/A	8.90	0	27.86
D-MW10	11/1/99	37.3	37.15	6.0 – 16.0	N/A	9.01	0	28.14
D-MW11	11/1/99	34.8	34.66	6.0 – 16.0	N/A	9.97	0	24.69
D-MW12	11/1/99	36.6	36.40	5.6 – 15.6	N/A	9.75	0	26.65
D-MW13	11/1/99	36.9	36.75	5.0 – 15.0	N/A	9.67	0	27.08
D-MW14	11/1/99	35.8	35.62	5.0 – 15.0	N/A	8.32	0	27.30
D-MW15	11/1/99	35.9	35.74	4.7 – 14.7	N/A	7.90	0	27.84
D-MW16	11/1/99	36.3	36.06	4.9 – 14.9	N/A	8.20	0	27.86
D-MW17	11/1/99	36.1	35.88	6.5 – 16.5	N/A	9.55	0	26.33
D-MW18	11/1/99	35.6	35.40	6.6 – 16.6	N/A	10.93	0	24.47
D-MW19	11/1/99	35.8	35.46	6.0 – 16.0	N/A	9.34	0	26.12
D-MW20	11/1/99	37.0	36.81	7.0 – 17.0	N/A	10.1	0	26.71
D-MW22	11/1/99	35.7	35.44	6.0 – 16.0	N/A	9.11	0	26.33
D-MW23	11/1/99	34.6	34.37	5.0 – 15.0	N/A	8.83	0	25.54
D-MW24	11/1/99	34.9	34.79	5.0 – 15.0	N/A	9.56	0	25.23
D-MW25	11/1/99	35.3	35.09	4.8 – 14.8	N/A	8.84	0	26.25
D-MW26	11/1/99	36.4	36.17	4.7 – 14.7	N/A	9.40	0	26.77
D-MW27	11/1/99	35.0	34.79	4.5 – 14.5	N/A	8.81	0	25.98
D-MW28	11/1/99	35.3	35.18	14.5 – 24.5	N/A	10.02	0	25.16
D-MW29	11/1/99	36.7	36.57	4.5 – 14.5	N/A	8.72	0	27.85
D-MW30	11/1/99	36.9	36.76	2.9 – 12.9	N/A	8.90	0	27.86
D-MW31	11/1/99	37.0	36.79	4.0 – 14.0	N/A	7.31	0	29.48
D-MW32	11/1/99	36.6	36.40	4.6 – 14.6	N/A	6.57	0	29.83

BGS = below ground surface.

BTOC = below top of casing.

MSL = mean sea level.

N/A = not available.

Table 8. CAP-Part A/B – Groundwater Elevations (continued)

Well Number	Date Measured	Ground Surface Elevation (ft MSL)	Top of Casing Elevation (ft MSL)	Screened Interval (ft BGS)	Depth of Free Product (ft BTOC)	Water Depth (ft BTOC)	Product Thickness (ft)	Corrected Groundwater Elevation. (ft MSL)
<i>CAP-Part B Investigation- 2000</i>								
P1-MW01	2/24/00	36.5	36.28	6.8 – 16.8	N/A	10.64	0	25.64
P1-MW03	2/24/00	37.5	37.24	6.0 – 16.0	N/A	9.96	0	27.28
P1-MW11	2/22/00	37.2	36.99	7.0 – 17.0	N/A	10.29	0	26.70
P1-MW13	2/22/00	36.7	36.41	7.0 – 17.0	N/A	10.67	0	25.74
P1-MW18	2/24/00	36.1	35.92	9.5 – 19.5	N/A	10.97	0	24.95
P1-MW19	2/24/00	37.9	37.76	9.0 – 19.0	N/A	12.64	0	25.12
P1-MW20	2/24/00	37.2	36.98	7.0 – 17.0	N/A	10.73	0	26.25
P1-MW22	2/24/00	37.4	37.28	6.0 – 16.0	N/A	10.16	0	27.12
P1-MW23	2/24/00	37.9	37.75	7.0 – 17.0	N/A	10.60	0	27.15
P1-MW36	2/24/00	37.9	37.58	7.7 – 17.7	N/A	12.31	0	25.27
P1-MW40	2/24/00	37.6	37.30	3.8 – 33.8	N/A	10.12	0	27.18
P1-MW42	2/24/00	35.0	34.84	5.6 – 15.6	N/A	12.40	0	22.44
D-MW1	2/24/00	37.0	36.83	7.0 – 17.0	12.04	12.05	0.01	24.78
D-MW2	2/24/00	37.6	37.45	7.6 – 17.6	11.38	12.26	0.88	25.96
D-MW5	2/22/00	38.3	37.98	6.5 – 16.5	NA	10.90	0	27.08
D-MW6	2/22/00	37.9	37.71	6.0 – 16.0	10.34	10.35	0.01	27.36
D-MW7	2/22/00	38.5	38.16	5.8 – 15.8	NA	10.83	0	27.33
D-MW8	2/24/00	37.4	37.10	7.0 – 17.0	10.89	11.04	0.15	26.19
D-MW9	2/22/00	37.0	36.76	6.0 – 16.0	NA	10.01	0	26.75
D-MW11	2/24/00	34.8	34.66	6.0 – 16.0	10.51	11.25	0.74	24.06
D-MW12	2/24/00	36.6	36.40	5.6 – 15.6	NA	10.75	0	25.65
D-MW13	2/22/00	36.9	36.75	5.0 – 15.0	10.38	10.53	0.15	26.35
D-MW14	2/22/00	35.8	35.62	5.0 – 15.0	NA	9.09	0	26.53
D-MW17	2/22/00	36.1	35.88	6.5 – 16.5	10.30	10.30	sheen	25.58
D-MW18	2/24/00	35.6	35.40	6.6 – 16.6	NA	11.74	0	23.66
D-MW19	2/22/00	35.8	35.46	6.0 – 16.0	NA	10.02	0	25.44
D-MW20	2/22/00	37.0	36.81	7.0 – 17.0	NA	10.66	0	26.15
D-MW22	2/22/00	35.7	35.44	6.0 – 16.0	NA	9.67	0	25.77

BGS = below ground surface.

BTOC = below top of casing.

MSL = mean sea level.

N/A = not available.

Table 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-MW01 H833-WB0101 5.2 - 7.2 04/23/1996 (mg/kg)	D-MW01 H833-WB0102 13.0 - 15.0 04/23/1996 (mg/kg)	D-MW02 H833-WB0201 3.3 - 5.3 04/23/1996 (mg/kg)	D-MW02 H833-WB0202 13.0 - 15.0 04/23/1996 (mg/kg)	D-MW03 H833-WB0301 3.0 - 5.0 04/24/1996 (mg/kg)	D-MW03 H833-WB0302 8.0 - 10.0 04/24/1996 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
<i>VOLATILE ORGANIC COMPOUNDS</i>									
Benzene	0.017	197.4	0.03	0.0054 U	0.0062 U	0.0056 =	23 =	0.0073 J	0.0061 U
Toluene	115	408,800	12	0.0054 U	0.0062 U	0.0055 U	1.7 =	0.0053 U	0.0061 U
Ethylbenzene	18	204,400	13	0.0054 U	0.0062 U	0.0055 U	2.2 =	0.0053 U	0.0061 U
Xylene (total)	700	1,000,000	190	0.0054 U	0.0062 U	0.0055 U	2.5 =	0.0066 =	0.0061 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>									
1-Methylnaphthalene	N/A ^d	--	--	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
2-Methylnaphthalene	N/A ^d	--	--	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Acenaphthene	N/A ^d	12,264	570	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Acenaphthylene	N/A ^d	61,320	4,200	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Benzo(b)fluoranthene	0.660	7.84	5	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Fluorene	N/A ^d	81,760	560	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Naphthalene	N/A ^d	40,880	84	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Pyrene	N/A ^d	61,320	4200	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
<i>OTHER ANALYTES</i>									
TPH - Diesel Range Organics	N/A ^d	--	--	11 U	12 U	11 U	13 =	11 U	12 U
TPH - Gasoline Range Organics	N/A ^d	--	--	0.20 U	0.22 U	0.20 U	680 =	0.19 UJ	0.22 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold 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 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-MW04 H833-WB0401 5.3 - 7.3 04/24/1996 (mg/kg)	D-MW04 H833-WB0402 8.0 - 10.0 04/24/1996 (mg/kg)	D-MW08 H833-WB0801 5.3 - 7.3 04/24/1996 (mg/kg)	D-MW08 H833-WB0802 8.0 - 10.0 04/24/1996 (mg/kg)	D-MW09 H833-WB0901 4.4 - 6.4 04/24/1996 (mg/kg)	D-MW09 H833-WB0902 13.0 - 15.0 04/24/1996 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
VOLATILE ORGANIC COMPOUNDS									
Benzene	0.017	197.4	0.03	0.0056 U	0.006 U	0.0054 U	28 J	0.0054 U	0.0060 U
Toluene	115	408,800	12	0.0056 U	0.006 U	0.0054 U	5 U	0.0054 U	0.0060 U
Ethylbenzene	18	204,400	13	0.0056 U	0.006 U	0.0054 U	5.1 J	0.0054 U	0.0060 U
Xylene (total)	700	1,000,000	190	0.0056 U	0.006 U	0.0054 U	10 J	0.0054 U	0.0060 U
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	N/A ^d	--	--	0.37 U	0.39 U	0.36 U	0.37 U	0.35 U	0.39 U
2-Methylnaphthalene	N/A ^d	--	--	0.37 U	0.39 U	0.36 U	0.37 U	0.35 U	0.39 U
Acenaphthene	N/A ^d	12,264	570	0.37 U	0.39 U	0.36 U	0.37 U	0.35 U	0.39 U
Acenaphthylene	N/A ^d	61,320	4,200	0.37 U	0.39 U	0.36 U	0.37 U	0.35 U	0.39 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.37 U	0.39 U	0.46 =	0.37 U	0.35 U	0.39 U
Benzo(b)fluoranthene	0.660	7.84	5	0.37 U	0.39 U	0.94 =	0.37 U	0.35 U	0.39 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.37 U	0.39 U	0.36 U	0.37 U	0.35 U	0.39 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.37 U	0.39 U	0.43 =	0.37 U	0.35 U	0.39 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.37 U	0.39 U	0.4 =	0.37 U	0.35 U	0.39 U
Fluorene	N/A ^d	81,760	560	0.37 U	0.39 U	0.36 U	0.37 U	0.35 U	0.39 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.37 U	0.39 U	0.36 U	0.37 U	0.35 U	0.39 U
Naphthalene	N/A ^d	40,880	84	0.37 U	0.39 U	0.36 U	0.37 U	0.35 U	0.39 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.37 U	0.39 U	0.36 U	0.37 U	0.35 U	0.39 U
Pyrene	N/A ^d	61,320	4200	0.37 U	0.39 U	0.54 =	0.37 U	0.35 U	0.39 U
OTHER ANALYTES									
TPH - Diesel Range Organics	N/A ^d	--	--	11 U	12 U	13 =	11 U	11 U	12 U
TPH - Gasoline Range Organics	N/A ^d	--	--	0.2 UJ	0.21 U	0.20 UJ	1.1 J	0.19 J	0.21 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold levels.*Italicized* values indicate results exceeding risk-based screening levels.Underlined values indicate results exceeding leaching to groundwater screening levels.

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

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Table 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-MW10 H833-WB1001 2.4 - 4.4 04/24/1996 (mg/kg)	D-MW10 H833-WB1002 8.0 - 10.0 04/24/1996 (mg/kg)	D-MW11 H883-WB1101 3.5 - 5.3 04/23/1996 (mg/kg)	D-MW11 H833-WB1102 8.0 - 10.0 04/23/1996 (mg/kg)	D-MW12 H833-WB1201 5.3 - 7.3 04/22/1996 (mg/kg)	D-MW12 H833-WB1202 8.0 - 10.0 04/22/1996 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
<i>VOLATILE ORGANIC COMPOUNDS</i>									
Benzene	0.017	197.4	0.03	0.0054 U	0.0060 U	0.0054 U	<u>0.92</u> =	0.0085 =	<u>4.3</u> =
Toluene	115	408,800	12	0.0054 U	0.0060 U	0.0054 U	0.55 =	0.0057 U	0.46 U
Ethylbenzene	18	204,400	13	0.0054 U	0.0060 U	0.0054 U	0.47 U	0.017 =	1.4 =
Xylene (total)	700	1,000,000	190	0.0054 U	0.0060 U	0.0054 U	0.49 =	0.012 =	0.92 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>									
1-Methylnaphthalene	N/A ^d	--	--	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
2-Methylnaphthalene	N/A ^d	--	--	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Acenaphthene	N/A ^d	12,264	570	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Acenaphthylene	N/A ^d	61,320	4,200	0.36 U _f	0.40 U _f	0.35 U _f	0.39 U _f	0.38 U _f	0.38 U _f
Anthracene	N/A ^d	613,200	12,000	g	g	g	g	g	g
Benzo(a)anthracene	0.660	7.84	2	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Benzo(a)pyrene	0.660	0.784	8	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Benzo(b)fluoranthene	0.660	7.84	5	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.36 U _h	0.40 U _h	0.35 U _h	0.39 U _h	0.38 U _h	0.38 U _h
Benzo(k)fluoranthene	0.660	78.4	49	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Chrysene	0.660	784	160	0.36 U _i	0.40 U _i	0.35 U _i	0.39 U _i	0.38 U _i	0.38 U _i
Dibenzo(a,h)anthracene	0.660	0.784	2	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Fluoranthene	N/A ^d	81,760	4,300	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Fluorene	N/A ^d	81,760	560	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Naphthalene	N/A ^d	40,880	84	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Pyrene	N/A ^d	61,320	4200	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
<i>OTHER ANALYTES</i>									
TPH - Diesel Range Organics	N/A ^d	--	--	11 U	12 U	11 U	19 =	28 =	13 =
TPH - Gasoline Range Organics	N/A ^d	--	--	0.20 U	0.22 U	0.19 U	51 =	1.5 J	210 J

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold levels.*Italicized* values indicate results exceeding risk-based screening levels.Underlined values indicate results exceeding leaching to groundwater screening levels.

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

Table 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-MW13	D-MW13	D-MW14	D-MW14	D-MW15	D-MW15
	GUST Soil	Risk-based		H833-WB1301	H833-WB1302	H833-WB1401	H833-WB1402	H833-WB1501	H833-WB1502
	Threshold	Screening	Leaching to	3.5 - 5.5	8.0 - 10.0	8.0 - 10.0	15.0 - 17.0	5.3 - 7.3	8.0 - 10.0
	Levels ^a	Level ^b	Groundwater ^c	04/22/1996	04/22/1996	04/22/1996	04/22/1996	04/25/1996	04/25/1996
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>									
Benzene	0.017	197.4	0.03	0.0056 U	3.2 =	0.0060 U	0.0063 U	0.0060 U	0.0062 U
Toluene	115	408,800	12	0.0056 U	0.45 U	0.0060 U	0.0063 U	0.0060 U	0.0062 U
Ethylbenzene	18	204,400	13	0.0056 U	1.2 =	0.0060 U	0.0063 U	0.0060 U	0.0062 U
Xylene (total)	700	1,000,000	190	0.0056 U	1.3 =	0.0060 U	0.0063 U	0.0060 U	0.0062 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>									
1-Methylnaphthalene	N/A ^d	--	--	0.37 U	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
2-Methylnaphthalene	N/A ^d	--	--	0.37 U	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Acenaphthene	N/A ^d	12,264	570	0.37 U	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Acenaphthylene	N/A ^d	61,320	4,200	0.61 =	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	2.4 =	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Benzo(b)fluoranthene	0.660	7.84	5	4.8 =	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Benzo(g,h,i)perylene	N/A ^d	--	--	1.9 =	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	4 =	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	1.4 =	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Fluorene	N/A ^d	81,760	560	0.37 U	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	2 =	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Naphthalene	N/A ^d	40,880	84	0.37 U	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.37 U	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Pyrene	N/A ^d	61,320	4200	1.5 =	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
<i>OTHER ANALYTES</i>									
TPH - Diesel Range Organics	N/A ^d	--	--	18 =	36 =	12 U	13 UJ	12 U	12 U
TPH - Gasoline Range Organics	N/A ^d	--	--	1.5 J	160 J	0.22 U	0.23 UJ	0.22 U	0.22 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold 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 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-MW16	D-MW16	D-MW17	D-MW17	D-MW18	D-MW18
	GUST Soil	Risk-based	Leaching to	H833-WB1601	H833-WB1602	H833-WB1701	H833-WB1702	H833-WB1801	H833-WB1802
	Threshold	Screening	Groundwater ^c	3.3 - 5.3	8.0 - 10.0	5.4 - 7.4	8.0 - 10.0	3.3 - 5.3	8.0 - 10.0
	Levels ^a	Level ^b		04/25/1996	04/25/1996	04/22/1996	04/22/1996	04/23/1996	04/23/1996
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS									
Benzene	0.017	197.4	0.03	0.0062 U	0.0060 U	0.0054 U	<u>410</u> J	0.0053 U	0.0056 U
Toluene	115	408,800	12	0.0062 U	0.0060 U	0.0054 U	<u>30</u> J	0.0053 U	0.0056 U
Ethylbenzene	18	204,400	13	0.0062 U	0.0060 U	0.0054 U	<u>50</u> J	0.0053 U	0.0056 U
Xylene (total)	700	1,000,000	190	0.0062 U	0.0060 U	0.0054 U	120 J	0.0053 U	0.0056 U
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	N/A ^d	--	--	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
2-Methylnaphthalene	N/A ^d	--	--	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Acenaphthene	N/A ^d	12,264	570	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Acenaphthylene	N/A ^d	61,320	4,200	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Benzo(b)fluoranthene	0.660	7.84	5	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Fluorene	N/A ^d	81,760	560	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Naphthalene	N/A ^d	40,880	84	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Phenanthrene ^c	N/A ^d	61,320	4,200	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Pyrene	N/A ^d	61,320	4200	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
OTHER ANALYTES									
TPH - Diesel Range Organics	N/A ^d	--	--	12 U	12 UJ	17 =	64 =	11 U	11 U
TPH - Gasoline Range Organics	N/A ^d	--	--	0.22 U	0.21 U	0.20 UJ	20000 J	0.19 U	0.20 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold 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 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-MW19	D-MW19	D-MW20	D-MW20	D-MW21	D-MW21
	GUST Soil	Risk-based		H833-WB1901	H833-WB1902	H833-WB2001	H833-WB2002	H833-WB2101	H833-WB2102
	Threshold	Screening	Leaching to	8.0 - 10.0	13.0 - 15.0	8.0 - 10.0	13.0 - 15.0	7.3	8.0 - 10.0
	Levels ^a	Level ^b	Groundwater ^c	04/22/1996	04/22/1996	04/23/1996	04/23/1996	04/23/1996	04/23/1996
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>									
Benzene	0.017	197.4	0.03	<u>11</u> J	<u>0.3</u> =	0.0060 U	0.0064 U	0.0056 U	0.0061 U
Toluene	115	408,800	12	0.46 U	0.031 U	0.0060 U	0.0064 U	0.0056 U	0.0061 U
Ethylbenzene	18	204,400	13	2 J	0.031 U	0.0060 U	0.0064 U	0.0056 U	0.0061 U
Xylene (total)	700	1,000,000	190	1.3 J	0.044 =	0.0060 U	0.0064 U	0.0056 U	0.0061 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>									
1-Methylnaphthalene	N/A ^d	--	--	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
2-Methylnaphthalene	N/A ^d	--	--	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Acenaphthene	N/A ^d	12,264	570	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Acenaphthylene	N/A ^d	61,320	4,200	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Benzo(b)fluoranthene	0.660	7.84	5	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Fluorene	N/A ^d	81,760	560	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Naphthalene	N/A ^d	40,880	84	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Pyrene	N/A ^d	61,320	4200	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
<i>OTHER ANALYTES</i>									
TPH - Diesel Range Organics	N/A ^d	--	--	22 =	12 U	12 U	13 U	11 U	12 U
TPH - Gasoline Range Organics	N/A ^d	--	--	860 J	7.7 J	0.22 U	0.23 UJ	0.20 UJ	0.22 UJ

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold levels.*Italicized* values indicate results exceeding risk-based screening levels.Underlined values indicate results exceeding leaching to groundwater screening levels.

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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 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-MW22	D-MW22	D-MW23	D-MW23	D-MW24	D-MW24
	GUST Soil	Risk-based	Leaching to	H833-WB2201	H833-WB2202	H833-WB2301	H833-WB2302	H833-WB2401	H833-WB2402
	Threshold	Screening	Groundwater ^c	5.3 - 7.3	8.0 - 10.0	5.3 - 7.3	8.0 - 10.0	3.3 - 5.3	8.0 - 10.0
	Levels ^a	Level ^b		04/23/1996	04/23/1996	04/23/1996	04/23/1996	04/23/1996	04/23/1996
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>									
Benzene	0.017	197.4	0.03	0.0056 U	0.0058 U	0.0058 U	0.0067 U	0.0055 U	0.0064 U
Toluene	115	408,800	12	0.0056 U	0.0058 U	0.0058 U	0.0067 U	0.0055 U	0.0064 U
Ethylbenzene	18	204,400	13	0.0056 U	0.0058 U	0.0058 U	0.0067 U	0.0055 U	0.0064 U
Xylene (total)	700	1,000,000	190	0.0056 U	0.0058 U	0.0058 U	0.0067 U	0.0055 U	0.0064 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>									
1-Methylnaphthalene	N/A ^d	--	--	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
2-Methylnaphthalene	N/A ^d	--	--	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Acenaphthene	N/A ^d	12,264	570	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Acenaphthylene	N/A ^d	61,320	4,200	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Benzo(b)fluoranthene	0.660	7.84	5	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Fluorene	N/A ^d	81,760	560	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Naphthalene	N/A ^d	40,880	84	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Pyrene	N/A ^d	61,320	4200	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
<i>OTHER ANALYTES</i>									
TPH - Diesel Range Organics	N/A ^d	--	--	11 U	12 U	12 U	13 U	11 U	13 U
TPH - Gasoline Range Organics	N/A ^d	--	--	0.20 UJ	0.21 UJ	0.21 U	0.24 U	0.20 U	0.23 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).

^b Protective of soil exposure during Industrial Land Use.

^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.

^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.

^e Values based on pyrene as a surrogate chemical.

^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.

^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.

^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.

ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.

Bold values indicate results exceeding Georgia UST soil threshold 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 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-MW25	D-MW25	D-MW26	D-MW26	D-MW27	D-MW27
	GUST Soil	Risk-based		H833-WB2501	H833-WB2502	H833-WB2601	H833-WB2602	H833-WB2701	H833-WB2702
	Threshold	Screening	Leaching to	3.4 - 5.4	8.0 - 10.0	5.3 - 7.3	8.0 - 10.0	3.3 - 5.3	8.0 - 10.0
	Levels ^a	Level ^b	Groundwater ^c	04/24/1996	04/24/1996	04/24/1996	04/24/1996	04/24/1996	04/24/1996
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>									
Benzene	0.017	197.4	0.03	0.0053 U	0.0062 U	0.0054 U	0.0062 U	0.0057 U	0.0061 U
Toluene	115	408,800	12	0.0053 U	0.0085 =	0.0054 U	0.0062 U	0.0057 U	0.0061 U
Ethylbenzene	18	204,400	13	0.0053 U	0.0062 U	0.0054 U	0.0062 U	0.0057 U	0.0061 U
Xylene (total)	700	1,000,000	190	0.0053 U	0.009 =	0.0054 U	0.0062 U	0.0057 U	0.0061 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>									
1-Methylnaphthalene	N/A ^d	--	--	0.35 U	0.41 U	0.35 U	0.41 U	0.38 U	0.4 U
2-Methylnaphthalene	N/A ^d	--	--	0.35 U	0.41 U	0.35 U	0.41 U	0.38 U	0.4 U
Acenaphthene	N/A ^d	12,264	570	0.35 U	0.41 U	0.35 U	0.41 U	0.38 U	0.4 U
Acenaphthylene	N/A ^d	61,320	4,200	0.35 U	0.41 U	0.35 U	0.41 U	0.38 U	0.4 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.35 U	0.41 U	0.45 =	0.41 U	0.38 U	0.4 U
Benzo(b)fluoranthene	0.660	7.84	5	0.35 U	0.41 U	0.8 =	0.41 U	0.38 U	0.4 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.35 U	0.41 U	0.35 U	0.41 U	0.38 U	0.4 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.35 U	0.41 U	0.39 =	0.41 U	0.38 U	0.4 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.35 U	0.41 U	0.44 =	0.41 U	0.38 U	0.4 U
Fluorene	N/A ^d	81,760	560	0.35 U	0.41 U	0.35 U	0.41 U	0.38 U	0.4 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.35 U	0.41 U	0.35 U	0.41 U	0.38 U	0.4 U
Naphthalene	N/A ^d	40,880	84	0.35 U	0.41 U	0.35 U	0.41 U	0.38 U	0.4 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.35 U	0.41 U	0.35 U	0.41 U	0.38 U	0.4 U
Pyrene	N/A ^d	61,320	4200	0.35 U	0.41 U	0.48 =	0.41 U	0.38 U	0.4 U
<i>OTHER ANALYTES</i>									
TPH - Diesel Range Organics	N/A ^d	--	--	10 U	12 U	11 U	12 U	11 U	12 U
TPH - Gasoline Range Organics	N/A ^d	--	--	0.19 U	0.22 U	0.19 U	0.22 U	0.21 U	0.22 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).

^b Protective of soil exposure during Industrial Land Use.

^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.

^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.

^e Values based on pyrene as a surrogate chemical.

^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.

^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.

^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.

ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.

Bold values indicate results exceeding Georgia UST soil threshold 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 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-SB01 H833-SB0101 1.3 - 3.3 03/05/1996 (mg/kg)	D-SB01 H833-SB0102 7.3 - 9.3 03/05/1996 (mg/kg)	D-SB02 H833-SB0201 1.5 - 3.5 02/27/1996 (mg/kg)	D-SB02 H833-SB0202 8.0 - 10.0 02/27/1996 (mg/kg)	D-SB02 H833-SB0203 13.0 - 15.0 02/27/1996 (mg/kg)	D-SB02 H833-SB0204 18.0 - 20.0 02/27/1996 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
VOLATILE ORGANIC COMPOUNDS									
Benzene	0.017	197.4	0.03	0.0053 U	0.0053 U	0.0053 U	0.0055 U	0.0064 U	0.0067 U
Toluene	115	408,800	12	0.0053 U	0.0053 U	0.0053 U	0.0055 U	0.0064 U	0.0067 U
Ethylbenzene	18	204,400	13	0.0053 U	0.0053 U	0.0053 U	0.0055 U	0.0064 U	0.0067 U
Xylene (total)	700	1,000,000	190	0.0053 U	0.0053 U	0.0053 U	0.0055 U	0.0064 U	0.0067 U
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	N/A ^d	--	--	0.35 U	0.35 U	0.35 U	0.36 U	0.42 U	0.44 U
2-Methylnaphthalene	N/A ^d	--	--	0.35 U	0.35 U	0.35 U	0.36 U	0.42 U	0.44 U
Acenaphthene	N/A ^d	12,264	570	0.35 U	0.35 U	0.35 U	0.36 U	0.42 U	0.44 U
Acenaphthylene	N/A ^d	61,320	4,200	0.35 U	0.35 U	0.35 U	0.36 U	0.42 U	0.44 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Bezo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.35 U	0.35 U	0.35 U	0.82 J	0.42 U	0.44 U
Benzo(b)fluoranthene	0.660	7.84	5	0.35 U	0.35 U	0.35 U	2.1 =	0.42 U	0.44 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.35 U	0.35 U	0.35 U	0.91 = _h	0.42 U _h	0.44 U _h
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	2.4 =	0.42 U	0.44 U
Chrysene	0.660	784	160	0.35 U _i	0.35 U _i	0.35 U _i	_i	0.42 U _i	0.44 U _i
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.35 U	0.35 U	0.35 U	2.1 =	0.42 U	0.44 U
Fluorene	N/A ^d	81,760	560	0.35 U	0.35 U	0.35 U	0.36 U	0.42 U	0.44 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.35 U	0.35 U	0.35 U	0.92 =	0.42 U	0.44 U
Naphthalene	N/A ^d	40,880	84	0.35 U	0.35 U	0.35 U	0.36 U	0.42 U	0.44 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.35 U	0.35 U	0.35 U	1.3 =	0.42 U	0.44 U
Pyrene	N/A ^d	61,320	4200	0.35 U	0.35 U	0.35 U	1.9 J	0.42 U	0.44 U
OTHER ANALYTES									
TPH - Diesel Range Organics	N/A ^d	--	--	11 U	10 U	16 J	25 J	13 UJ	13 UJ
TPH - Gasoline Range Organics	N/A ^d	--	--	0.26 U	0.26 U	0.26 UJ	0.27 UJ	0.32 U	0.33 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold 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 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-SB03 H833-SB0301 1.3 - 3.3 03/05/1996 (mg/kg)	D-SB03 H833-SB0302 7.3 - 9.3 03/05/1996 (mg/kg)	D-SB04 H833-SB0401 1.5 - 3.5 02/27/1996 (mg/kg)	D-SB04 H833-SB0402 8.0 - 10.0 02/27/1996 (mg/kg)	D-SB05 H833-SB0501 1.3 - 3.3 03/05/1996 (mg/kg)	D-SB05 H833-SB0502 7.3 - 9.3 03/05/1996 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
<i>VOLATILE ORGANIC COMPOUNDS</i>									
Benzene	0.017	197.4	0.03	<u>1.5</u> =	<u>0.47</u> U	0.0057 U	0.0054 U	0.0054 U	0.0055 U
Toluene	115	408,800	12	2.2 =	11 J	0.0071 =	0.0054 U	0.0054 U	0.0055 U
Ethylbenzene	18	204,400	13	1.0 =	6 J	0.0057 U	0.0054 U	0.0054 U	0.0055 U
Xylene (total)	700	1,000,000	190	3.2 =	13 J	0.0088 =	0.0054 U	0.0054 U	0.0055 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>									
1-Methylnaphthalene	N/A ^d	--	--	1.7 R	0.39 U	0.38 U	0.36 U	0.35 U	0.36 U
2-Methylnaphthalene	N/A ^d	--	--	1.7 R	0.39 U	0.38 U	0.36 U	0.35 U	0.36 U
Acenaphthene	N/A ^d	12,264	570	1.7 R	0.39 U	0.38 U	0.36 U	0.35 U	0.36 U
Acenaphthylene	N/A ^d	61,320	4,200	1.7 R	0.39 U	0.38 U	0.36 U	0.35 U	0.36 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	4.2 J	0.39 U	0.38 U	0.36 U	0.35 U	0.36 U
Benzo(b)fluoranthene	0.660	7.84	5	4.9 J	0.39 U	0.38 U	0.36 U	0.35 U	0.36 U
Benzo(g,h,i)perylene	N/A ^d	--	--	4.3 J	0.39 U	0.38 U	0.54 =	0.35 U	0.36 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	8.6 J	0.39 U	0.38 U	0.36 U	0.35 U	0.36 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	4.0 J	0.39 U	0.38 U	0.36 U	0.35 U	0.36 U
Fluorene	N/A ^d	81,760	560	1.7 R	0.39 U	0.38 U	0.36 U	0.35 U	0.36 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	2.7 J	0.39 U	0.38 U	0.36 U	0.35 U	0.36 U
Naphthalene	N/A ^d	40,880	84	1.7 R	0.39 U	0.38 U	0.36 U	0.35 U	0.36 U
Phenanthrene ^e	N/A ^d	61,320	4,200	2.7 J	0.39 U	0.38 U	0.36 U	0.35 U	0.36 U
Pyrene	N/A ^d	61,320	4200	7.4 J	0.39 U	0.38 U	0.36 U	0.35 U	0.36 U
<i>OTHER ANALYTES</i>									
TPH - Diesel Range Organics	N/A ^d	--	--	84 =	46 =	16 J	11 J	40 =	14 =
TPH - Gasoline Range Organics	N/A ^d	--	--	51 J	600 =	0.29 U	0.27 UJ	0.27 UJ	0.27 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold 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 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-SB06 H833-SB0601 1.5 - 3.5 02/27/1996 (mg/kg)	D-SB06 H833-SB0602 8.0 - 10.0 02/27/1996 (mg/kg)	D-SB06 H833-SB0603 13.0 - 15.0 02/27/1996 (mg/kg)	D-SB06 H833-SB0604 18.0 - 20.0 02/27/1996 (mg/kg)	D-SB07 H833-SB0701 1.3 - 3.3 02/28/1999 (mg/kg)	D-SB07 H833-SB0702 7.3 - 9.3 02/28/1999 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
<i>VOLATILE ORGANIC COMPOUNDS</i>									
Benzene	0.017	197.4	0.03	0.0053 U	9.3 =	0.0063 U	0.0065 U	0.0053 U	9 =
Toluene	115	408,800	12	0.0053 U	0.4 U	0.0063 U	0.0065 U	0.0053 U	0.49 U
Ethylbenzene	18	204,400	13	0.0053 U	4.2 =	0.0063 U	0.0065 U	0.0053 U	3.6 =
Xylene (total)	700	1,000,000	190	0.0053 U	2.1 =	0.0063 U	0.0065 U	0.0053 U	2.6 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>									
1-Methylnaphthalene	N/A ^d	--	--	0.35 U	0.38 U	0.42 U	0.43 U	0.35 U	0.40 U
2-Methylnaphthalene	N/A ^d	--	--	0.35 U	0.38 U	0.42 U	0.43 U	0.35 U	0.40 U
Acenaphthene	N/A ^d	12,264	570	0.35 U	0.38 U	0.42 U	0.43 U	0.35 U	0.40 U
Acenaphthylene	N/A ^d	61,320	4,200	0.35 _f U	0.38 _f U	0.42 _f U	0.43 _f U	0.35 _f U	0.40 _f U
Anthracene	N/A ^d	613,200	12,000	_g	_g	_g	_g	_g	_g
Benzo(a)anthracene	0.660	7.84	2	0.35 U	0.38 U	0.42 U	0.43 U	0.35 U	0.40 U
Benzo(a)pyrene	0.660	0.784	8	0.35 U	0.38 U	0.42 U	0.43 U	0.35 U	0.40 U
Benzo(b)fluoranthene	0.660	7.84	5	0.35 U	0.38 U	0.42 U	0.43 U	0.35 U	0.40 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.35 _h U	0.38 _h U	0.42 _h U	0.43 _h U	0.35 _h U	0.40 _h U
Benzo(k)fluoranthene	0.660	78.4	49	0.35 _i U	0.38 _i U	0.42 _i U	0.43 _i U	0.35 _i U	0.40 _i U
Chrysene	0.660	784	160	0.35 U	0.38 U	0.42 U	0.43 U	0.35 U	0.40 U
Dibenzo(a,h)anthracene	0.660	0.784	2	0.35 U	0.38 U	0.42 U	0.43 U	0.35 U	0.40 U
Fluoranthene	N/A ^d	81,760	4,300	0.35 U	0.38 U	0.42 U	0.43 U	0.35 U	0.40 U
Fluorene	N/A ^d	81,760	560	0.35 U	0.38 U	0.42 U	0.43 U	0.35 U	0.40 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.35 U	0.38 U	0.42 U	0.43 U	0.35 U	0.40 U
Naphthalene	N/A ^d	40,880	84	0.35 U	0.38 U	0.42 U	0.43 U	0.35 U	0.40 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.35 U	0.38 U	0.42 U	0.43 U	0.35 U	0.40 U
Pyrene	N/A ^d	61,320	4200	0.35 U	0.38 U	0.42 U	0.43 U	0.35 U	0.40 U
<i>OTHER ANALYTES</i>									
TPH - Diesel Range Organics	N/A ^d	--	--	10 UJ	22 J	13 UJ	13 UJ	11 U	32 =
TPH - Gasoline Range Organics	N/A ^d	--	--	0.26 U	180 =	0.32 U	0.32 U	0.26 U	170 =

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold 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.

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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 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-SB08	D-SB08	D-SB09	D-SB09	D-SB10	D-SB10
	GUST Soil	Risk-based	Leaching to	H833-SB0801	H833-SB0802	H833-SB0901	H833-SB0902	H833-SB1001	H833-SB1002
	Threshold	Screening	Groundwater ^c	1.3 - 3.3	7.3 - 9.3	1.5 - 3.5	5.0 - 7.0	1.5 - 3.5	8.0 - 10.0
	Levels ^a	Level ^b		03/05/1996	03/05/1996	02/29/1996	02/29/1996	02/28/1996	02/28/1996
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS									
Benzene	0.017	197.4	0.03	0.0054 U	0.0053 U	0.0056 U	0.0053 U	0.0054 U	<u>260</u> J
Toluene	115	408,800	12	0.0054 U	0.0053 U	0.0056 U	0.0053 U	0.0054 U	<u>140</u> J
Ethylbenzene	18	204,400	13	0.0054 U	0.0053 U	0.0056 U	0.0053 U	0.0054 U	<u>76</u> J
Xylene (total)	700	1,000,000	190	0.0054 U	0.0053 U	0.0056 U	0.0053 U	0.0054 U	<u>200</u> J
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	N/A ^d	--	--	0.36 U	0.35 U	0.37 U	0.35 U	0.35 U	0.39 U
2-Methylnaphthalene	N/A ^d	--	--	0.36 U	0.35 U	0.37 U	0.35 U	0.35 U	0.60 =
Acenaphthene	N/A ^d	12,264	570	0.36 U	0.35 U	0.37 U	0.35 U	0.35 U	0.39 U
Acenaphthylene	N/A ^d	61,320	4,200	0.36 U	0.35 U	0.37 U	0.35 U	0.35 U	0.39 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.36 U	0.35 U	0.37 U	0.35 U	0.35 U	0.39 U
Benzo(b)fluoranthene	0.660	7.84	5	0.36 U	0.35 U	0.37 U	0.35 U	0.35 U	0.39 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.36 U	0.35 U	0.37 U	0.35 U	0.35 U	0.39 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.36 U	0.35 U	0.37 U	0.35 U	0.35 U	0.39 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.36 U	0.35 U	0.37 U	0.35 U	0.35 U	0.39 U
Fluorene	N/A ^d	81,760	560	0.36 U	0.35 U	0.37 U	0.35 U	0.35 U	0.39 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.36 U	0.35 U	0.37 U	0.35 U	0.35 U	0.39 U
Naphthalene	N/A ^d	40,880	84	0.36 U	0.35 U	0.37 U	0.35 U	0.35 U	0.68 =
Phenanthrene ^e	N/A ^d	61,320	4,200	0.36 U	0.35 U	0.37 U	0.35 U	0.35 U	0.39 U
Pyrene	N/A ^d	61,320	4200	0.36 U	0.35 U	0.37 U	0.35 U	0.35 U	0.39 U
OTHER ANALYTES									
TPH - Diesel Range Organics	N/A ^d	--	--	11 U	11 U	11 U	10 U	11 U	470 =
TPH - Gasoline Range Organics	N/A ^d	--	--	0.27 UJ	0.26 UJ	0.28 U	0.26 UJ	0.27 U	3600 J

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).

^b Protective of soil exposure during Industrial Land Use.

^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.

^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.

^e Values based on pyrene as a surrogate chemical.

^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.

^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.

^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.

ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.

Bold values indicate results exceeding Georgia UST soil threshold 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 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID:	Screening Levels			D-SB10	D-SB10	D-SB11	D-SB11	D-SB12	D-SB12
	GUST Soil	Risk-based		H833- SB1003	H833- SB1004	H833- SB1101	H833- SB1102	H833- SB1201	H833- SB1202
Sample Interval (ft BGS):	Threshold	Screening	Leaching to	13.0 - 15.0	18.0 - 20.0	1.3 - 3.3	5.3 - 7.3	0.0 - 2.0	6.0 - 8.0
Collection Date:	Levels ^a	Level ^b	Groundwater ^c	02/28/1996	02/28/1996	02/28/1996	02/28/1996	02/28/1996	02/28/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS									
Benzene	0.017	197.4	0.03	<u>0.19</u> =	<u>0.22</u> =	0.0054 U	0.0057 U	0.0055 U	0.0057 U
Toluene	115	408,800	12	0.019 =	0.034 =	0.0054 U	0.0057 U	0.0055 U	0.0057 U
Ethylbenzene	18	204,400	13	0.029 =	0.046 =	0.0054 U	0.0057 U	0.0055 U	0.0057 U
Xylene (total)	700	1,000,000	190	0.052 =	0.2 =	0.0054 U	0.0057 U	0.0055 U	0.0057 U
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	N/A ^d	--	--	0.41 U	0.42 U	0.35 U	0.38 U	0.36 U	0.38 U
2-Methylnaphthalene	N/A ^d	--	--	0.41 U	0.42 U	0.35 U	0.38 U	0.36 U	0.38 U
Acenaphthene	N/A ^d	12,264	570	0.41 U	0.42 U	0.35 U	0.38 U	0.36 U	0.38 U
Acenaphthylene	N/A ^d	61,320	4,200	0.41 U	0.42 U	0.35 U	0.38 U	0.36 U	0.38 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.41 U	0.42 U	0.35 U	0.38 U	0.36 U	0.38 U
Benzo(b)fluoranthene	0.660	7.84	5	0.41 U	0.42 U	0.38 =	0.38 U	0.36 U	0.38 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.41 U	0.42 U	0.35 U	0.38 U	0.36 U	0.38 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.41 U	0.42 U	0.39 =	0.38 U	0.36 U	3.8 =
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.41 U	0.42 U	0.35 U	0.38 U	0.36 U	0.38 U
Fluorene	N/A ^d	81,760	560	0.41 U	0.42 U	0.35 U	0.38 U	0.36 U	0.38 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.41 U	0.42 U	0.35 U	0.38 U	0.36 U	0.38 U
Naphthalene	N/A ^d	40,880	84	0.41 U	0.42 U	0.35 U	0.38 U	0.36 U	0.38 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.41 U	0.42 U	0.35 U	0.38 U	0.36 U	0.38 U
Pyrene	N/A ^d	61,320	4200	0.41 U	0.42 U	0.35 U	0.38 U	0.36 U	0.38 U
OTHER ANALYTES									
TPH - Diesel Range Organics	N/A ^d	--	--	12 =	13 U	11 U	11 U	11 U	11 U
TPH - Gasoline Range Organics	N/A ^d	--	--	1.1 =	2.5 J	0.27 U	0.29 UJ	0.27 U	0.29 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold 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 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-SB13	D-SB13	D-SB14	D-SB14	D-SB15	D-SB15
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)	H833-SB1301 1.3 - 3.3 02/28/1996 (mg/kg)	H833-SB1302 5.3 - 7.3 02/28/1996 (mg/kg)	H833-SB1401 0.0 - 2.0 02/29/1996 (mg/kg)	H833-SB1402 6.0 - 8.0 02/29/1996 (mg/kg)	H833-SB1501 1.5 - 3.5 02/29/1996 (mg/kg)	H833-SB1502 8.0 - 10.0 02/29/1996 (mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>									
Benzene	0.017	197.4	0.03	0.0054 U	0.0055 U	0.0053 U	0.0062 U	0.0053 U	0.0066 U
Toluene	115	408,800	12	0.0054 U	0.0055 U	0.0053 U	0.0062 U	0.0053 U	0.0081 =
Ethylbenzene	18	204,400	13	0.0054 U	0.0055 U	0.0053 U	0.0062 U	0.0053 U	0.0066 U
Xylene (total)	700	1,000,000	190	0.0054 U	0.0055 U	0.0053 U	0.0062 U	0.0053 U	0.01 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>									
1-Methylnaphthalene	N/A ^d	--	--	0.36 U	0.36 U	0.35 U	0.41 U	0.35 U	0.43 U
2-Methylnaphthalene	N/A ^d	--	--	0.36 U	0.36 U	0.35 U	0.41 U	0.35 U	0.43 U
Acenaphthene	N/A ^d	12,264	570	0.36 U	0.36 U	0.35 U	0.41 U	0.35 U	0.43 U
Acenaphthylene	N/A ^d	61,320	4,200	0.36 U	0.36 U	0.35 U	0.41 U	0.35 U	0.43 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.36 U	0.36 U	0.35 U	0.41 U	0.35 U	0.43 U
Benzo(b)fluoranthene	0.660	7.84	5	0.36 U	0.36 U	0.35 U	0.41 U	0.35 U	0.43 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.36 U	0.36 U	0.35 U	0.41 U	0.35 U	0.43 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.36 U	0.36 U	0.35 U	0.41 U	0.35 U	0.43 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.36 U	0.36 U	0.35 U	0.41 U	0.35 U	0.43 U
Fluorene	N/A ^d	81,760	560	0.36 U	0.36 U	0.35 U	0.41 U	0.35 U	0.43 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.36 U	0.36 U	0.35 U	0.41 U	0.35 U	0.43 U
Naphthalene	N/A ^d	40,880	84	0.36 U	0.36 U	0.35 U	0.41 U	0.35 U	0.43 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.36 U	0.36 U	0.35 U	0.41 U	0.35 U	0.43 U
Pyrene	N/A ^d	61,320	4200	0.36 U	0.36 U	0.35 U	0.41 U	0.35 U	0.43 U
<i>OTHER ANALYTES</i>									
TPH - Diesel Range Organics	N/A ^d	--	--	11 U	11 U	11 U	12 U	10 U	13 U
TPH - Gasoline Range Organics	N/A ^d	--	--	0.27 U	0.27 U	0.26 U	0.31 U	0.26 UJ	0.33 UJ

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold 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 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station:	Screening Levels			D-SB16	D-SB16	D-SB17	D-SB17	D-SB18	D-SB18
Sample ID:	GUST Soil	Risk-based		H833-SB1601	H833-SB1602	H833-SB1701	H833-SB1702	H833-SB1801	H833-SB1802
Sample Interval (ft BGS):	Threshold	Screening	Leaching to	1.3 - 3.3	5.3 - 7.3	1.5 - 3.5	8.0 - 10.0	1.3 - 3.3	5.3 - 7.3
Collection Date:	Levels ^a	Level ^b	Groundwater ^c	02/29/1996	02/29/1996	02/29/1996	02/29/1996	02/29/1996	02/29/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS									
Benzene	0.017	197.4	0.03	0.0052 U	0.0058 U	0.0055 U	0.0062 U	0.0054 U	0.0056 U
Toluene	115	408,800	12	0.0052 U	0.0058 U	0.0055 U	0.0062 U	0.0054 U	0.0056 U
Ethylbenzene	18	204,400	13	0.0052 U	0.0058 U	0.0055 U	0.0062 U	0.0054 U	0.0056 U
Xylene (total)	700	1,000,000	190	0.0052 U	0.0058 U	0.0055 U	0.0062 U	0.0054 U	0.0056 U
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	N/A ^d	--	--	0.34 U	0.38 U	1.8 U	0.41 U	0.72 U	0.37 U
2-Methylnaphthalene	N/A ^d	--	--	0.34 U	0.38 U	1.8 U	0.41 U	0.72 U	0.37 U
Acenaphthene	N/A ^d	12,264	570	0.34 U	0.38 U	1.8 U	0.41 U	0.72 U	0.37 U
Acenaphthylene	N/A ^d	61,320	4,200	0.34 U	0.38 U	1.8 U	0.41 U	0.98 =	0.37 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.34 U	0.38 U	<i>12</i> =	0.41 U	<i>6</i> =	0.37 U
Benzo(b)fluoranthene	0.660	7.84	5	0.34 U	0.38 U	<i>20</i> =	0.41 U	<i>9.4</i> =	0.37 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.34 U	0.38 U	7.7 =	0.41 U	4.4 =	0.37 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.34 U	0.38 U	<i>27</i> =	0.41 U	<i>8.2</i> =	0.37 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.34 U	0.38 U	24 =	0.41 U	4.6 =	0.37 U
Fluorene	N/A ^d	81,760	560	0.34 U	0.38 U	1.8 U	0.41 U	0.72 U	0.37 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.34 U	0.38 U	<i>10</i> =	0.41 U	<i>4.9</i> =	0.37 U
Naphthalene	N/A ^d	40,880	84	0.34 U	0.38 U	1.8 U	0.41 U	0.72 U	0.37 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.34 U	0.38 U	16 =	0.41 U	0.72 U	0.37 U
Pyrene	N/A ^d	61,320	4200	0.34 U	0.38 U	14 =	0.41 U	4.6 =	0.37 U
OTHER ANALYTES									
TPH - Diesel Range Organics	N/A ^d	--	--	10 U	12 U	300 J	12 U	25 =	11 U
TPH - Gasoline Range Organics	N/A ^d	--	--	0.26 U	0.29 U	0.27 UJ	0.31 U	0.27 U	0.28 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).

^b Protective of soil exposure during Industrial Land Use.

^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.

^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.

^e Values based on pyrene as a surrogate chemical.

^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.

^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.

^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.

ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.

Bold values indicate results exceeding Georgia UST soil threshold 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 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-SB19 H833-SB1901 1.5 - 3.5 02/29/1996 (mg/kg)	D-SB19 H833-SB1902 8.0 - 10.0 02/29/1996 (mg/kg)	D-SB25 H833-SB2501 1.5 - 3.5 02/29/1996 (mg/kg)	D-SB25 H833-SB2502 8.0 - 10.0 02/29/1996 (mg/kg)	D-SB26 H833-SB2601 1.5 - 3.5 03/04/1996 (mg/kg)	D-SB26 H833-SB2602 8.0 - 10.0 03/04/1996 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
VOLATILE ORGANIC COMPOUNDS									
Benzene	0.017	197.4	0.03	0.0054 U	0.0062 U	0.0067 =	0.0062 U	0.0056 U	0.0060 U
Toluene	115	408,800	12	0.0054 U	0.0062 U	0.0054 U	0.0062 U	0.0056 U	0.0060 U
Ethylbenzene	18	204,400	13	0.0054 U	0.0062 U	0.0054 U	0.0062 U	0.0095 =	0.0060 U
Xylene (total)	700	1,000,000	190	0.0054 U	0.0062 U	0.0054 U	0.0062 U	0.039 =	0.0060 U
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	N/A ^d	--	--	0.36 U	0.41 U	0.36 U	0.41 U	0.37 U	0.40 U
2-Methylnaphthalene	N/A ^d	--	--	0.36 U	0.41 U	0.36 U	0.41 U	0.37 U	0.40 U
Acenaphthene	N/A ^d	12,264	570	0.36 U	0.41 U	0.36 U	0.41 U	0.37 U	0.40 U
Acenaphthylene	N/A ^d	61,320	4,200	0.36 U _f	0.41 U _f	0.36 U _f	0.41 U _f	0.37 U _f	0.40 U _f
Anthracene	N/A ^d	613,200	12,000	g	g	g	g	g	g
Benzo(a)anthracene	0.660	7.84	2	0.36 U	0.41 U	0.36 U	0.41 U	0.37 U	0.40 U
Benzo(a)pyrene	0.660	0.784	8	0.36 U	0.41 U	0.36 U	0.41 U	0.37 U	0.40 U
Benzo(b)fluoranthene	0.660	7.84	5	0.36 U	0.41 U	0.36 U	0.41 U	0.37 U	0.40 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.36 U _h	0.41 U _h	0.36 U _h	0.41 U _h	0.37 U _h	0.40 U _h
Benzo(k)fluoranthene	0.660	78.4	49	0.36 U	0.41 U	0.36 U	0.41 U	0.37 U	0.40 U
Chrysene	0.660	784	160	0.36 U _i	0.41 U _i	0.36 U _i	0.41 U _i	0.37 U _i	0.40 U _i
Dibenzo(a,h)anthracene	0.660	0.784	2	0.36 U	0.41 U	0.36 U	0.41 U	0.37 U	0.40 U
Fluoranthene	N/A ^d	81,760	4,300	0.36 U	0.41 U	0.36 U	0.41 U	0.37 U	0.40 U
Fluorene	N/A ^d	81,760	560	0.36 U	0.41 U	0.36 U	0.41 U	0.37 U	0.40 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.36 U	0.41 U	0.36 U	0.41 U	0.37 U	0.40 U
Naphthalene	N/A ^d	40,880	84	0.36 U	0.41 U	0.36 U	0.41 U	0.37 U	0.40 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.36 U	0.41 U	0.36 U	0.41 U	0.37 U	0.40 U
Pyrene	N/A ^d	61,320	4200	0.36 U	0.41 U	0.36 U	0.41 U	0.37 U	0.40 U
OTHER ANALYTES									
TPH - Diesel Range Organics	N/A ^d	--	--	31 =	12 U	11 U	12 U	11 U	12 U
TPH - Gasoline Range Organics	N/A ^d	--	--	0.27 U	0.31 U	0.27 U	0.31 U	0.71 =	0.30 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold 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 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-SB27 H833-SB2701 1.5 - 3.5 02/29/1996 (mg/kg)	D-SB27 H833-SB2702 8.0 - 10.0 02/29/1996 (mg/kg)	D-SB28 H833-SB2801 1.2 - 3.2 02/29/1996 (mg/kg)	D-SB28 H833-SB2802 5.2 - 7.2 02/29/1996 (mg/kg)	D-SB29 H833-SB2901 1.5 - 3.5 02/28/1996 (mg/kg)	D-SB29 H833-SB2902 8.0 - 10.0 02/28/1996 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
<i>VOLATILE ORGANIC COMPOUNDS</i>									
Benzene	0.017	197.4	0.03	0.0056 U	0.0059 U	0.0054 U	0.0059 U	0.0057 U	0.0057 U
Toluene	115	408,800	12	0.0056 U	0.0059 U	0.0054 U	0.0059 U	0.0057 U	0.0057 U
Ethylbenzene	18	204,400	13	0.0056 U	0.0059 U	0.0054 U	0.0059 U	0.0057 U	0.0057 U
Xylene (total)	700	1,000,000	190	0.0056 U	0.0059 U	0.0054 U	0.0059 U	0.0067 =	0.0077 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>									
1-Methylnaphthalene	N/A ^d	--	--	0.37 U	0.39 U	0.36 U	0.39 U	0.38 U	0.76 U
2-Methylnaphthalene	N/A ^d	--	--	0.37 U	0.39 U	0.36 U	0.39 U	0.38 U	0.76 U
Acenaphthene	N/A ^d	12,264	570	0.37 U	0.39 U	0.36 U	0.39 U	0.38 U	0.76 U
Acenaphthylene	N/A ^d	61,320	4,200	0.37 _f	0.39 _f	0.36 _f	0.39 _f	0.38 _f	1.3 _f =
Anthracene	N/A ^d	613,200	12,000						
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.37 U	0.39 U	0.36 U	0.39 U	0.38 U	3.8 =
Benzo(b)fluoranthene	0.660	7.84	5	0.37 U	0.39 U	0.36 U	0.39 U	0.38 U	5.1 =
Benzo(g,h,i)perylene	N/A ^d	--	--	0.37 U	0.39 U	0.36 U	0.39 U	0.38 U	2.9 _h =
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.37 U	0.39 U	0.36 U	0.39 U	0.38 U	6.7 =
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.37 U	0.39 U	0.36 U	0.39 U	0.38 U	1.3 =
Fluorene	N/A ^d	81,760	560	0.37 U	0.39 U	0.36 U	0.39 U	0.38 U	0.76 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.37 U	0.39 U	0.36 U	0.39 U	0.38 U	1.9 =
Naphthalene	N/A ^d	40,880	84	0.37 U	0.39 U	0.36 U	0.39 U	0.38 U	0.76 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.37 U	0.39 U	0.36 U	0.39 U	0.38 U	0.76 U
Pyrene	N/A ^d	61,320	4200	0.37 U	0.39 U	0.36 U	0.39 U	0.38 U	3 =
<i>OTHER ANALYTES</i>									
TPH - Diesel Range Organics	N/A ^d	--	--	11 U	12 U	11 U	12 U	11 U	33 =
TPH - Gasoline Range Organics	N/A ^d	--	--	0.28 U	0.29 U	0.27 UJ	0.29 U	0.29 U	0.29 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold levels.*Italicized* values indicate results exceeding risk-based screening levels.Underlined values indicate results exceeding leaching to groundwater screening levels.

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Table 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-SB29 H833-SB2903	D-SB29 H833-SB2904	D-SB30 H833-SB3001	D-SB30 H833-SB3002	D-SB31 H833-SB3101	D-SB31 H833-SB3102
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)	13.0 - 15.0 02/28/1996 (mg/kg)	18.0 - 20.0 02/28/1996 (mg/kg)	1.6 - 3.6 03/04/1996 (mg/kg)	8.0 - 10.0 03/04/1996 (mg/kg)	1.5 - 3.5 03/04/1996 (mg/kg)	8.0 - 10.0 03/04/1996 (mg/kg)
VOLATILE ORGANIC COMPOUNDS									
Benzene	0.017	197.4	0.03	0.0063 U	0.0062 U	0.0059 U	0.0060 U	0.0067 U	0.0062 U
Toluene	115	408,800	12	0.0063 U	0.0062 U	0.0059 U	0.0060 U	0.0067 U	0.0062 U
Ethylbenzene	18	204,400	13	0.0063 U	0.0062 U	0.0059 U	0.0060 U	0.0067 U	0.0062 U
Xylene (total)	700	1,000,000	190	0.0063 U	0.0062 U	0.0059 U	0.0060 U	0.0067 U	0.0084 =
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	N/A ^d	--	--	0.42 U	0.41 U	0.39 U	0.40 U	0.39 U	0.41 U
2-Methylnaphthalene	N/A ^d	--	--	0.42 U	0.41 U	0.39 U	0.40 U	0.39 U	0.41 U
Acenaphthene	N/A ^d	12,264	570	0.42 U	0.41 U	0.39 U	0.40 U	0.39 U	0.41 U
Acenaphthylene	N/A ^d	61,320	4,200	0.42 U _f	0.41 U _f	0.39 U _f	0.40 U _f	0.39 U _f	0.41 U _f
Anthracene	N/A ^d	613,200	12,000						
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.42 U	0.41 U	0.39 U	0.40 U	0.39 U	0.41 U
Benzo(b)fluoranthene	0.660	7.84	5	0.42 U	0.41 U	0.39 U	0.40 U	0.39 U	0.41 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.42 U _h	0.41 U _h	0.39 U _h	0.40 U _h	0.39 U _h	0.41 U _h
Benzo(k)fluoranthene	0.660	78.4	49						
Chrysene	0.660	784	160	0.42 U _i	0.41 U _i	0.39 U _i	0.40 U _i	0.39 U _i	0.41 U _i
Dibenzo(a,h)anthracene	0.660	0.784	2						
Fluoranthene	N/A ^d	81,760	4,300	0.42 U	0.41 U	0.39 U	0.40 U	0.39 U	0.41 U
Fluorene	N/A ^d	81,760	560	0.42 U	0.41 U	0.39 U	0.40 U	0.39 U	0.41 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.42 U	0.41 U	0.39 U	0.40 U	0.39 U	0.41 U
Naphthalene	N/A ^d	40,880	84	0.42 U	0.41 U	0.39 U	0.40 U	0.39 U	0.41 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.42 U	0.41 U	0.39 U	0.40 U	0.39 U	0.41 U
Pyrene	N/A ^d	61,320	4200	0.42 U	0.41 U	0.39 U	0.40 U	0.39 U	0.41 U
OTHER ANALYTES									
TPH - Diesel Range Organics	N/A ^d	--	--	13 U	12 U	12 U	12 U	12 U	12 U
TPH - Gasoline Range Organics	N/A ^d	--	--	0.32 U	0.31 U	0.29 U	0.3 U	0.29 U	0.31 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold levels.*Italicized* values indicate results exceeding risk-based screening levels.Underlined values indicate results exceeding leaching to groundwater screening levels.

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

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

Table 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-SB32 H833-SB3201	D-SB32 H833-SB3202	D-SB32 H833-SB3203	D-SB32 H833-SB3204	P1-SB20 SB2001	P1-SB20 SB2002
	GUST Soil Threshold Levels ^a	Risk-based Screening Level ^b	Leaching to Groundwater ^c	1.5 - 3.5 02/28/1996 (mg/kg)	8.0 - 10.0 02/29/1996 (mg/kg)	13.0 - 15.0 02/29/1996 (mg/kg)	18.0 - 20.0 02/29/1996 (mg/kg)	4.0 - 6.0 11/20/1996 (mg/kg)	6.0 - 8.0 11/20/1996 (mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>									
Benzene	0.017	197.4	0.03	0.0056 U	0.0062 U	0.0063 U	0.0062 U	<u>0.18</u> J	<u>6.2</u> U
Toluene	115	408,800	12	0.0059 =	0.0062 U	0.0063 U	0.0062 U	0.22 J	1.3 J
Ethylbenzene	18	204,400	13	0.0056 U	0.0062 U	0.0063 U	0.0062 U	5.9 =	<u>34</u> =
Xylene (total)	700	1,000,000	190	0.013 =	0.0062 U	0.0063 U	0.0062 U	46 =	<u>220</u> =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>									
1-Methylnaphthalene	N/A ^d	--	--	0.37 U	0.41 U	0.42 U	0.41 U	0.38 U	0.58 =
2-Methylnaphthalene	N/A ^d	--	--	0.37 U	0.41 U	0.42 U	0.41 U	0.38 U	0.95 =
Acenaphthene	N/A ^d	12,264	570	0.37 U	0.41 U	0.42 U	0.41 U	0.38 U	0.40 U
Acenaphthylene	N/A ^d	61,320	4,200	0.37 U _f	0.41 U _f	0.42 U _f	0.41 U _f	0.38 U _f	0.40 U _f
Anthracene	N/A ^d	613,200	12,000						
Bezo(a)anthracene	0.660	7.84	2	g	g	g	g	g	g
Benzo(a)pyrene	0.660	0.784	8	0.37 U	0.41 U	0.42 U	0.41 U	0.38 U	0.40 U
Benzo(b)fluoranthene	0.660	7.84	5	0.37 U	0.41 U	0.42 U	0.41 U	0.38 U	0.40 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.37 U _h	0.41 U _h	0.42 U _h	0.41 U _h	0.38 U _h	0.40 U _h
Benzo(k)fluoranthene	0.660	78.4	49						
Chrysene	0.660	784	160	0.37 U _i	0.41 U _i	0.42 U _i	0.41 U _i	0.38 U _i	0.40 U _i
Dibenzo(a,h)anthracene	0.660	0.784	2						
Fluoranthene	N/A ^d	81,760	4,300	0.37 U	0.41 U	0.42 U	0.41 U	0.38 U	0.40 U
Fluorene	N/A ^d	81,760	560	0.37 U	0.41 U	0.42 U	0.41 U	0.38 U	0.40 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.37 U	0.41 U	0.42 U	0.41 U	0.38 U	0.40 U
Naphthalene	N/A ^d	40,880	84	0.37 U	0.41 U	0.42 U	0.41 U	0.38 U	1.1
Phenanthrene ^e	N/A ^d	61,320	4,200	0.37 U	0.41 U	0.42 U	0.41 U	0.38 U	0.40 U
Pyrene	N/A ^d	61,320	4200	0.37 U	0.41 U	0.42 U	0.41 U	0.38 U	0.40 U
<i>OTHER ANALYTES</i>									
TPH - Diesel Range Organics	N/A ^d	--	--	11 U	12 U	13 UJ	20 =	140 =	550 =
TPH - Gasoline Range Organics	N/A ^d	--	--	0.28 U	0.31 U	0.32 UJ	0.31 U	800 J	4000 J

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold 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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Table 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			P1-SB21 SB2101 1.0 - 3.0 11/20/1996 (mg/kg)	P1-SB21 SB2102 9.0 - 11.0 11/20/1996 (mg/kg)	P1-SB22 SB2201 6.0 - 8.0 11/20/1996 (mg/kg)	P1-SB22 SB2202 8.0 - 10.0 11/20/1996 (mg/kg)	P1-SB23 SB2301 5.0 - 7.0 11/21/1996 (mg/kg)	P1-SB23 SB2302 7.0 - 9.0 11/21/1996 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
VOLATILE ORGANIC COMPOUNDS									
Benzene	0.017	197.4	0.03	0.0052 U	0.0066 U	0.0052 U	0.26 J	0.00027 U	0.00028 U
Toluene	115	408,800	12	0.038 =	0.0078 =	0.0052 U	10 J	0.0036 U	0.0037 U
Ethylbenzene	18	204,400	13	0.0052 U	0.0066 U	0.0052 U	5.3 J	0.0033 U	0.0035 U
Xylene (total)	700	1,000,000	190	0.0082 =	0.008 =	0.0052 U	38 J	0.0026 J	0.0015 J
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	N/A ^d	--	--	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
2-Methylnaphthalene	N/A ^d	--	--	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
Acenaphthene	N/A ^d	12,264	570	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
Acenaphthylene	N/A ^d	61,320	4,200	0.35 U _f	0.44 U _f	0.34 U _f	0.39 U _f	0.37 U _f	0.38 U _f
Anthracene	N/A ^d	613,200	12,000						
Bezo(a)anthracene	0.660	7.84	2	g	g	g	g	g	g
Benzo(a)pyrene	0.660	0.784	8	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
Benzo(b)fluoranthene	0.660	7.84	5	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.35 U _h	0.44 U _h	0.34 U _h	0.39 U _h	0.37 U _h	0.38 U _h
Benzo(k)fluoranthene	0.660	78.4	49						
Chrysene	0.660	784	160	0.35 U _i	0.44 U _i	0.34 U _i	0.39 U _i	0.37 U _i	0.38 U _i
Dibenzo(a,h)anthracene	0.660	0.784	2						
Fluoranthene	N/A ^d	81,760	4,300	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
Fluorene	N/A ^d	81,760	560	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
Naphthalene	N/A ^d	40,880	84	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
Pyrene	N/A ^d	61,320	4200	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
OTHER ANALYTES									
TPH - Diesel Range Organics	N/A ^d	--	--	5.3 =	11 =	8.3 =	23 =	13 =	18 =
TPH - Gasoline Range Organics	N/A ^d	--	--	0.26 U	1400 J	0.26 U	630 J	0.2 U	0.2 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold levels.*Italicized* values indicate results exceeding risk-based screening levels.Underlined values indicate results exceeding leaching to groundwater screening levels.

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Table 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			P1-SB24 SB2401 5.0 - 7.0 11/21/1996 (mg/kg)	P1-SB24 SB2402 9.0 - 11.0 11/21/1996 (mg/kg)	P1-MW11 WB1101 8.0 - 10.0 11/21/1996 (mg/kg)	P1-MW11 WB1102 13.0 - 15.0 11/21/1996 (mg/kg)	P1-MW12 WB1201 8.0 - 10.0 11/21/1996 (mg/kg)	P1-MW12 WB1202 13.0 - 15.0 11/21/1996 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
VOLATILE ORGANIC COMPOUNDS									
Benzene	0.017	197.4	0.03	0.00026 U	0.0003 U	<u>3.1</u> U	<u>0.57</u> U	0.048 U	0.0003 U
Toluene	115	408,800	12	0.008 J	0.004 U	<u>41</u> U	7.6 U	0.77 U	0.0047 U
Ethylbenzene	18	204,400	13	0.0033 U	0.0037 U	<u>71</u> J	<u>14</u> J	0.72 U	0.0037 U
Xylene (total)	700	1,000,000	190	0.0041 J	0.0023 J	84 J	13 J	1.9 J	0.0014 U
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	N/A ^d	--	--	0.36 U	0.41 U	2.1 U	0.39 U	0.40 U	0.41 U
2-Methylnaphthalene	N/A ^d	--	--	0.36 U	0.41 U	2.1 U	0.39 U	0.40 U	0.41 U
Acenaphthene	N/A ^d	12,264	570	0.36 U	0.41 U	2.1 U	0.39 U	0.40 U	0.41 U
Acenaphthylene	N/A ^d	61,320	4,200	0.36 U	0.41 U	2.1 U	0.39 U	0.40 U	0.41 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.97 =	0.41 U	2.1 U	0.39 U	0.40 U	0.41 U
Benzo(b)fluoranthene	0.660	7.84	5	1.8 =	0.41 U	3.9 J	0.39 U	0.40 U	0.41 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.71 = _h	0.55 = _h	2.1 U _h	0.39 U _h	0.40 U _h	0.41 U _h
Benzo(k)fluoranthene	0.660	78.4	49						
Chrysene	0.660	784	160	2.2 = _i	0.41 U _i	5.4 J _i	0.39 U _i	0.40 U _i	0.41 U _i
Dibenzo(a,h)anthracene	0.660	0.784	2						
Fluoranthene	N/A ^d	81,760	4,300	2.4 =	0.41 U	2.1 U	0.39 U	0.40 U	0.41 U
Fluorene	N/A ^d	81,760	560	0.73 =	0.41 U	2.1 U	0.39 U	0.40 U	0.41 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.57 =	0.41 U	2.1 U	0.39 U	0.40 U	0.41 U
Naphthalene	N/A ^d	40,880	84	0.36 U	0.41 U	2.1 U	0.39 U	0.40 U	0.41 U
Phenanthrene ^e	N/A ^d	61,320	4,200	2.9 =	0.41 U	2.1 U	0.39 U	0.40 U	0.41 U
Pyrene	N/A ^d	61,320	4200	1.8 =	0.41 U	2.1 U	0.39 U	0.40 U	0.41 U
OTHER ANALYTES									
TPH - Diesel Range Organics	N/A ^d	--	--	11 U	12 U	150 J	15 =	33 =	12 U
TPH - Gasoline Range Organics	N/A ^d	--	--	0.2 U	0.22 U	20000 J	7800 J	200 =	0.22 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold 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 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			P1-SB25 SB2501 05/13/1997 4.0 - 6.0 (mg/kg)	P1-SB25 SB2502 05/13/1997 8.0 - 10.0 (mg/kg)	P1-SB26 SB2601 05/13/1997 4.0 - 6.0 (mg/kg)	P1-SB26 SB2602 05/13/1997 8.0 - 10.0 (mg/kg)	P1-MW13 WB1301 05/12/1997 8.0 - 10.0 (mg/kg)	P1-MW13 WB1302 05/12/1997 13.0 - 15.0 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
VOLATILE ORGANIC COMPOUNDS									
Benzene	0.017	197.4	0.03	0.021 UJ	0.29 UJ	0.0054 U	0.022 UJ	0.022 UJ	0.0014 U
Toluene	115	408,800	12	2.6 J	<u>64 J</u>	0.011 =	0.290 UJ	0.5 J	0.39 J
Ethylbenzene	18	204,400	13	23 J	82 J	0.0085 =	2 =	5.8 J	1.0 =
Xylene (total)	700	1,000,000	190	47 J	190 J	0.071 =	3.1 =	5.1 J	1.7 =
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	N/A ^d	--	--	1.5 J	0.39 U	0.35 U	0.38 U	0.38 U	0.4 U
2-Methylnaphthalene	N/A ^d	--	--	0.9 J	0.042 J	0.041 J	0.091 J	0.38 U	0.4 U
Acenaphthene	N/A ^d	12,264	570	1 J	0.39 U	0.35 U	0.38 U	0.38 U	0.4 U
Acenaphthylene	N/A ^d	61,320	4,200	2.5 J	0.39 U	0.35 U	0.38 U	0.38 U	0.4 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	1.9 J	0.39 U	0.35 U	0.38 U	0.38 U	0.4 U
Benzo(b)fluoranthene	0.660	7.84	5	1.8 U	0.39 U	0.35 U	0.38 U	0.38 U	0.4 U
Benzo(g,h,i)perylene	N/A ^d	--	--	1.8 U	0.39 U	0.35 U	0.38 U	0.38 U	0.4 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	10 J	0.39 U	0.35 U	0.079 J	0.38 U	0.4 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	2.7 J	0.18 J	0.14 J	0.14 J	0.38 U	0.4 U
Fluorene	N/A ^d	81,760	560	5.8 J	0.39 U	0.35 U	0.38 U	0.38 U	0.4 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	1.8 U	0.39 U	0.35 U	0.38 U	0.38 U	0.4 U
Naphthalene	N/A ^d	40,880	84	1.8 U	0.39 U	0.35 U	0.069 J	0.38 U	0.4 U
Phenanthrene ^c	N/A ^d	61,320	4,200	11 J	0.39 U	0.35 U	0.082 J	0.38 U	0.4 U
Pyrene	N/A ^d	61,320	4200	16 J	0.13 J	0.066 J	0.1 J	0.38 U	0.4 U
OTHER ANALYTES									
TPH - Diesel Range Organics	N/A ^d	--	--	180 =	17 =	20 =	22 =	55 =	34 =
TPH - Gasoline Range Organics	N/A ^d	--	--	950 J	140 J	0.38 J	72 J	190 J	700 =

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold levels.*Italicized* values indicate results exceeding risk-based screening levels.Underlined values indicate results exceeding leaching to groundwater screening levels.

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

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Table 9. Former Fuel Pit 1A/DAACG Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			P1-MW14 WB1401 05/12/1997 4.0 - 6.0 (mg/kg)	P1-MW14 WB1402 05/12/1997 8.0 - 10.0 (mg/kg)	P1-MW15 WB1501 05/12/1997 4.0 - 6.0 (mg/kg)	P1-MW15 WB1502 05/12/1997 8.0 - 10.0 (mg/kg)	P1-MW16 WB1601 05/12/1997 4.0 - 6.0 (mg/kg)	P1-MW16 WB1602 05/12/1997 8.0 - 10.0 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
VOLATILE ORGANIC COMPOUNDS									
Benzene	0.017	197.4	0.03	0.0056 U	0.0059 U	0.0059 U	0.0062 U	0.0061 U	0.0062 U
Toluene	115	408,800	12	0.0056 U	0.05 =	0.0094 =	0.0062 U	0.017 =	0.0062 U
Ethylbenzene	18	204,400	13	0.0056 U	0.014 =	0.0059 U	0.0062 U	0.0062 =	0.0062 U
Xylene (total)	700	1,000,000	190	0.0056 U	0.059 =	0.0062 =	0.0072 =	0.026 =	0.0062 U
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	N/A ^d	--	--	0.37 U	0.39 U	0.39 U	0.41 U	0.40 U	0.41 U
2-Methylnaphthalene	N/A ^d	--	--	0.37 U	0.39 U	0.39 U	0.41 U	0.40 U	0.41 U
Acenaphthene	N/A ^d	12,264	570	0.37 U	0.39 U	0.39 U	0.41 U	0.40 U	0.41 U
Acenaphthylene	N/A ^d	61,320	4,200	0.37 U _f	0.39 U _f	0.39 U _f	0.41 U _f	0.40 U _f	0.41 U _f
Anthracene	N/A ^d	613,200	12,000						
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.37 U	0.39 U	0.24 J	0.41 U	0.13 J	0.41 U
Benzo(b)fluoranthene	0.660	7.84	5	0.37 U	0.39 U	0.39 U	0.41 U	0.13 J	0.41 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.37 U _h	0.39 U _h	0.23 J _h	0.41 U _h	0.24 = _h	0.41 U _h
Benzo(k)fluoranthene	0.660	78.4	49						
Chrysene	0.660	784	160	0.37 U _i	0.39 U _i	0.39 U _i	0.41 U _i	0.40 U _i	0.41 U _i
Dibenzo(a,h)anthracene	0.660	0.784	2						
Fluoranthene	N/A ^d	81,760	4,300	0.37 U	0.39 U	0.31 J	0.41 U	0.096 J	0.073 J
Fluorene	N/A ^d	81,760	560	0.37 U	0.39 U	0.058 J	0.41 U	0.40 U	0.41 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.37 U	0.39 U	0.2 J	0.41 U	0.40 U	0.41 U
Naphthalene	N/A ^d	40,880	84	0.37 U	0.39 U	0.39 U	0.41 U	0.40 U	0.41 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.37 U	0.39 U	0.39 U	0.41 U	0.40 U	0.41 U
Pyrene	N/A ^d	61,320	4200	0.064 J	0.39 U	0.12 J	0.41 U	0.40 U	0.41 U
OTHER ANALYTES									
TPH - Diesel Range Organics	N/A ^d	--	--	11 U	12 U	17 =	12 U	12 U	12 U
TPH - Gasoline Range Organics	N/A ^d	--	--	0.2 U	0.21 U	0.21 U	0.22 U	0.22 U	0.22 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold levels.*Italicized* values indicate results exceeding risk-based screening levels.Underlined values indicate results exceeding leaching to groundwater screening levels.

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

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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. Former Fuel Pit 1A/DAACG Area - Groundwater Data Risk-based Screening Results

Station: Sample ID: Screened Interval (ft BGS): Collection Date: Units:	Screening Levels		D-MW01 H833-GW0101 7.0 - 17.0 05/21/1996 (ug/L)	D-MW02 H833-GW0201 7.6 - 17.6 05/21/1996 (ug/L)	D-MW03 H833-GW0301 6.0 - 16.0 05/23/1996 (ug/L)	D-MW04 H833-GW0401 5.0 - 15.0 05/23/1996 (ug/L)	D-MW08 H833-GW0801 7.0 - 17.0 05/21/1996 (ug/L)	D-MW09 H833-GW0901 6.0 - 16.0 05/23/1996 (ug/L)	D-MW10 H833-GW1001 6.0 - 16.0 05/23/1996 (ug/L)
	IWQS (ug/L)	Risk-based ^a (ug/L)							
VOLATILE ORGANIC COMPOUNDS									
Benzene	71	0.36	<u>100</u> =	<u>700</u> =	<u>1</u> U	<u>1</u> U	<u>200</u> =	<u>1</u> U	<u>1</u> U
Toluene	200,000	750	25 U	<u>12000</u> =	1 U	4.6 =	<u>920</u> =	1 U	1 U
Ethylbenzene	28,718	1300	230 =	1100 =	1 U	1 U	310 =	1 U	1 U
Xylene (total)	NRC	12000	860 =	4500 =	1 U	1 U	1200 =	1 U	1 U
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	-		10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	-		10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	-	365	10 U	20 =	10 U	10 U	10 U	10 U	15 =
Acenaphthylene	-	182.5	10 U	10 U	10 U	10 U	10 U	10 =	10 U
Anthracene	110,000	182.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	0.0311	0.092	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Benzo(a)pyrene	0.0311	0.0092	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Benzo(b)fluoranthene	-	0.092	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Benzo(g,h,i)perylene	-	-	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	0.0311	0.92	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Chrysene	0.0311	9.2	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Dibenzo(a,h)anthracene	0.0311	0.0092	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Fluoranthene	370	1460	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	14,000	243	10 U	10 U	10 U	10 U	10 U	10 U	10 =
Indeno(1,2,3-cd)pyrene	0.0311	0.092	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Naphthalene	-	6.5	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>21</u> =	<u>10</u> U
Phenanthrene ^b	-	182.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	11,000	182.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U

^a Protective of tap water ingestion by a resident.^b 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.

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Table 10. Former Fuel Pit 1A/DAACG Area - Groundwater Data Risk-based Screening Results (continued)

Station:	Screening Levels		D-MW11	D-MW12	D-MW13	D-MW14	D-MW15	D-MW16	D-MW17
Sample ID:			H833-GW1101	H833-GW1201	H833-GW1301	H833-GW1401	H833-GW1501	H833-GW1601	H833-GW1701
Screened Interval (ft BGS):			6.6 - 16.6	5.6 - 15.6	5.0 - 15.0	5.0 - 15.0	4.7 - 14.7	4.9 - 14.9	6.5 - 16.5
Collection Date:	IWQS	Risk-based ^a	05/23/1996	05/22/1996	05/23/1996	05/23/1996	05/22/1996	05/22/1996	05/22/1996
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
VOLATILE ORGANIC COMPOUNDS									
Benzene	71	0.36	<u>230</u> =	<u>140</u> =	<u>50</u> U	<u>1</u> U	<u>1</u> U	<u>1</u> U	<u>500</u> U
Toluene	200,000	750	<u>3600</u> =	<u>540</u> =	<u>600</u> =	<u>1</u> U	<u>1</u> U	<u>1</u> U	<u>16000</u> =
Ethylbenzene	28,718	1300	<u>440</u> =	<u>310</u> =	<u>1500</u> =	<u>1</u> U	<u>1</u> U	<u>1</u> U	<u>1200</u> =
Xylene (total)	NRC	12000	<u>2100</u> =	<u>2700</u> =	<u>6200</u> =	<u>1</u> U	<u>1</u> U	<u>1</u> U	<u>5200</u> =
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	-		10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	-		10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	-	365	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	-	182.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	110,000	182.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	0.0311	0.092	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Benzo(a)pyrene	0.0311	0.0092	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Benzo(b)fluoranthene	-	0.092	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Benzo(g,h,i)perylene	-	-	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	0.0311	0.92	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Chrysene	0.0311	9.2	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Dibenzo(a,h)anthracene	0.0311	0.0092	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Fluoranthene	370	1460	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	14,000	243	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.0311	0.092	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Naphthalene	-	6.5	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>30</u> =
Phenanthrene ^b	-	182.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	11,000	182.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U

^a Protective of tap water ingestion by a resident.^b 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.

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Table 10. Former Fuel Pit 1A/DAACG Area - Groundwater Data Risk-based Screening Results (continued)

Station: Sample ID: Screened Interval (ft BGS): Collection Date: Units:	Screening Levels		D-MW18 H833-GW1801 6.6 - 16.6 05/22/1996 (ug/L)	D-MW19 H833-GW1901 6.0 - 16.0 05/22/1996 (ug/L)	D-MW21 H833-GW2101 6.0 - 16.0 05/23/1996 (ug/L)	D-MW22 H833-GW2201 6.0 - 16.0 05/22/1996 (ug/L)	D-MW23 H833-GW2301 5.0 - 15.0 05/22/1996 (ug/L)	D-MW24 H833-GW2401 5.0 - 15.0 05/22/1996 (ug/L)	D-MW25 H833-GW2501 4.8 - 14.8 05/22/1996 (ug/L)
	IWQS (ug/L)	Risk-based ^a (ug/L)							
VOLATILE ORGANIC COMPOUNDS									
Benzene	71	0.36	<u>20</u> =	<u>390</u> =	1 U	2 U	1 U	1 U	1 U
Toluene	200,000	750	17 =	<u>3300</u> =	1 U	2 U	1 U	1 U	1 U
Ethylbenzene	28,718	1300	110 =	350 =	1 U	27 =	1 U	1 U	1 U
Xylene (total)	NRC	12000	450 =	1300 =	1 U	29 =	1 U	1 U	1 U
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	-		16 =	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	-		23 =	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	-	365	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	-	182.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	110,000	182.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	0.0311	0.092	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Benzo(a)pyrene	0.0311	0.0092	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Benzo(b)fluoranthene	-	0.092	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Benzo(g,h,i)perylene	-	-	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	0.0311	0.92	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Chrysene	0.0311	9.2	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Dibenzo(a,h)anthracene	0.0311	0.0092	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Fluoranthene	370	1460	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	14,000	243	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.0311	0.092	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Naphthalene	-	6.5	<u>41</u> =	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U
Phenanthrene ^b	-	182.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	11,000	182.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U

^a Protective of tap water ingestion by a resident.^b 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.

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R Indicates that the sample results are unusable and the presence or absence of the compound could not be verified.

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Table 10. Former Fuel Pit 1A/DAACG Area - Groundwater Data Risk-based Screening Results (continued)

Station:	Screening Levels		D-MW26	D-MW27	P1-MW11	P1-MW12	P1-MW13	P1-MW14	P1-MW15
Sample ID:			H833-GW2601	H833-GW2701	HT4-MW11	HT4-MW12	MW1301	MW1401	MW1501
Screened Interval (ft BGS):			4.7 - 14.7	4.5 - 14.5	7.0-17.0	6.5-16.5	7.0-17.0	7.0-17.0	6.0-16.0
Collection Date:	IWQS	Risk-based ^a	05/22/1996	05/22/1996	12/10/1996	12/10/1996	05/30/1997	05/30/1997	05/30/1997
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
VOLATILE ORGANIC COMPOUNDS									
Benzene	71	0.36	<u>1</u> U	<u>1</u> U	<u>40</u> =	<u>10</u> U	<u>62</u> =	<u>1</u> U	<u>1</u> U
Toluene	200,000	750	1 U	1 U	610 =	40 =	<u>1100</u> =	1 U	1 U
Ethylbenzene	28,718	1300	1 U	1 U	1000 =	130 =	170 =	1 U	1 U
Xylene (total)	NRC	12000	1 U	1 U	4200 =	500 =	630 =	2 U	2 U
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	-		10 U	10 U	1 U	1 U	1 U	1 U	1 U
2-Methylnaphthalene	-		10 U	10 U	2.4 =	1 U	0.077 J	1 U	1 U
Acenaphthene	-	365	10 U	10 U	1 U	1 U	1 UJ	1 UJ	1 UJ
Acenaphthylene	-	182.5	10 U	10 U	1 U	1 U	1 U	1 U	1 U
Anthracene	110,000	182.5	10 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzo(a)anthracene	0.0311	0.092	<u>10</u> U	<u>10</u> U	<u>0.2</u> U	<u>0.2</u> U	0.0311 U	0.0311 U	0.0311 U
Benzo(a)pyrene	0.0311	0.0092	<u>10</u> UJ	<u>10</u> UJ	<u>0.2</u> U	<u>0.2</u> U	<u>0.0311</u> U	<u>0.0311</u> U	<u>0.026</u> J
Benzo(b)fluoranthene	-	0.092	<u>10</u> U	<u>10</u> U	<u>0.2</u> U	<u>0.2</u> U	0.0099 J	<u>0.2</u> U	0.023 J
Benzo(g,h,i)perylene	-	-	10 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.026 J
Benzo(k)fluoranthene	0.0311	0.92	<u>10</u> U	<u>10</u> U	<u>0.5</u> U	<u>0.5</u> U	0.0311 U	0.0311 U	0.0311 U
Chrysene	0.0311	9.2	<u>10</u> U	<u>10</u> U	<u>0.2</u> U	<u>0.2</u> U	0.0081 J	0.012 J	<u>0.032</u> =
Dibenzo(a,h)anthracene	0.0311	0.0092	<u>10</u> U	<u>10</u> U	<u>1</u> U	<u>1</u> U	<u>0.036</u> U	<u>0.036</u> U	<u>0.036</u> U
Fluoranthene	370	1460	10 U	10 U	0.5 U	0.5 U	0.058 J	0.14 J	0.15 J
Fluorene	14,000	243	10 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Indeno(1,2,3-cd)pyrene	0.0311	0.092	<u>10</u> U	<u>10</u> U	<u>0.5</u> U	<u>0.5</u> U	0.0311 U	0.0311 U	0.0311 U
Naphthalene	-	6.5	<u>10</u> U	<u>10</u> U	<u>9.8</u> =	1 U	1 U	1 U	1 U
Phenanthrene ^b	-	182.5	10 U	10 U	0.2 U	0.2 U	0.042 J	0.098 J	0.054 J
Pyrene	11,000	182.5	10 U	10 U	0.5 U	0.5 U	0.5 U	0.1 J	0.2 J

^a Protective of tap water ingestion by a resident.^b 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.

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Table 10. Former Fuel Pit 1A/DAACG Area - Groundwater Data Risk-based Screening Results (continued)

Station:	Screening Levels		P1-MW16	P1-MW42	D-MW01	D-MW05	D-MW08
Sample ID:			MW1601	PH1-MW4201	AK0112	AK0512	AK0812
Screened Interval (ft BGS):			6.0-16.0	5.6-15.6	7.0-17.0	6.5-16.5	7.0-17.0
Collection Date:	IWQS	Risk-based ^a	05/30/1997	11/03/1999	02/22/2000	02/23/2000	02/22/2000
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	71	0.36	<u>1</u> U	<u>1</u> U	105 =	4580 =	418 =
Toluene	200,000	750	1 U	1 U	312 =	<u>6860</u> =	31 =
Ethylbenzene	28,718	1300	1 U	1 U	215 =	<u>1560</u> =	827 =
Xylene (total)	NRC	12000	2 U	2 U	1130 =	5800 =	3120 =
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	-		1 U	1 U	*	*	*
2-Methylnaphthalene	-		1 U	1 U	*	*	*
Acenaphthene	-	365	1 UJ	1 U	*	*	*
Acenaphthylene	-	182.5	1 U	1 U	*	*	*
Anthracene	110,000	182.5	0.2 U	0.2 U	*	*	*
Benzo(a)anthracene	0.0311	0.092	0.0311 U	0.2 U	*	*	*
Benzo(a)pyrene	0.0311	0.0092	<u>0.0311</u> U	0.2 U	*	*	*
Benzo(b)fluoranthene	-	0.092	<u>0.2</u> U	<u>0.2</u> U	*	*	*
Benzo(g,h,i)perylene	-	-	0.5 U	0.5 U	*	*	*
Benzo(k)fluoranthene	0.0311	0.92	0.0311 U	0.2 U	*	*	*
Chrysene	0.0311	9.2	0.031 U	0.2 U	*	*	*
Dibenzo(a,h)anthracene	0.0311	0.0092	0.036 U	0.2 U	*	*	*
Fluoranthene	370	1460	0.5 U	0.5 U	*	*	*
Fluorene	14,000	243	0.5 U	0.5 U	*	*	*
Indeno(1,2,3-cd)pyrene	0.0311	0.092	0.0311 U	0.2 U	*	*	*
Naphthalene	-	6.5	1 U	1 U	*	*	*
Phenanthrene ^b	-	182.5	0.025 J	0.2 U	*	*	*
Pyrene	11,000	182.5	0.075 J	0.5 U	*	*	*

^a Protective of tap water ingestion by a resident.^b Values based on pyrene as a surrogate chemical.^c Well D-MW05 is located in the Former Pumphouse #1 Tank Pit Area.

* 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.

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Table 10. Former Fuel Pit 1A/DAACG Area - Groundwater Data Risk-based Screening Results (continued)

Station:	Screening Levels		D-MW11	D-MW13	D-MW17	P1-MW11	P1-MW13
Sample ID:			AK1112	AK1312	AK1712	AN1112	AN1312
Screened Interval (ft BGS):			6.6-16.6	5.0-15.0	6.5-16.5	7.0-17.0	7.0-17.0
Collection Date:	IWQS	Risk-based ^a	02/22/2000	02/22/2000	02/22/2000	02/23/2000	02/23/2000
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	71	0.36	<u>398</u> =	<u>10</u> U	<u>138</u> =	<u>50.3</u> =	<u>10</u> U
Toluene	200,000	750	<u>16200</u> =	113 =	<u>1850</u> =	337 =	319 =
Ethylbenzene	28,718	1300	973 =	<u>1440</u> =	374 =	1210 =	100 =
Xylene (total)	NRC	12000	3880 =	4940 =	2630 =	5110 =	404 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	-		*	*	*	*	*
2-Methylnaphthalene	-		*	*	*	*	*
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	1460	*	*	*	*	*
Fluorene	14,000	243	*	*	*	*	*
Indeno(1,2,3-cd)pyrene	0.0311	0.092	*	*	*	*	*
Naphthalene	-	6.5	*	*	*	*	*
Phenanthrene ^b	-	182.5	*	*	*	*	*
Pyrene	11,000	182.5	*	*	*	*	*

^a Protective of tap water ingestion by a resident.^b 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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= Indicates that the compound was detected at the concentration reported.

Table 11. Former Pumphouse #1 Tank Pit Area - Soil Data Risk-based Screening Results

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-MW05	D-MW05	D-MW06	D-MW06	D-MW07	D-MW07
	GUST Soil	Risk-based	Leaching to	H833-WB0501	H833-WB0502	H833-WB0601	H833-WB0602	H833-WB0701	H833-WB0702
	Threshold	Screening	Groundwater ^c	8.0 - 10.0	13.0 - 15.0	1.3 - 3.3	8.0 - 10.0	1.3 - 3.3	8.0 - 10.0
	Levels ^a	Level ^b		04/25/1996	04/25/1996	04/25/1996	04/25/1996	04/29/1996	04/29/1996
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>									
Benzene	0.017	197.4	0.03	<u>5.6</u> U	0.0077 J	0.0054 U	<u>12</u> U	0.0054 U	0.0058 U
Toluene	115	408,800	12	12 J	0.0062 U	0.0054 U	12 U	0.0054 U	0.0058 U
Ethylbenzene	18	204,400	13	13 J	0.027 J	0.033 =	<u>23</u> J	0.0054 U	0.0058 U
Xylene (total)	700	1,000,000	190	28 J	0.009 J	0.13 =	44 J	0.0054 U	0.0058 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>									
1-Methylnaphthalene	N/A ^d	--	--	0.36 U	0.41 U	0.36 U	0.40 U	0.36 U	0.38 U
2-Methylnaphthalene	N/A ^d	--	--	0.36 U	0.41 U	0.36 U	0.40 U	0.36 U	0.38 U
Acenaphthene	N/A ^d	12,264	570	0.36 U	0.41 U	0.36 U	0.40 U	0.36 U	0.38 U
Acenaphthylene	N/A ^d	61,320	4,200	0.36 U	0.41 U	0.36 U	0.40 U	0.36 U	0.38 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.36 U	0.41 U	0.36 U	0.40 U	0.36 U	0.38 U
Benzo(b)fluoranthene	0.660	7.84	5	0.36 U	0.41 U	0.36 U	0.40 U	0.36 U	0.38 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.36 U	0.41 U	0.36 U	0.40 U	0.36 U	0.38 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.36 U	0.41 U	0.36 U	0.40 U	0.36 U	0.38 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.36 U	0.41 U	0.36 U	0.40 U	0.36 U	0.38 U
Fluorene	N/A ^d	81,760	560	0.36 U	0.41 U	0.36 U	0.40 U	0.36 U	0.38 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.36 U	0.41 U	0.36 U	0.40 U	0.36 U	0.38 U
Naphthalene	N/A ^d	40,880	84	0.36 U	0.41 U	0.36 U	0.40 U	0.36 U	0.38 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.36 U	0.41 U	0.36 U	0.40 U	0.36 U	0.38 U
Pyrene	N/A ^d	61,320	4200	0.36 U	0.41 U	0.36 U	0.40 U	0.36 U	0.38 U
<i>OTHER ANALYTES</i>									
TPH - Diesel Range Organics	N/A ^d	--	--	11 =	12 U	11 U	12 U	15 =	12 U
TPH - Gasoline Range Organics	N/A ^d	--	--	2900 J	35 J	2.2 J	6400 J	0.20 U	0.21 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold 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. Former Pumphouse #1 Tank Pit Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-SB21	D-SB21	D-SB22	D-SB22	D-SB23	D-SB23
	GUST Soil Threshold Levels ^a	Risk-based Screening Level ^b	Leaching to Groundwater ^c	H833-SB2101 1.5 - 3.5 02/29/1996 (mg/kg)	H833-SB2102 8.0 - 10.0 02/29/1996 (mg/kg)	H833-SB2201 1.3 - 3.3 02/29/1996 (mg/kg)	H833-SB2202 7.3 - 9.3 02/29/1996 (mg/kg)	H833-SB2301 1.5 - 3.5 02/28/1996 (mg/kg)	H833-SB2302 8.0 - 10.0 02/28/1996 (mg/kg)
VOLATILE ORGANIC COMPOUNDS									
Benzene	0.017	197.4	0.03	0.0054 U	0.0062 U	<u>13</u> =	<u>160</u> <u>J</u>	<u>0.34</u> =	<u>8.5</u> <u>J</u>
Toluene	115	408,800	12	0.082 J	0.0062 U	0.61 =	<u>43</u> <u>J</u>	0.0056 U	11 J
Ethylbenzene	18	204,400	13	0.019 J	0.0062 U	2.2 =	<u>31</u> <u>J</u>	0.027 =	6.1 J
Xylene (total)	700	1,000,000	190	0.076 J	0.0062 U	8.2 =	74 J	0.047 =	12 J
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	N/A ^d	--	--	0.35 U	0.41 U	0.36 U	0.39 U	0.37 U	0.36 U
2-Methylnaphthalene	N/A ^d	--	--	0.35 U	0.41 U	0.36 U	0.39 U	0.37 U	0.36 U
Acenaphthene	N/A ^d	12,264	570	0.35 U	0.41 U	0.36 U	0.39 U	0.37 U	0.36 U
Acenaphthylene	N/A ^d	61,320	4,200	0.35 U	0.41 U	0.36 U	0.39 U	0.37 U	0.36 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.35 U	0.41 U	0.36 U	0.39 U	0.37 U	0.36 U
Benzo(b)fluoranthene	0.660	7.84	5	0.35 U	0.41 U	0.36 U	0.39 U	0.37 U	0.36 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.58 =	0.41 U	0.36 U	0.39 U	0.84 =	0.36 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.35 U	0.41 U	0.36 U	0.39 U	0.37 U	0.36 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.35 U	0.41 U	0.36 U	0.39 U	0.37 U	0.36 U
Fluorene	N/A ^d	81,760	560	0.35 U	0.41 U	0.36 U	0.39 U	0.37 U	0.36 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.35 U	0.41 U	0.36 U	0.39 U	0.37 U	0.36 U
Naphthalene	N/A ^d	40,880	84	0.35 U	0.41 U	0.36 U	0.39 U	0.37 U	0.36 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.35 U	0.41 U	0.36 U	0.39 U	0.37 U	0.36 U
Pyrene	N/A ^d	61,320	4200	0.35 U	0.41 U	0.36 U	0.39 U	0.37 U	0.36 U
OTHER ANALYTES									
TPH - Diesel Range Organics	N/A ^d	--	--	11 U	12 U	16 =	88 =	17 =	23 =
TPH - Gasoline Range Organics	N/A ^d	--	--	0.27 UJ	0.31 U	200 =	1900 J	0.28 U	210 J

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold 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. Former Pumphouse #1 Tank Pit Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-SB23	D-SB23	D-SB24	D-SB24	D-SB25	D-SB25
	GUST Soil	Risk-based	Leaching to	H833-SB2303	H833-SB2304	H833-SB2401	H833-SB2402	H833-SB2501	H833-SB2502
	Threshold	Screening	Groundwater ^c	13.0 - 15.0	18.0 - 20.0	1.3 - 3.3	7.3 - 9.3	1.5 - 3.5	8.0 - 10.0
	Levels ^a	Level ^b		02/28/1996	02/28/1996	02/29/1996	02/29/1996	02/29/1996	02/29/1996
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS									
Benzene	0.017	197.4	0.03	0.0062 U	<u>0.091</u> =	0.0056 U	0.0057 U	0.0067 =	0.0062 U
Toluene	115	408,800	12	0.0062 U	0.0063 U	0.013 =	0.0057 U	0.0054 U	0.0062 U
Ethylbenzene	18	204,400	13	0.0062 U	0.026 =	0.0056 U	0.0057 U	0.0054 U	0.0062 U
Xylene (total)	700	1,000,000	190	0.025 =	0.028 =	0.012 =	0.0057 U	0.0054 U	0.0062 U
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	N/A ^d	--	--	0.41 U	0.42 U	0.37 U	0.38 U	0.36 U	0.41 U
2-Methylnaphthalene	N/A ^d	--	--	0.41 U	0.42 U	0.37 U	0.38 U	0.36 U	0.41 U
Acenaphthene	N/A ^d	12,264	570	0.41 U	0.42 U	0.37 U	0.38 U	0.36 U	0.41 U
Acenaphthylene	N/A ^d	61,320	4,200	0.41 U	0.42 U	0.37 U	0.38 U	0.36 U	0.41 U
Anthracene	N/A ^d	613,200	12,000	f	f	f	f	f	f
Benzo(a)anthracene	0.660	7.84	2	g	g	g	g	g	g
Benzo(a)pyrene	0.660	0.784	8	0.41 U	0.42 U	0.37 U	0.38 U	0.36 U	0.41 U
Benzo(b)fluoranthene	0.660	7.84	5	0.41 U	0.42 U	0.37 U	0.38 U	0.36 U	0.41 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.41 U	0.42 U	0.37 U	0.38 U	0.36 U	0.41 U
Benzo(k)fluoranthene	0.660	78.4	49	h	h	h	h	h	h
Chrysene	0.660	784	160	0.41 U	0.42 U	0.37 U	0.38 U	0.36 U	0.41 U
Dibenzo(a,h)anthracene	0.660	0.784	2	i	i	i	i	i	i
Fluoranthene	N/A ^d	81,760	4,300	0.41 U	0.42 U	0.37 U	0.38 U	0.36 U	0.41 U
Fluorene	N/A ^d	81,760	560	0.41 U	0.42 U	0.37 U	0.38 U	0.36 U	0.41 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.41 U	0.42 U	0.37 U	0.38 U	0.36 U	0.41 U
Naphthalene	N/A ^d	40,880	84	0.41 U	0.42 U	0.37 U	0.38 U	0.36 U	0.41 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.41 U	0.42 U	0.37 U	0.38 U	0.36 U	0.41 U
Pyrene	N/A ^d	61,320	4200	0.41 U	0.42 U	0.37 U	0.38 U	0.36 U	0.41 U
OTHER ANALYTES									
TPH - Diesel Range Organics	N/A ^d	--	--	12 U	13 U	11 U	12 U	11 U	12 U
TPH - Gasoline Range Organics	N/A ^d	--	--	0.31 U	1.1 =	0.28 UJ	0.29 UJ	0.27 U	0.31 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).

^b Protective of soil exposure during Industrial Land Use.

^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.

^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.

^e Values based on pyrene as a surrogate chemical.

^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.

^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.

^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.

ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.

Bold values indicate results exceeding Georgia UST soil threshold 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. Former Pumphouse #1 Tank Pit Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			D-SB26	D-SB26	P1-MW01	P1-MW01	P1-MW02	P1-MW02
	GUST Soil	Risk-based		H833-SB2601	H833-SB2602	WB0101	WB0102	WB0201	WB0202
	Threshold	Screening	Leaching to	1.5 - 3.5	8.0 - 10.0	8.0 - 10.0	13.0 - 15.0	8.0 - 10.0	13.0 - 15.0
	Levels ^a	Level ^b	Groundwater ^c	03/04/1996	03/04/1996	11/18/1996	11/18/1996	11/18/1996	11/18/1996
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS									
Benzene	0.017	197.4	0.03	0.0056 U	0.0060 U	<u>3</u> J	0.0003 U	<u>0.59</u> J	0.0015 U
Toluene	115	408,800	12	0.0056 U	0.0060 U	<u>15</u> J	0.45 =	1.3 J	0.07 J
Ethylbenzene	18	204,400	13	0.0095 =	0.0060 U	19 J	0.062 =	1.4 =	0.53 J
Xylene (total)	700	1,000,000	190	0.039 =	0.0060 U	130 J	0.37 =	8.4 =	1.2 J
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	N/A ^d	--	--	0.37 U	0.40 U	0.36 U	0.42 U	0.38 U	0.40 U
2-Methylnaphthalene	N/A ^d	--	--	0.37 U	0.40 U	0.36 U	0.42 U	0.38 U	0.40 U
Acenaphthene	N/A ^d	12,264	570	0.37 U	0.40 U	0.36 U	0.42 U	0.38 U	0.40 U
Acenaphthylene	N/A ^d	61,320	4,200	0.37 U	0.40 U	0.36 U	0.42 U	0.38 U	0.40 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.37 U	0.40 U	0.36 U	0.42 U	0.38 U	0.40 U
Benzo(b)fluoranthene	0.660	7.84	5	0.37 U	0.40 U	0.36 U	0.42 U	0.38 U	0.40 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.37 U	0.40 U	0.36 U	0.42 U	0.38 U	0.40 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.37 U	0.40 U	0.42 =	0.42 U	0.38 U	0.40 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.37 U	0.40 U	0.84 =	0.42 U	0.38 U	0.40 U
Fluorene	N/A ^d	81,760	560	0.37 U	0.40 U	0.36 U	0.42 U	0.38 U	0.40 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.37 U	0.40 U	0.36 U	0.42 U	0.38 U	0.40 U
Naphthalene	N/A ^d	40,880	84	0.37 U	0.40 U	0.36 U	0.42 U	0.38 U	0.40 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.37 U	0.40 U	1.1 =	0.42 U	0.38 U	0.40 U
Pyrene	N/A ^d	61,320	4200	0.37 U	0.40 U	0.65 =	0.42 U	0.38 U	0.40 U
OTHER ANALYTES									
TPH - Diesel Range Organics	N/A ^d	--	--	11 U	12 U	50 =	15 =	11 U	12 U
TPH - Gasoline Range Organics	N/A ^d	--	--	0.71 =	0.30 U	4000 J	3.4 =	1200 J	200 J

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).

^b Protective of soil exposure during Industrial Land Use.

^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.

^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.

^e Values based on pyrene as a surrogate chemical.

^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.

^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.

^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.

ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.

Bold values indicate results exceeding Georgia UST soil threshold 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. Former Pumphouse #1 Tank Pit Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			P1-MW03 WB0301 8.0 - 10.0 11/19/1996 (mg/kg)	P1-MW03 WB0302 13.0 - 15.0 11/19/1996 (mg/kg)	P1-SB01 SB0101 4.0 - 6.0 11/18/1996 (mg/kg)	P1-SB01 SB0102 8.0 - 10.0 11/18/1996 (mg/kg)	P1-SB02 SB0201 4.0 - 6.0 11/18/1996 (mg/kg)	P1-SB02 SB0202 8.0 - 10.0 11/18/1996 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
<i>VOLATILE ORGANIC COMPOUNDS</i>									
Benzene	0.017	197.4	0.03	<u>2.9</u> <u>U</u>	0.03 U	<u>0.16</u> <u>J</u>	0.0014 U	<u>0.062</u> <u>U</u>	0.0014 U
Toluene	115	408,800	12	<u>160</u> <u>J</u>	9.8 J	0.63 =	0.019 J	0.82 U	0.019 U
Ethylbenzene	18	204,400	13	<u>96</u> <u>J</u>	6.1 J	0.67 =	0.052 =	0.77 U	0.07 J
Xylene (total)	700	1,000,000	190	<u>260</u> <u>J</u>	19 J	5.7 =	0.082 =	0.9 J	0.032 J
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>									
1-Methylnaphthalene	N/A ^d	--	--	0.40 U	0.41 U	0.37 U	0.38 U	0.42 U	0.40 U
2-Methylnaphthalene	N/A ^d	--	--	0.40 U	0.41 U	0.37 U	0.38 U	0.42 U	0.40 U
Acenaphthene	N/A ^d	12,264	570	0.40 U	0.41 U	0.37 U	0.38 U	0.42 U	0.40 U
Acenaphthylene	N/A ^d	61,320	4,200	0.40 U	0.41 U	0.37 U	0.38 U	0.42 U	0.40 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.40 U	0.41 U	0.37 U	0.38 U	0.42 U	0.40 U
Benzo(b)fluoranthene	0.660	7.84	5	0.40 U	0.61 =	0.52 =	0.38 U	0.76 J	0.40 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.40 U	0.41 U	0.37 U	0.38 U	0.42 U	0.40 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.40 U	0.60 =	0.37 U	0.55 =	0.42 U	0.40 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.42 =	1.1 =	0.47 =	0.47 =	0.46 J	0.40 U
Fluorene	N/A ^d	81,760	560	0.40 U	0.41 U	0.37 U	0.38 U	0.42 U	0.40 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.40 U	0.41 U	0.37 U	0.38 U	0.42 U	0.40 U
Naphthalene	N/A ^d	40,880	84	0.40 U	0.41 U	0.37 U	0.38 U	0.42 U	0.40 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.40 U	0.58 =	0.52 =	0.42 =	0.42 U	0.53 J
Pyrene	N/A ^d	61,320	4200	0.40 U	0.70 =	0.37 U	0.39 =	0.42 U	0.40 U
<i>OTHER ANALYTES</i>									
TPH - Diesel Range Organics	N/A ^d	--	--	23 J	27 J	85 =	45 =	140 J	44 J
TPH - Gasoline Range Organics	N/A ^d	--	--	21000 J	1400 J	210 J	17 =	370 J	99 J

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold 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. Former Pumphouse #1 Tank Pit Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			P1-SB03 SB0301 4.0 - 6.0 11/18/1996 (mg/kg)	P1-SB03 SB0302 8.0 - 10.0 11/18/1996 (mg/kg)	P1-SB04 SB0401 4.0 - 6.0 11/18/1996 (mg/kg)	P1-SB04 SB0402 8.0 - 10.0 11/18/1996 (mg/kg)	P1-SB05 SB0501 4.0 - 6.0 11/18/1996 (mg/kg)	P1-SB05 SB0502 8.0 - 10.0 11/18/1996 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
<i>VOLATILE ORGANIC COMPOUNDS</i>									
Benzene	0.017	197.4	0.03	<u>2.1</u> <u>J</u>	<u>5.5</u> <u>J</u>	<u>0.26</u> <u>J</u>	<u>3</u> <u>J</u>	0.0015 U	<u>0.13</u> <u>J</u>
Toluene	115	408,800	12	<u>16</u> <u>J</u>	9.7 J	2.6 J	<u>53</u> <u>J</u>	0.59 =	0.3 U
Ethylbenzene	18	204,400	13	8.2 J	<u>16</u> <u>J</u>	1.5 =	<u>14</u> <u>J</u>	0.1 =	0.29 U
Xylene (total)	700	1,000,000	190	34 J	68 J	10 =	73 J	0.61 =	0.37 J
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>									
1-Methylnaphthalene	N/A ^d	--	--	0.36 U	0.41 U	0.38 U	0.41 U	0.40 U	0.39 U
2-Methylnaphthalene	N/A ^d	--	--	0.36 U	0.41 U	0.38 U	0.41 U	0.40 U	0.39 U
Acenaphthene	N/A ^d	12,264	570	0.36 U	0.41 U	0.38 U	0.41 U	0.40 U	0.39 U
Acenaphthylene	N/A ^d	61,320	4,200	0.36 _f U	0.41 _f U	0.38 _f U	0.41 _f U	0.40 _f U	0.39 _f U
Anthracene	N/A ^d	613,200	12,000	_g	_g	_g	_g	_g	_g
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.36 U	0.41 U	0.38 U	0.41 U	0.40 U	0.39 U
Benzo(b)fluoranthene	0.660	7.84	5	0.36 U	0.41 U	0.38 U	0.41 U	0.40 U	0.39 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.36 _h U	0.41 _h U	0.38 _h U	0.41 _h U	0.40 _h U	0.39 _h U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.36 _i U	0.41 _i U	0.38 _i U	0.41 _i U	0.40 _i U	0.39 _i U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.36 U	0.41 U	0.38 U	0.41 U	0.40 U	0.39 U
Fluorene	N/A ^d	81,760	560	0.36 U	0.41 U	0.38 U	0.41 U	0.40 U	0.39 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.36 U	0.41 U	0.38 U	0.41 U	0.40 U	0.39 U
Naphthalene	N/A ^d	40,880	84	0.36 U	0.41 U	0.38 U	0.41 U	0.40 U	0.39 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.36 U	0.41 U	0.38 U	0.41 U	0.40 U	0.39 U
Pyrene	N/A ^d	61,320	4200	0.36 U	0.41 U	0.38 U	0.41 U	0.40 U	0.39 U
<i>OTHER ANALYTES</i>									
TPH - Diesel Range Organics	N/A ^d	--	--	26 =	18 J	11 U	24 =	52 =	180 J
TPH - Gasoline Range Organics	N/A ^d	--	--	4700 J	2100 J	1000 J	7200 J	5.6 J	88 J

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold 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. Former Pumphouse #1 Tank Pit Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			P1-SB06 SB0601 4.0 - 6.0 11/18/1996 (mg/kg)	P1-SB06 SB0602 10.0 - 12.0 11/18/1996 (mg/kg)	P1-SB07 SB0701 4.0 - 6.0 11/19/1996 (mg/kg)	P1-SB07 SB0702 10.0 - 12.0 11/19/1996 (mg/kg)	P1-SB08 SB0801 4.0 - 6.0 11/19/1996 (mg/kg)	P1-SB08 SB0802 10.0 - 12.0 11/19/1996 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
<i>VOLATILE ORGANIC COMPOUNDS</i>									
Benzene	0.017	197.4	0.03	0.00029 U	<u>1.6</u> J	0.00028 U	0.00029 U	0.00028 U	0.0003 U
Toluene	115	408,800	12	0.0041 J	3.1 J	0.0038 U	0.022 =	0.0038 U	0.004 U
Ethylbenzene	18	204,400	13	0.0032 J	6.3 J	0.0067 =	0.022 =	0.0036 U	0.0037 U
Xylene (total)	700	1,000,000	190	0.0084 =	30 J	0.046 =	0.13 =	0.0039 J	0.0012 J
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>									
1-Methylnaphthalene	N/A ^d	--	--	0.40 U	0.38 U	0.39 U	0.40 U	0.39 U	0.41 U
2-Methylnaphthalene	N/A ^d	--	--	0.40 U	0.38 U	0.39 U	0.40 U	0.39 U	0.41 U
Acenaphthene	N/A ^d	12,264	570	0.40 U	0.38 U	0.39 U	0.40 U	0.39 U	0.41 U
Acenaphthylene	N/A ^d	61,320	4,200	0.40 U	0.38 U	0.39 U	0.40 U	0.39 U	0.41 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.40 U	0.38 U	0.39 U	0.40 U	0.39 U	0.41 U
Benzo(b)fluoranthene	0.660	7.84	5	0.62 =	<u>1.1</u> =	<u>1.6</u> =	0.40 U	<u>1.6</u> =	0.41 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.40 U	0.38 U	0.55 =	0.40 U	1.5 =	0.41 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.40 U	0.38 U	0.39 U	0.52 =	<u>1.2</u> =	0.41 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.40 U	0.74 =	0.39 U	0.40 U	0.39 U	0.41 U
Fluorene	N/A ^d	81,760	560	0.40 U	0.38 U	0.39 U	0.40 U	0.39 U	0.41 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.40 U	0.53 =	0.39 U	0.40 U	0.39 U	0.41 U
Naphthalene	N/A ^d	40,880	84	0.40 U	0.38 U	0.39 U	0.40 U	0.39 U	0.41 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.40 U	0.38 U	0.39 U	0.40 U	0.39 U	0.41 U
Pyrene	N/A ^d	61,320	4200	0.40 U	0.38 U	0.39 U	0.40 U	0.39 U	0.41 U
<i>OTHER ANALYTES</i>									
TPH - Diesel Range Organics	N/A ^d	--	--	130 J	24 =	92 J	12 UJ	12 UJ	12 UJ
TPH - Gasoline Range Organics	N/A ^d	--	--	1.2 J	5000 J	0.31 =	1.8 =	4.2 =	0.22 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold 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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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. Former Pumphouse #1 Tank Pit Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			P1-SB19 SB1901 4.0 - 6.0 11/20/1996 (mg/kg)	P1-SB19 SB1902 6.0 - 8.0 11/20/1996 (mg/kg)	P1-MW17 WB1701 4.0 - 6.0 (mg/kg)	P1-MW17 WB1702 8.0 - 10.0 (mg/kg)	P1-MW18 WB1801 8.0 - 10.0 (mg/kg)	P1-MW18 WB1802 13.0 - 15.0 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
<i>VOLATILE ORGANIC COMPOUNDS</i>									
Benzene	0.017	197.4	0.03	0.0056 U	0.0063 U	0.0057 UJ	0.0060 UJ	0.0013 UJ	0.0063 U
Toluene	115	408,800	12	0.0056 U	0.0063 U	0.0057 U	0.0060 U	0.018 UJ	0.0063 U
Ethylbenzene	18	204,400	13	0.0056 U	0.0063 U	0.0057 U	0.0060 U	0.017 UJ	0.0063 U
Xylene (total)	700	1,000,000	190	0.0056 U	0.0063 U	0.0057 U	0.006 U	0.4 =	0.0063 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>									
1-Methylnaphthalene	N/A ^d	--	--	0.37 U	0.42 U	0.38 U	0.39 U	0.03 J	0.42 U
2-Methylnaphthalene	N/A ^d	--	--	0.37 U	0.42 U	0.38 U	0.39 U	0.043 J	0.42 U
Acenaphthene	N/A ^d	12,264	570	0.37 U	0.42 U	0.38 U	0.39 U	0.059 J	0.42 U
Acenaphthylene	N/A ^d	61,320	4,200	0.37 U	0.42 U	0.38 U	0.39 U	0.37 U	0.42 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.37 U	0.42 U	0.38 U	0.39 U	0.17 J	0.42 U
Benzo(b)fluoranthene	0.660	7.84	5	0.37 U	0.42 U	0.38 U	0.39 U	0.37 U	0.42 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.37 U	0.42 U	0.38 U	0.39 U	0.2 J	0.42 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.37 U	0.42 U	0.38 U	0.39 U	0.21 J	0.1 J
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.37 U	0.42 U	0.38 U	0.39 U	0.12 J	0.066 J
Fluorene	N/A ^d	81,760	560	0.37 U	0.42 U	0.38 U	0.39 U	0.054 J	0.42 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.37 U	0.42 U	0.38 U	0.39 U	0.37 U	0.42 U
Naphthalene	N/A ^d	40,880	84	0.37 U	0.42 U	0.38 U	0.39 U	0.37 U	0.42 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.37 U	0.42 U	0.38 U	0.39 U	0.11 J	0.42 U
Pyrene	N/A ^d	61,320	4200	0.37 U	0.42 U	0.38 U	0.39 U	0.09 J	0.42 U
<i>OTHER ANALYTES</i>									
TPH - Diesel Range Organics	N/A ^d	--	--	22 =	4.2 =	11 U	12 U	11 U	13 U
TPH - Gasoline Range Organics	N/A ^d	--	--	0.28 U	0.51 =	0.2 U	0.21 U	2.4 =	22 J

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold levels.*Italicized* values indicate results exceeding risk-based screening levels.Underlined values indicate results exceeding leaching to groundwater screening levels.

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

Table 11. Former Pumphouse #1 Tank Pit Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			P1-MW19 WB1901 05/05/1997 8.0 - 10.0 (mg/kg)	P1-MW19 WB1902 05/05/1997 13.0 - 15.0 (mg/kg)	P1-MW20 WB2001 05/13/1997 4.0 - 6.0 (mg/kg)	P1-MW20 WB2002 05/13/1997 8.0 - 10.0 (mg/kg)	P1-MW21 WB2101 05/06/1997 8.0 - 10.0 (mg/kg)	P1-MW21 WB2102 05/06/1997 13.0 - 15.0 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
VOLATILE ORGANIC COMPOUNDS									
Benzene	0.017	197.4	0.03	0.0053 U	0.0062 U	0.0058 U	0.0056 U	0.0054 U	0.0060 U
Toluene	115	408,800	12	0.0053 U	0.0062 U	0.0058 U	0.0056 U	0.0054 U	0.01 =
Ethylbenzene	18	204,400	13	0.0053 U	0.0062 U	0.0058 U	0.0056 U	0.015 =	0.0060 U
Xylene (total)	700	1,000,000	190	0.0053 U	0.0062 U	0.0058 U	0.0056 U	0.11 =	0.0060 U
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	N/A ^d	--	--	0.025 J	0.016 J	0.018 J	0.37 U	0.051 J	0.40 U
2-Methylnaphthalene	N/A ^d	--	--	0.35 U	0.41 U	0.38 U	0.37 U	0.36 U	0.40 U
Acenaphthene	N/A ^d	12,264	570	0.053 J	0.14 J	0.38 U	0.37 U	0.36 U	0.40 U
Acenaphthylene	N/A ^d	61,320	4,200	0.35 U _f	0.41 U _f	0.38 U _f	0.37 U _f	0.36 U _f	0.063 J _f
Anthracene	N/A ^d	613,200	12,000						
Benzo(a)anthracene	0.660	7.84	2	g	g	g	g	g	g
Benzo(a)pyrene	0.660	0.784	8	0.35 U	0.41 U	0.38 U	0.37 U	0.13 J	0.40 U
Benzo(b)fluoranthene	0.660	7.84	5	0.35 U	0.41 U	0.38 U	0.37 U	0.36 U	0.40 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.35 U _h	0.41 U _h	0.38 U _h	0.37 U _h	0.36 U _h	0.40 U _h
Benzo(k)fluoranthene	0.660	78.4	49						
Chrysene	0.660	784	160	0.35 U _i	0.41 U _i	0.38 U _i	0.37 U _i	0.48 = _i	0.40 U _i
Dibenzo(a,h)anthracene	0.660	0.784	2						
Fluoranthene	N/A ^d	81,760	4,300	0.35 U	0.41 U	0.38 U	0.37 U	0.2 J	0.40 U
Fluorene	N/A ^d	81,760	560	0.35 U	0.41 U	0.38 U	0.37 U	0.31 J	0.40 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.35 U	0.41 U	0.38 U	0.37 U	0.36 U	0.40 U
Naphthalene	N/A ^d	40,880	84	0.35 U	0.41 U	0.38 U	0.37 U	0.1 J	0.40 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.35 U	0.41 U	0.38 U	0.37 U	1 =	0.22 J
Pyrene	N/A ^d	61,320	4200	0.051 J	0.41 U	0.38 U	0.37 U	0.037 J	0.40 U
OTHER ANALYTES									
TPH - Diesel Range Organics	N/A ^d	--	--	17 =	12 U	12 U	11 U	61 =	12 U
TPH - Gasoline Range Organics	N/A ^d	--	--	0.19 U	0.22 U	0.2 J U	0.2 J U	2 =	0.24 =

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).

^b Protective of soil exposure during Industrial Land Use.

^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.

^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.

^e Values based on pyrene as a surrogate chemical.

^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.

^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.

^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.

ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.

Bold values indicate results exceeding Georgia UST soil threshold levels.

Italicized values indicate results exceeding risk-based screening levels.

Underlined values indicate results exceeding leaching to groundwater screening levels.

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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.

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

Table 11. Former Pumphouse #1 Tank Pit Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			P1-MW22 WB2201 05/06/1997 4.0 - 6.0 (mg/kg)	P1-MW22 WB2202 05/06/1997 8.0 - 10.0 (mg/kg)	P1-MW23 WB2301 05/13/1997 8.0 - 10.0 (mg/kg)	P1-MW23 WB2302 05/13/1997 13.0 - 15.0 (mg/kg)	P1-MW24 WB2401 05/06/1997 8.0 - 10.0 (mg/kg)	P1-MW24 WB2402 05/06/1997 13.0 - 15.0 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
VOLATILE ORGANIC COMPOUNDS									
Benzene	0.017	197.4	0.03	0.0013 UJ	<u>0.9</u> =	0.0056 U	0.0062 U	0.0056 U	0.006 U
Toluene	115	408,800	12	0.079 =	1.2 =	0.0056 U	0.0062 U	0.007 =	0.017 =
Ethylbenzene	18	204,400	13	0.17 =	3.3 =	0.0056 U	0.0062 U	0.011 =	0.006 U
Xylene (total)	700	1,000,000	190	4.1 =	55 =	0.0056 U	0.0062 U	0.14 =	0.0078 =
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	N/A ^d	--	--	0.082 J	0.1 J	0.37 U	0.41 U	0.037 =	0.40 U
2-Methylnaphthalene	N/A ^d	--	--	0.11 J	0.23 J	0.37 U	0.41 U	0.051 J	0.40 U
Acenaphthene	N/A ^d	12,264	570	0.35 U	0.38 U	0.05 J	0.41 U	0.047 J	0.40 U
Acenaphthylene	N/A ^d	61,320	4,200	0.35 U _f	0.12 J _f	0.37 U _f	0.41 U _f	0.12 J _f	0.40 U _f
Anthracene	N/A ^d	613,200	12,000						
Benzo(a)anthracene	0.660	7.84	2	g	g	g	g	g	g
Benzo(a)pyrene	0.660	0.784	8	0.35 U	0.38 U	0.097 J	0.41 U	0.37 U	0.40 U
Benzo(b)fluoranthene	0.660	7.84	5	0.35 U	0.38 U	0.37 U	0.41 U	0.37 U	0.40 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.35 U _h	0.38 U _h	0.37 U _h	0.41 U _h	0.37 U _h	0.40 U _h
Benzo(k)fluoranthene	0.660	78.4	49						
Chrysene	0.660	784	160	0.35 U _i	0.38 U _i	0.16 J _i	0.41 U _i	0.37 U _i	0.40 U _i
Dibenzo(a,h)anthracene	0.660	0.784	2						
Fluoranthene	N/A ^d	81,760	4,300	0.35 U	0.15 J	0.42 =	0.41 U	0.069 J	0.40 U
Fluorene	N/A ^d	81,760	560	0.35 U	0.063 J	0.37 U	0.41 U	0.37 U	0.40 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.35 U	0.38 U	0.37 U	0.41 U	0.37 U	0.40 U
Naphthalene	N/A ^d	40,880	84	0.14 J	0.19 J	0.37 U	0.41 U	0.37 U	0.40 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.35 U	0.11 J	0.37 U	0.41 U	0.085 =	0.40 U
Pyrene	N/A ^d	61,320	4200	0.053 J	0.068 J	0.31 J	0.41 U	0.37 U	0.40 U
OTHER ANALYTES									
TPH - Diesel Range Organics	N/A ^d	--	--	64 =	150 =	11 U	12 U	68 =	12 U
TPH - Gasoline Range Organics	N/A ^d	--	--	4.6 =	750 J	21 J	0.22 UJ	1.0 =	0.22 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold 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. Former Pumphouse #1 Tank Pit Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			P1-SB27 SB2701 05/13/1997 4.0 - 6.0 (mg/kg)	P1-SB27 SB2702 05/13/1997 8.0 - 10.0 (mg/kg)	P1-SB28 SB2801 05/13/1997 4.0 - 6.0 (mg/kg)	P1-SB28 SB2802 05/13/1997 8.0 - 10.0 (mg/kg)	P1-SB29 SB2901 05/13/1997 4.0 - 6.0 (mg/kg)	P1-SB29 SB2902 05/13/1997 8.0 - 10.0 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
<i>VOLATILE ORGANIC COMPOUNDS</i>									
Benzene	0.017	197.4	0.03	0.0059 U	0.120 UJ	0.0056 U	0.0060 U	0.021 UJ	0.022 UJ
Toluene	115	408,800	12	0.013 =	8.5 J	0.0056 U	0.0060 U	0.64 =	1.1 =
Ethylbenzene	18	204,400	13	0.0083 =	20 J	0.0056 U	0.0060 U	2.7 =	2.3 =
Xylene (total)	700	1,000,000	190	0.043 =	37 J	0.0056 U	0.0060 U	4.4 =	9.6 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>									
1-Methylnaphthalene	N/A ^d	--	--	0.39 U	0.073 J	0.37 U	0.40 U	0.36 U	0.38 U
2-Methylnaphthalene	N/A ^d	--	--	0.39 U	0.15 J	0.37 U	0.40 U	0.074 J	0.037 J
Acenaphthene	N/A ^d	12,264	570	0.39 U	0.071 J	0.37 U	0.40 U	0.13 J	0.38 U
Acenaphthylene	N/A ^d	61,320	4,200	0.39 U	0.40 U	0.37 U	0.40 U	0.36 U	0.38 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.21 J	0.40 U	0.37 U	0.40 U	0.36 U	0.38 U
Benzo(b)fluoranthene	0.660	7.84	5	0.39 U	0.40 U	0.37 U	0.40 U	0.36 U	0.38 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.39 U	0.40 U	0.37 U	0.40 U	0.36 U	0.38 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.43 =	0.12 J	0.37 U	0.40 U	0.36 U	0.38 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	1.2 =	0.34 J	0.37 U	0.40 U	0.24 J	0.15 J
Fluorene	N/A ^d	81,760	560	0.39 U	0.40 U	0.37 U	0.40 U	0.36 U	0.38 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.39 U	0.40 U	0.37 U	0.40 U	0.36 U	0.38 U
Naphthalene	N/A ^d	40,880	84	0.062 J	0.20 J	0.37 U	0.40 U	0.36 U	0.38 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.39 U	0.40 U	0.37 U	0.40 U	0.23 J	0.38 U
Pyrene	N/A ^d	61,320	4200	0.82 =	0.27 J	0.37 U	0.40 U	0.21 J	0.094 J
<i>OTHER ANALYTES</i>									
TPH - Diesel Range Organics	N/A ^d	--	--	13 =	66 =	11 U	12 U	24 =	18 =
TPH - Gasoline Range Organics	N/A ^d	--	--	0.53 J	730 J	0.2 U	0.22 U	74 J	65 J

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold levels.*Italicized* values indicate results exceeding risk-based screening levels.Underlined values indicate results exceeding leaching to groundwater screening levels.

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

Table 11. Former Pumphouse #1 Tank Pit Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			P1-SB30 SB3001 05/13/1997 4.0 - 6.0 (mg/kg)	P1-SB30 SB3002 05/13/1997 8.0 - 10.0 (mg/kg)	P1-SB31 SB3101 05/13/1997 4.0 - 6.0 (mg/kg)	P1-SB31 SB3102 05/13/1997 8.0 - 10.0 (mg/kg)	P1-SB32 SB3201 05/12/1997 4.0 - 6.0 (mg/kg)	P1-SB32 SB3202 05/12/1997 8.0 - 10.0 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
<i>VOLATILE ORGANIC COMPOUNDS</i>									
Benzene	0.017	197.4	0.03	0.0055 U	0.023 UJ	0.0013 J	0.022 UJ	0.0054 U	0.0060 U
Toluene	115	408,800	12	0.0055 U	7 J	0.017 UJ	0.32 J	0.0054 U	0.0060 U
Ethylbenzene	18	204,400	13	0.0055 U	21 J	0.016 UJ	2.5 J	0.0054 U	0.0060 U
Xylene (total)	700	1,000,000	190	0.12 =	64 J	0.016 J	6.3 J	0.0054 U	0.0060 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>									
1-Methylnaphthalene	N/A ^d	--	--	0.36 U	0.39 U	0.36 U	0.38 U	0.36 U	0.40 U
2-Methylnaphthalene	N/A ^d	--	--	0.23 J	0.39 U	0.041 J	0.38 U	0.36 U	0.40 U
Acenaphthene	N/A ^d	12,264	570	2.2 =	0.082 J	0.074 J	0.38 U	0.36 U	0.40 U
Acenaphthylene	N/A ^d	61,320	4,200	0.54 =	0.39 U	0.36 U	0.38 U	0.36 U	0.40 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.36 U	0.39 U	0.36 U	0.38 U	0.36 U	0.40 U
Benzo(b)fluoranthene	0.660	7.84	5	0.36 U	0.39 U	0.36 U	0.38 U	0.36 U	0.40 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.36 U	0.39 U	0.36 U	0.38 U	0.36 U	0.40 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.36 U	0.39 U	0.36 U	0.38 U	0.36 U	0.40 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.14 J	0.054 J	0.32 J	0.29 J	0.36 U	0.40 U
Fluorene	N/A ^d	81,760	560	1.2 =	0.07 J	0.36 U	0.38 U	0.36 U	0.40 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.36 U	0.39 U	0.36 U	0.38 U	0.36 U	0.40 U
Naphthalene	N/A ^d	40,880	84	0.36 U	0.39 U	0.36 U	0.38 U	0.36 U	0.40 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.36 U	0.39 U	0.36 U	0.2 J	0.36 U	0.40 U
Pyrene	N/A ^d	61,320	4200	0.36 U	0.39 U	0.22 J	0.22 J	0.36 U	0.40 U
<i>OTHER ANALYTES</i>									
TPH - Diesel Range Organics	N/A ^d	--	--	240 =	50 =	11 =	18 =	11 U	12 U
TPH - Gasoline Range Organics	N/A ^d	--	--	0.57 J	15 J	2.8 J	110 J	0.20 U	0.22 U

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold levels.*Italicized* values indicate results exceeding risk-based screening levels.Underlined values indicate results exceeding leaching to groundwater screening levels.

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

Table 11. Former Pumphouse #1 Tank Pit Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			P1-SB33 SB3301 05/12/1997 4.0 - 6.0 (mg/kg)	P1-SB33 SB3302 05/12/1997 10.0 - 12.0 (mg/kg)	P1-SB34 SB3401 05/12/1997 4.0 - 6.0 (mg/kg)	P1-SB34 SB3402 05/12/1997 8.0 - 10.0 (mg/kg)	P1-SB35 SB3501 05/08/1997 4.0 - 6.0 (mg/kg)	P1-SB35 SB3502 05/08/1997 10.0 - 12.0 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)						
<i>VOLATILE ORGANIC COMPOUNDS</i>									
Benzene	0.017	197.4	0.03	0.0058 U	0.0015 UJ	0.0060 U	0.0014 J	0.0057 U	<u>0.097 U</u>
Toluene	115	408,800	12	0.0058 U	0.220 J	0.0110 =	0.018 UJ	0.0057 U	0.44 U
Ethylbenzene	18	204,400	13	0.016 =	0.098 J	0.0060 U	0.017 UJ	0.0057 U	1.6 =
Xylene (total)	700	1,000,000	190	0.107 =	0.050 J	0.060 =	0.75 J	0.0057 U	18 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>									
1-Methylnaphthalene	N/A ^d	--	--	0.38 U	0.41 U	0.4 U	0.38 U	0.37 U	0.35 U
2-Methylnaphthalene	N/A ^d	--	--	0.38 U	0.41 U	0.4 U	0.38 U	0.37 U	0.35 U
Acenaphthene	N/A ^d	12,264	570	0.38 U	0.41 U	0.4 U	0.38 U	0.37 U	0.35 U
Acenaphthylene	N/A ^d	61,320	4,200	0.38 U	0.41 U	0.4 U	0.38 U	0.37 U	0.35 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.38 U	0.41 U	0.35 J	0.38 U	0.37 U	0.35 U
Benzo(b)fluoranthene	0.660	7.84	5	0.38 U	0.41 U	0.15 J	0.38 U	0.37 U	0.35 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.38 U	0.41 U	0.4 U	0.38 U	0.37 U	0.35 U
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.38 U	0.41 U	0.4 U	0.38 U	0.37 U	0.35 U
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.38 U	0.35 J	0.062 J	0.38 U	0.37 U	0.35 U
Fluorene	N/A ^d	81,760	560	0.38 U	0.41 U	0.4 U	0.38 U	0.37 U	0.35 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.38 U	0.41 U	0.4 U	0.38 U	0.37 U	0.35 U
Naphthalene	N/A ^d	40,880	84	0.38 U	0.41 U	0.4 U	0.38 U	0.37 U	0.35 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.38 U	0.41 U	0.095 J	0.38 U	0.37 U	0.35 U
Pyrene	N/A ^d	61,320	4200	0.38 U	0.37 J	0.061 J	0.38 U	0.37 U	0.35 U
<i>OTHER ANALYTES</i>									
TPH - Diesel Range Organics	N/A ^d	--	--	15 =	20 =	12 U	19 =	11 U	11 U
TPH - Gasoline Range Organics	N/A ^d	--	--	0.21 U	50 =	0.71 =	5.9 J	0.2 U	260 J

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold 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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= Indicates that the compound was detected at the concentration reported.

Table 11. Former Pumphouse #1 Tank Pit Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			P1-SB36 SB3601 05/08/1997 4.0 - 6.0 (mg/kg)	P1-SB36 SB3602 05/08/1997 10.0 - 12.0 (mg/kg)	P1-SB37 SB3701 05/08/1997 4.0 - 6.0 (mg/kg)	P1-SB37 SB3702 05/08/1997 10.0 - 12.0 (mg/kg)	P1-SB38 SB3801 05/13/1997 4.0 - 6.0 (mg/kg)	P1-SB38 SB3802 05/13/1997 8.0 - 10.0 (mg/kg)	P1-SB39 SB3901 05/08/1997 4.0 - 6.0 (mg/kg)
	GUST Soil Threshold Levels ^a (mg/kg)	Risk-based Screening Level ^b (mg/kg)	Leaching to Groundwater ^c (mg/kg)							
VOLATILE ORGANIC COMPOUNDS										
Benzene	0.017	197.4	0.03	0.0056 U	0.0059 U	0.0060 U	0.0014 U	0.0058 U	0.0058 U	0.0059 U
Toluene	115	408,800	12	0.0056 U	0.0059 U	0.0060 U	0.390 U	0.012 =	0.0058 U	0.022 =
Ethylbenzene	18	204,400	13	0.0056 U	0.0059 U	0.0060 U	0.760 J	0.022 =	0.0058 U	0.026 =
Xylene (total)	700	1,000,000	190	0.0056 U	0.0059 U	0.0060 U	6.2 =	0.082 =	0.0058 U	0.26 =
POLYNUCLEAR AROMATIC HYDROCARBONS										
1-Methylnaphthalene	N/A ^d	--	--	0.37 U	0.39 U	2.0 U	0.42 U	0.028 J	0.38 U	0.39 U
2-Methylnaphthalene	N/A ^d	--	--	0.37 U	0.39 U	2.0 U	0.42 U	0.081 J	0.38 U	0.39 U
Acenaphthene	N/A ^d	12,264	570	0.37 U	0.39 U	2.0 U	0.42 U	0.18 J	0.38 U	0.39 U
Acenaphthylene	N/A ^d	61,320	4,200	0.37 U _f	0.39 U _f	2.0 U _f	0.42 U _f	0.38 U _f	0.38 U _f	0.39 U _f
Anthracene	N/A ^d	613,200	12,000	_g	_g	_g	_g	_g	_g	_g
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.37 U	0.39 U	2.0 U	0.42 U	0.31 J	0.38 U	0.39 U
Benzo(b)fluoranthene	0.660	7.84	5	0.37 U	0.39 U	2.0 U	0.42 U	0.38 U	0.38 U	0.39 U
Benzo(g,h,i)perylene	N/A ^d	--	--	0.37 U _h	0.39 U _h	2.0 U _h	0.42 U _h	0.38 U _h	0.38 U _h	0.39 U _h
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	_h	_h
Chrysene	0.660	784	160	0.37 U _i	0.39 U _i	2.0 U _i	0.42 U _i	1.3 _i	0.38 U _i	0.39 U _i
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.37 U	0.39 U	2.0 U	0.42 U	0.14 J	0.38 U	0.39 U
Fluorene	N/A ^d	81,760	560	0.37 U	0.39 U	2.0 U	0.42 U	0.42 =	0.38 U	0.39 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.37 U	0.39 U	2.0 U	0.42 U	0.38 U	0.38 U	0.39 U
Naphthalene	N/A ^d	40,880	84	0.37 U	0.39 U	2.4 =	0.42 U	0.38 U	0.38 U	0.39 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.37 U	0.39 U	2.0 U	0.42 U	1.3 =	0.38 U	0.39 U
Pyrene	N/A ^d	61,320	4200	0.37 U	0.39 U	2.0 U	0.42 U	1.3 =	0.38 U	0.39 U
OTHER ANALYTES										
TPH - Diesel Range Organics	N/A ^d	--	--	6.2 J	12 U	390 =	9.7 J	35 =	14 =	29 =
TPH - Gasoline Range Organics	N/A ^d	--	--	0.2 U	0.21 U	0.091 J	240 J	0.21 U	2.1 U	0.7 J

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold levels.*Italicized* values indicate results exceeding risk-based screening levels.Underlined values indicate results exceeding leaching to groundwater screening levels.

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

Table 11. Former Pumphouse #1 Tank Pit Area - Soil Data Risk-based Screening Results (continued)

Station: Sample ID: Sample Interval (ft BGS): Collection Date: Units:	Screening Levels			P1-SB39	P1-SB40	P1-SB40	P1-SB41	P1-SB41	P1-SB41	P1-MW40	P1-MW40
	GUST Soil	Risk-based		SB3902	SB4001	SB4002	SB4101	SB4102	SB4102	PH1-WB4001	PH1-WB4002
	Threshold	Screening	Leaching to	05/08/1997	05/08/1997	05/08/1997	05/08/1997	05/08/1997	05/08/1997	09/29/1999	09/29/1999
	Levels ^a	Level ^b	Groundwater ^c	8.0 - 10.0	4.0 - 6.0	8.0 - 10.0	4.0 - 6.0	10.0 - 12.0	8.0 - 10.0	48.0 - 50.0	
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS											
Benzene	0.017	197.4	0.03	0.0062 U	0.067 U	0.32 U	0.0058 U	0.0062 U	5.1 J	0.029 U	
Toluene	115	408,800	12	0.28 U	0.77 =	180 U	0.0058 U	0.0062 U	190 U	0.029 U	
Ethylbenzene	18	204,400	13	0.28 U	0.99 =	44 U	0.0058 U	0.0062 U	110 U	0.029 U	
Xylene (total)	700	1,000,000	190	0.56 U	6.5 =	220 U	0.012 =	0.0062 U	530 U	0.058 U	
POLYNUCLEAR AROMATIC HYDROCARBONS											
1-Methylnaphthalene	N/A ^d	--	--	0.38 U	0.4 U	0.39 U	0.39 U	0.41 U	0.036 =	0.023 U	
2-Methylnaphthalene	N/A ^d	--	--	0.38 U	0.4 U	0.39 U	0.39 U	0.41 U	0.097 =	0.023 U	
Acenaphthene	N/A ^d	12,264	570	0.38 U	0.4 U	0.39 U	0.39 U	0.41 U	0.066 U	0.057 U	
Acenaphthylene	N/A ^d	61,320	4,200	0.38 U	0.4 U	0.39 U	0.39 U	0.41 U	0.026 U	0.023 U	
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f	_f	0.0053 U	0.0046 U	
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g	_g	0.0053 U	0.0046 U	
Benzo(a)pyrene	0.660	0.784	8	0.38 U	0.4 U	0.39 U	0.39 U	0.41 U	0.0053 U	0.0046 U	
Benzo(b)fluoranthene	0.660	7.84	5	0.38 U	0.4 U	0.39 U	0.39 U	0.41 U	0.0053 U	0.0046 U	
Benzo(g,h,i)perylene	N/A ^d	--	--	0.38 U	0.4 U	0.39 U	0.39 U	0.41 U	0.013 U	0.011 U	
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h	_h	0.0053 U	0.0046 U	
Chrysene	0.660	784	160	0.38 U	0.4 U	0.39 U	0.39 U	0.41 U	0.0053 U	0.0046 U	
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i	_i	0.013 U	0.011 U	
Fluoranthene	N/A ^d	81,760	4,300	0.38 U	0.4 U	0.39 U	0.39 U	0.41 U	0.021 =	0.011 U	
Fluorene	N/A ^d	81,760	560	0.38 U	0.4 U	0.39 U	0.39 U	0.41 U	0.013 U	0.011 U	
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.38 U	0.4 U	0.39 U	0.39 U	0.41 U	0.013 U	0.011 U	
Naphthalene	N/A ^d	40,880	84	0.38 U	0.4 U	0.39 U	0.39 U	0.41 U	0.1 =	0.023 U	
Phenanthrene ^e	N/A ^d	61,320	4,200	0.38 U	0.4 U	0.39 U	0.39 U	0.41 U	0.017 =	0.0046 U	
Pyrene	N/A ^d	61,320	4200	0.38 U	0.4 U	0.39 U	0.39 U	0.41 U	0.013 U	0.011 U	
OTHER ANALYTES											
TPH - Diesel Range Organics	N/A ^d	--	--	25 =	21 =	35 =	7.8 J	12 U	43 J	3.8 U	
TPH - Gasoline Range Organics	N/A ^d	--	--	35 J	86 J	3700 J	0.052 J	0.22 U	9900 J	1.4 U	

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).^b Protective of soil exposure during Industrial Land Use.^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.^e Values based on pyrene as a surrogate chemical.^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.**Bold** values indicate results exceeding Georgia UST soil threshold 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 12. Former Pumphouse #1 Tank Pit Area - Sediment Data Risk-based Screening Results

Station:	Screening Levels			P1-SWE07	P1-SWE08	P1-SWE09	P1-SE10
Sample ID:	GUST	Risk-based	Leaching to	HT4-SE07	HT4-SE08	HT4-SE09	HT4-SE10
Sample Date:	STLs ^a	Level ^b	Groundwater ^c	12/10/1996	12/10/1996	12/10/1996	12/10/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	197.4	0.03	<u>0.62</u> U	0.011 U	0.0094 U	0.013 U
Toluene	115	408,800	12	0.62 U	0.011 U	0.0094 U	0.013 U
Ethylbenzene	18	204,400	13	0.62 U	0.011 U	0.0094 U	0.013 U
Xylenes	700	1,000,000	190	0.62 U	0.011 U	0.0094 U	0.013 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	N/A ^d	--	--	0.51 U	0.70 U	0.62 U	0.85 U
2-Methylnaphthalene	N/A ^d	--	--	0.51 U	0.70 U	0.62 U	0.85 U
Acenaphthene	N/A ^d	12,264	570	0.51 U	0.70 U	0.62 U	0.85 U
Acenaphthylene	N/A ^d	61,320	4,200	0.51 U	0.70 U	0.62 U	0.85 U
Anthracene	N/A ^d	613,200	12,000	_f	_f	_f	_f
Benzo(a)anthracene	0.660	7.84	2	_g	_g	_g	_g
Benzo(a)pyrene	0.660	0.784	8	0.6 =	0.70 U	1.0 =	1.9 =
Benzo(b)fluoranthene	0.660	7.84	5	0.51 U	0.70 U	2.4 =	3.6 =
Benzo(g,h,i)perylene	N/A ^d	--	--	0.51 U	0.70 U	1.8 =	2.3 =
Benzo(k)fluoranthene	0.660	78.4	49	_h	_h	_h	_h
Chrysene	0.660	784	160	0.51 U	0.70 U	1.9 =	2.7 =
Dibenzo(a,h)anthracene	0.660	0.784	2	_i	_i	_i	_i
Fluoranthene	N/A ^d	81,760	4,300	0.51 U	0.70 U	1.7 =	1.9 =
Fluorene	N/A ^d	81,760	560	0.51 U	0.70 U	0.62 U	0.85 U
Indeno(1,2,3-cd)pyrene	0.660	7.84	14	0.51 U	0.70 U	0.8 =	1.3 =
Naphthalene	N/A ^d	40,880	84	0.51 U	0.70 U	0.62 U	0.85 U
Phenanthrene ^e	N/A ^d	61,320	4,200	0.51 U	0.70 U	1.2 =	0.85 U
Pyrene	N/A ^d	61,320	4200	0.51 U	0.70 U	1.6 J	2.0 J
<i>OTHER ANALYTES</i>							
TPH-DRO	N/A ^d	--	--	15 U	21 U	24 =	26 U
TPH-GRO	N/A ^d	--	--	130 J	0.38 U	0.34 U	0.98 J

^a Average or higher groundwater pollution susceptibility area (where ≤500 feet to a surface water body).

^b Protective of soil exposure during Industrial Land Use.

^c Protective of groundwater ingestion. Used a dilution attenuation factor of 20.

^d Not applicable. The screening level exceeds the expected soil concentration under free product condition.

^e Values based on pyrene as a surrogate chemical.

^f Phenanthrene and anthracene co-eluted and could not be determined individually; results are presented under phenanthrene.

^g Chrysene and benzo(a)anthracene co-eluted and could not be determined individually; results are presented under chrysene.

^h Benzo(b)fluoranthene and benzo(k)fluoranthene co-eluted and could not be determined individually; results are presented under benzo(b)fluoranthene.

ⁱ Indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene co-eluted and could not be determined individually; results are presented under indeno(1,2,3-cd)pyrene.

Bold values indicate results exceeding Georgia UST soil threshold 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 13. Former Pumphouse #1 Tank Pit Area - Groundwater Data Risk-based Screening Results

Station: Screening Levels			D-MW05	D-MW06	D-MW07	P1-MW01	P1-MW02	P1-MW03	P1-MW17	P1-MW18
Sample ID:			H833-GW0501	H833-GW0601	H833-GW0701	HT4-MW01	HT4-MW02	HT4-MW03	MW1701	MW1801
Screened Interval (ft BGS):			6.5 - 16.5	6.0 - 16.0	5.8 - 15.8	6.8-16.8	7.0-17.0	6.0-16.0	6.5-16.5	9.5-19.5
Collection Date:			05/23/1996	05/23/1996	05/23/1996	12/09/1996	12/09/1996	12/09/1996	05/29/1997	05/30/1997
Units:			(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
<i>VOLATILE ORGANIC COMPOUNDS</i>										
Benzene	71	0.36	<u>4100</u> =	<u>25</u> U	<u>1</u> U	<u>500</u> U	<u>1100</u> =	<u>740</u> =	<u>1</u> U	<u>4.2</u> J
Toluene	200,000	750	<u>8900</u> =	<u>1400</u> =	1 U	<u>16000</u> =	<u>25000</u> =	<u>19000</u> =	1 U	57 =
Ethylbenzene	28,718	1300	<u>1700</u> =	320 =	1 U	<u>1900</u> =	<u>1400</u> =	<u>2000</u> =	2.3 =	19 =
Xylene (total)	NRC	12000	6400 =	1400 =	1 U	9500 =	5900 =	7400 =	2 U	110 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>										
1-Methylnaphthalene	-		10 U	10 U	10 U	1 U	1 U	1 U	1 U	0.16 J
2-Methylnaphthalene	-		10 U	10 U	10 U	2.8 =	1.3 =	1.9 =	1 U	0.68 J
Acenaphthene	-	365	10 U	10 U	10 U	1 U	1 U	1 U	1 R	0.31 J
Acenaphthylene	-	182.5	10 U	10 U	10 U	1 U	1 U	1 U	1 U	1 U
Anthracene	110,000	182.5	10 U	10 U	10 U	0.58 =	0.2 U	0.2 U	0.2 U	0.022 J
Benzo(a)anthracene	0.0311	0.092	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>0.2</u> U	<u>0.2</u> U	<u>0.2</u> U	0.066 =	0.014 J
Benzo(a)pyrene	0.0311	0.0092	<u>10</u> U	<u>10</u> U	<u>10</u> UJ	<u>0.2</u> U	<u>0.2</u> U	<u>0.2</u> =	<u>0.094</u> =	<u>0.0311</u> U
Benzo(b)fluoranthene	-	0.092	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>0.2</u> U	<u>0.2</u> U	<u>0.28</u> =	0.077 J	0.022 J
Benzo(g,h,i)perylene	-	-	10 U	10 U	10 U	0.5 U	0.5 U	0.5 U	0.068 J	0.5 U
Benzo(k)fluoranthene	0.0311	0.92	<u>10</u> U	<u>10</u> U	<u>10</u> U	0.5 U	0.5 U	0.5 U	0.036 =	0.0311 U
Chrysene	0.0311	9.2	<u>10</u> U	<u>10</u> U	<u>10</u> U	0.2 U	0.2 U	0.26 =	0.12 =	0.024 J
Dibenzo(a,h)anthracene	0.0311	0.0092	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>1</u> U	<u>1</u> U	<u>1</u> U	<u>0.036</u> U	<u>0.036</u> U
Fluoranthene	370	1460	10 U	10 U	10 U	0.6 =	0.5 U	0.76 =	0.26 J	0.16 J
Fluorene	14,000	243	10 U	10 U	10 U	0.6 =	0.5 U	0.5 U	0.5 R	0.18 J
Indeno(1,2,3-cd)pyrene	0.0311	0.092	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>0.5</u> U	<u>0.5</u> U	<u>0.5</u> U	0.048 =	0.0311 U
Naphthalene	-	6.5	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>16</u> =	<u>7</u> =	<u>9.2</u> =	1 U	1 U
Phenanthrene ^b	-	182.5	10 U	10 U	10 U	2.2 =	0.2 U	0.42 J	0.024 J	0.14 J
Pyrene	11,000	182.5	10 U	10 U	10 U	0.5 U	0.5 U	0.5 U	0.21 J	0.075 J

^a Protective of tap water ingestion by a resident.^b 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 13. Former Pumphouse #1 Tank Pit Area - Groundwater Data Risk-based Screening Results (continued)

Station: Sample ID: Screened Interval (ft BGS): Collection Date: Units:	Screening Levels		P1-MW19	P1-MW20	P1-MW21	P1-MW22	P1-MW23	P1-MW24	P1-MW01
	IWQS	Risk-based ^a	MW1901	MW2001	MW2101	MW2201	MW2301	MW2401	PH1-MW0102
	(ug/L)	(ug/L)	9.0-19.0	7.0-17.0	7.0-17.0	6.0-16.0	7.0-17.0	29.5-34.5	6.8-16.8
			05/29/1997	05/30/1997	05/29/1997	05/29/1997	05/30/1997	05/30/1997	11/03/1999
			(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
VOLATILE ORGANIC COMPOUNDS									
Benzene	71	0.36	<u>630</u> =	1 U	<u>100</u> =	<u>160</u> =	<u>110</u> =	1 U	<u>17</u> J
Toluene	200,000	750	<u>1900</u> =	1 U	380 =	80 J	62 =	1 U	<u>6500</u> =
Ethylbenzene	28,718	1300	530 =	1 U	860 =	200 =	180 =	1 U	<u>1800</u> =
Xylene (total)	NRC	12000	2400 =	2 U	3400 =	6200 =	1100 =	2 U	10000 =
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	-		1 U	1 U	5 U	0.36 J	1 U	1 U	*
2-Methylnaphthalene	-		0.59 J	1 U	2.1 J	0.79 J	0.94 J	1 U	*
Acenaphthene	-	365	1 R	1 UJ	2.4 J	0.92 J	0.36 J	1 U	*
Acenaphthylene	-	182.5	1 U	1 U	5 U	1 U	1 U	1 U	*
Anthracene	110,000	182.5	0.2 U	0.076 J	0.7 J	0.0092 J	0.08 J	0.2 U	*
Benzo(a)anthracene	0.0311	0.092	0.0311 U	<u>0.29</u> =	<u>0.156</u> U	0.0311 U	0.022 J	0.0311 U	*
Benzo(a)pyrene	0.0311	0.0092	<u>0.0311</u> U	<u>0.29</u> =	<u>0.156</u> U	<u>0.0311</u> U	<u>0.038</u> =	<u>0.0311</u> U	*
Benzo(b)fluoranthene	-	0.092	0.011 J	<u>0.19</u> J	1 U	0.0092 J	0.044 J	<u>0.2</u> U	*
Benzo(g,h,i)perylene	-	-	0.5 U	0.43 J	2.5 U	0.5 U	0.062 J	0.5 U	*
Benzo(k)fluoranthene	0.0311	0.92	0.0311 U	0.42 =	0.156 U	0.0311 U	0.026 J	0.0311 U	*
Chrysene	0.0311	9.2	0.031 U	0.96 =	0.156 U	0.015 J	0.045 =	0.0311 U	*
Dibenzo(a,h)anthracene	0.0311	0.0092	<u>0.036</u> U	<u>0.73</u> =	<u>0.18</u> U	<u>0.036</u> U	<u>0.036</u> U	<u>0.036</u> U	*
Fluoranthene	370	1460	0.049 J	0.15 J	1.4 J	0.056 J	0.39 J	0.5 U	*
Fluorene	14,000	243	0.5 R	0.5 U	2.7 J	0.15 J	0.43 J	0.5 U	*
Indeno(1,2,3-cd)pyrene	0.0311	0.092	0.0311 U	<u>0.32</u> =	<u>0.156</u> U	0.0311 U	0.039 =	0.0311 U	*
Naphthalene	-	6.5	1.5 =	1 U	<u>11</u> =	<u>11</u> =	1 U	1 U	*
Phenanthrene ^b	-	182.5	0.078 J	0.048 J	8.2 J	0.12 J	0.72 =	0.2 U	*
Pyrene	11,000	182.5	0.5 U	0.13 J	2.5 U	0.5 U	0.26 J	0.5 U	*

^a Protective of tap water ingestion by a resident.^b Values based on pyrene as a surrogate chemical.

* PAH analysis not performed on samples collected in November 1999, if a sample was collected from the well in 1996.

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 13. Former Pumphouse #1 Tank Pit Area - Groundwater Data Risk-based Screening Results (continued)

Station: Sample ID:	Screening Levels		P1-MW02	P1-MW03	P1-MW18	P1-MW19	P1-MW20	P1-MW22	P1-MW23
			PH1-MW0202	PH1-MW0302	PH1-MW1802	PH1-MW1902	PH1-MW2002	PH1-MW2202	PH1-MW2302
Screened Interval (ft BGS):			7.0-17.0	6.0-16.0	9.5-19.5	9.0-19.0	7.0-17.0	6.0-16.0	7.0-17.0
Collection Date:	IWQS	Risk-based ^a	11/03/1999	11/03/1999	11/03/1999	11/03/1999	11/03/1999	11/03/1999	11/03/1999
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
VOLATILE ORGANIC COMPOUNDS									
Benzene	71	0.36	1000 =	360 =	<u>25</u> U	200 =	<u>1</u> U	250 U	330 =
Toluene	200,000	750	<u>19000</u> =	<u>6800</u> J	530 =	<u>6400</u> =	1 U	250 U	110 =
Ethylbenzene	28,718	1300	<u>1600</u> =	<u>1400</u> =	370 =	<u>1800</u> =	1 U	150 J	830 =
Xylene (total)	NRC	12000	7700 =	6600 =	1650 =	7800 =	2 U	8300 =	3720 =
POLYNUCLEAR AROMATIC HYDROCARBONS									
1-Methylnaphthalene	-		*	*	*	*	*	*	*
2-Methylnaphthalene	-		*	*	*	*	*	*	*
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	1460	*	*	*	*	*	*	*
Fluorene	14,000	243	*	*	*	*	*	*	*
Indeno(1,2,3-cd)pyrene	0.0311	0.092	*	*	*	*	*	*	*
Naphthalene	-	6.5	*	*	*	*	*	*	*
Phenanthrene ^b	-	182.5	*	*	*	*	*	*	*
Pyrene	11,000	182.5	*	*	*	*	*	*	*

^a Protective of tap water ingestion by a resident.^b Values based on pyrene as a surrogate chemical.

* PAH analysis not performed on samples collected in November 1999, if a sample was collected from the well in 1996.

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 13. Former Pumphouse #1 Tank Pit Area - Groundwater Data Risk-based Screening Results (continued)

Station:	Screening Levels		P1-MW36	P1-MW40	P1-MW40	P1-MW40	P1-MW40	P1-MW40	D-MW05	D-MW16
Sample ID:			PH1- MW3601	PH1- MW4001	PH1- MW4002	PH1- MW4003	PH1- MW4004	PH1- MW4004	H833- MW0502	H833- MW1602
Screened Interval (ft BGS):			7.7-17.7	3.8 - 33.8	3.8 - 33.8	3.8 - 33.8	3.8 - 33.8	3.8 - 33.8	6.5 - 16.5	4.9 - 14.9
Collection Date:	IWQS	Risk-based ^a	11/02/1999	11/03/1999	11/04/1999	11/05/1999	11/05/1999	11/05/1999	11/03/1999	11/03/1999
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
<i>VOLATILE ORGANIC COMPOUNDS</i>										
Benzene	71	0.36	<u>1</u> U	<u>160</u> =	<u>510</u> =	<u>490</u> =	<u>500</u> =	<u>500</u> =	<u>3400</u> =	<u>1</u> U
Toluene	200,000	750	1 U	200 =	62 =	100 U	55 =	55 =	<u>2000</u> =	1 U
Ethylbenzene	28,718	1300	1 U	1200 =	380 =	370 =	400 =	400 =	1200 =	1 U
Xylene (total)	NRC	12000	2 U	5520 =	3030 =	3020 =	3230 =	3230 =	5250 =	2 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>										
1-Methylnaphthalene	-		1 U	1 U	*	*	*	*	*	*
2-Methylnaphthalene	-		1 U	1 U	*	*	*	*	*	*
Acenaphthene	-	365	1 U	1 U	*	*	*	*	*	*
Acenaphthylene	-	182.5	1 U	1 U	*	*	*	*	*	*
Anthracene	110,000	182.5	0.2 U	0.2 U	*	*	*	*	*	*
Benzo(a)anthracene	0.0311	0.092	<u>0.2</u> U	<u>0.2</u> U	*	*	*	*	*	*
Benzo(a)pyrene	0.0311	0.0092	<u>0.2</u> U	<u>0.2</u> U	*	*	*	*	*	*
Benzo(b)fluoranthene	-	0.092	<u>0.2</u> U	<u>0.2</u> U	*	*	*	*	*	*
Benzo(g,h,i)perylene	-	-	0.5 U	0.5 U	*	*	*	*	*	*
Benzo(k)fluoranthene	0.0311	0.92	0.2 U	0.2 U	*	*	*	*	*	*
Chrysene	0.0311	9.2	0.2 U	0.2 U	*	*	*	*	*	*
Dibenzo(a,h)anthracene	0.0311	0.0092	<u>0.2</u> U	<u>0.2</u> U	*	*	*	*	*	*
Fluoranthene	370	1460	0.5 U	0.5 U	*	*	*	*	*	*
Fluorene	14,000	243	0.5 U	0.5 U	*	*	*	*	*	*
Indeno(1,2,3-cd)pyrene	0.0311	0.092	<u>0.2</u> U	<u>0.2</u> U	*	*	*	*	*	*
Naphthalene	-	6.5	1 U	2.1 =	*	*	*	*	*	*
Phenanthrene ^b	-	182.5	0.2 U	0.2 U	*	*	*	*	*	*
Pyrene	11,000	182.5	0.5 U	0.5 U	*	*	*	*	*	*

^a Protective of tap water ingestion by a resident.^b Values based on pyrene as a surrogate chemical.

* PAH analysis not performed on samples collected in November 1999, if a sample was collected from the well in 1996.

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 14. Former Pumphouse #1 Tank Pit Area – Surface Water Data Risk-based Screening Results

Station:	Screening	P1-SWE07	P1-SWE08	P1-SWE09	P1-SE10	P1-SW5	P1-SW6	P1-SW7	P1-SW8	P1-SW9
Sample ID:	Levels	HT4-SW07	HT4-SW08	HT4-SW09	HT4-SW10	PH1-SW1	PH1-SW2	PH1-SW3	PH1-SW4	PH1-SWE07
Sample Date:	IWQS	12/10/1996	12/10/1996	12/10/1996	12/10/1996	02/17/1999	02/17/1999	02/17/1999	02/17/1999	02/17/1999
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
VOLATILE ORGANIC COMPOUNDS										
Benzene	71.28	19 J	5.2 J	1 J	1 U	1 U	1 U	11.1 =	9 =	8.5 =
Toluene	200,000	230 J	50 J	1.8 =	1 U	1 U	1 U	96 =	144 =	185 =
Ethylbenzene	28,718	30 J	3.8 J	1 U	1 U	1 U	1 U	36.4 =	5.4 =	32 =
Xylenes	--	270 J	55 J	3.1 J	2 U	2 U	2 U	76.8 =	133.8 =	182.5 =
POLYNUCLEAR AROMATIC HYDROCARBONS										
1-Methylnaphthalene	--	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U
2-Methylnaphthalene	--	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U
Acenaphthene	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Acenaphthylene	--	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U
Anthracene	110,000	0.2 U	0.2 U	0.2 U	0.2 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Benzo(a)anthracene	0.0311	0.2 U	0.2 U	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	0.0311	0.2 U	0.2 U	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzo(g,h,i)perylene	--	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Benzo(k)fluoranthene	0.0311	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chrysene	0.0311	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibenzo(a,h)anthracene	0.0311	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Fluoranthene	370	0.5 U	0.5 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Fluorene	14,000	0.5 U	0.5 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Indeno(1,2,3-cd)pyrene	0.0311	0.5 U	0.5 U	0.2 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Naphthalene	NRC	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Pyrene	11,000	0.5 U	0.5 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

Bold values indicate results exceeding Georgia In-Stream Water Quality Standards.

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 15. AT123D Predicted Maximum Concentrations at the
Former Pumphouse #1 Monitoring Well Locations**

Former Fuel Pit 1A/DAACG Area (Release #1)			Former Pumphouse #1 Tank Pit Area (Release #2)		
Station ID	Benzene Concentrations in Groundwater (µg/L)		Station ID	Benzene Concentrations in Groundwater (µg/L)	
	Predicted 2-Yr Maximum ^a	Observed (1999/2000)		Predicted 2-Yr Maximum ^b	Observed (1999/2000)
D-MW01	1,720	105	D-MW05	5,990	4,580
D-MW02	12,500	NS	D-MW06	5,990	NS
D-MW03	1.5	NS	D-MW07 ^c	129	NS
D-MW08	11,700	418	D-MW15 ^c	0.0	NS
D-MW09	30.3	NS	D-MW16 ^c	0.0	<1
D-MW11	6,310	398	P1-MW17	39.5	NS
D-MW12	12,500	NS	P1-MW18	638	<25
D-MW13	8,740	<10	P1-MW19	1,300	200
D-MW14	45.9	NS	P1-MW20	931	<1
D-MW17	12,500	138	P1-MW22	5,990	<250
D-MW18	1,130	NS	P1-MW23	723	330
D-MW19	12,400	NS	P1-MW24	931	NS
D-MW20	305	NS	P1-MW36	351	<1
D-MW21	2,850	NS	P1-MW40	5,990	540
D-MW22	1,210	NS			
P1-MW13	4.4	<10			
P1-MW14	0.0	NS			
P1-MW15	0.0	NS			
P1-MW16	0.06	NS			
P1-MW42	0.26	<1			

^a It should be noted here that the predicted maximum concentrations at the well locations are based on the assumption of a continuous, steady-state source of 12,500 µg/L and that groundwater is moving towards the well. This is a highly conservative assumption for many well locations that are upgradient of the source based on groundwater flow direction.

^b It should be noted here that the predicted maximum concentrations at the well locations are based on the assumption of a continuous, steady-state source of 5,990 µg/L and that groundwater is moving towards the well. This is a highly conservative assumption for many well locations that are upgradient of the source based on groundwater flow direction.

^c Well location that is considered upgradient or cross gradient of the source based on groundwater flow direction.

NS - Not sampled in November 1999 or February 2000.

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 UST 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 Former Pumphouse #1 site. The information presented in this section provides the supporting documentation for Section II.B.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:

- 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 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 U.S. Geological Survey (USGS) database search. A summary of the information obtained from the survey is provided in the following sections.

1.1.1 Fort Stewart Directorate of Public Works Survey Summary

According to the DPW, nine water supply wells are located within the confines of the HAAF area. These wells have the potential to provide up to 3,890 gpm of water to occupants of the HAAF installation. The Fort Stewart DPW was unable to provide documentation listing the companies responsible for well installation and drillers' logs showing as-built information and subsurface geologic data. The DPW provided well locations, pump 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 Former Pumphouse #1 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 Lightning 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 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.

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

Four City of Savannah water supply wells are located outside the boundary of HAAF, within two miles of the Former Pumphouse #1 site. The closest of these wells is Well 15, which is located 1.5 miles south of the site. 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 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 (GA EPD 1998a). 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 FORMER PUMPHOUSE #1 SITE

M&E conducted a field potential receptor survey for the Former Pumphouse #1 site. The site and adjacent areas were surveyed for locations of surface water bodies, utility lines, and basements. Basements do not exist in the buildings adjacent to the site. Additional information, provided by the Fort Stewart DPW, was used to determine the location of the nearest public supply wells and downgradient surface water bodies not located during the field survey.

1.3.1 Water Supply Wells Near the Former Pumphouse #1 Site

The following information is presented to provide supplemental information to Section II.B.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 Former Pumphouse #1 site.

- Well 1, located on the corner of Moore Road and Douglas Street, at Building 711, is located approximately 5,700 feet north (upgradient) of the Former Pumphouse #1 site.
- Well 2, located at Building 1205 on the corner of Neal Street and Lightning Road, is located approximately 4,200 feet northeast (upgradient) of the Former Pumphouse #1 site.
- Well 3, located at Building 8455, is approximately 6,700 feet southwest (downgradient) of the Former Pumphouse #1 site.

Therefore, the Former Pumphouse #1 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. Well 1 is being sampled as part of the Former Building 710, Facility ID#9-025029 monitoring program and has not contained any benzene, toluene, ethylbenzene, xylenes or polynuclear aromatic hydrocarbons.

1.3.2 Surface Water Bodies Near the Former Pumphouse #1 Site

A man-made drainage ditch is located approximately 250 feet south of the Former Pumphouse #1 site. The man-made surface water drainage feature flows west toward Lamar Canal, which is located approximately 7,000 feet west of the Former Pumphouse #1 site. The surface water then flows to the southwest until it reaches Springfield Canal, which eventually joins the Little Ogeechee River more than 3 miles downstream of the site. Because of the ditch 160 feet southeast of the Former Pumphouse #1 site, the site is classified as being less than 500 feet to a downgradient surface water body.

1.3.3 Underground Utilities at the Former Pumphouse #1 Site

There are numerous underground water, electrical, and abandoned fuel lines that connect the former fuel pits located at the edge of the taxiway north of the former tank pits. These underground lines are located upgradient of the area of contamination around the former tank pits and are located within the area of contamination near Former Fuel Pit 1A/DAACG area. The invert depth of the former fuel transfer line in the vicinity of Fuel Pit 1A is approximately 6.4 feet BGS. There are two monitoring wells that are located in the vicinity of Fuel Pit 1A, and in November 1999, the depths to groundwater in these wells were 8.74 feet in P1-MW11 and 9.22 feet in P1-MW13. Thus, the invert depth of the former fuel transfer line is located approximately 2.0 feet above the water table. The water and electrical lines run adjacent to the former fuel transfer line. It is estimated that the invert depths of these utilities are no more than 5 feet BGS.

The invert depth of the former fuel transfer line in the vicinity of Fuel Pit 1C, which is located north of the former tank pit area, is approximately 7.6 feet BGS. There are two monitoring wells that are located in the vicinity of Fuel Pit 1C, and in November 1999, the depths to groundwater in these wells were 8.71 feet in P1-MW3 and 8.83 feet in P1-MW22. Thus, the invert depth of the former fuel transfer line is located approximately 1.0 feet above the water table. The water and electrical lines run adjacent to the former fuel transfer line. It is estimated that the invert depths of these utilities are no more than 5 feet BGS.

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

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: TBD = to be determined

APPENDIX IV

SOIL BORING LOGS

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**FORMER PUMPHOUSE #1 CAP-PART A
BORING LOGS**

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**FORMER PUMPHOUSE #1 CAP-PART B
BORING LOGS**

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DAACG FACILITY CAP-PART B BORING LOGS

Note: The “H833” prefix provided in these boring logs has been replaced with a “D” prefix throughout this document.

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APPENDIX V

SOIL AND SEDIMENT LABORATORY RESULTS

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**FORMER PUMPHOUSE #1 CAP-PART A
SOIL ANALYTICAL RESULTS**

NOVEMBER 1996

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Table V-A. Summary of Former Pumphouse #1 CAP-Part A Soil Analytical Results

Station:	GUST	P1-MW01	P1-MW01	P1-MW02	P1-MW02	P1-MW03	P1-MW03
Sample ID:	Soil	WB0101	WB0102	WB0201	WB0202	WB0301	WB0302
Sample Interval (ft BGS):	Threshold	8.0 - 10.0	13.0 - 15.0	8.0 - 10.0	13.0 - 15.0	8.0 - 10.0	13.0 - 15.0
Sample Date:	Levels ¹	11/18/1996	11/18/1996	11/18/1996	11/18/1996	11/19/1996	11/19/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	3 J	0.0003 U	0.59 J	0.0015 U	2.9 U	0.03 U
Toluene	115	15 J	0.45 =	1.3 J	0.07 J	160 J	9.8 J
Ethylbenzene	18	19 J	0.062 =	1.4 =	0.53 J	96 J	6.1 J
Xylenes, total	700	130 J	0.37 =	8.4 =	1.2 J	260 J	19 J
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.36 U	0.42 U	0.38 U	0.40 U	0.40 U	0.41 U
2-Methylnaphthalene	NRC	0.36 U	0.42 U	0.38 U	0.40 U	0.40 U	0.41 U
Acenaphthene	NRC	0.36 U	0.42 U	0.38 U	0.40 U	0.40 U	0.41 U
Acenaphthylene	NRC	a	a	a	a	a	a
Anthracene	NRC	b	b	b	b	b	b
Benzo(a)anthracene	0.660	0.36 U	0.42 U	0.38 U	0.40 U	0.40 U	0.41 U
Benzo(a)pyrene	0.660	0.36 U	0.42 U	0.38 U	0.40 U	0.40 U	0.61 =
Benzo(b)fluoranthene	0.660	0.36 U	0.42 U	0.38 U	0.40 U	0.40 U	0.41 U
Benzo(g,h,i)perylene	NRC	c	c	c	c	c	c
Benzo(k)fluoranthene	0.660	0.42 =	0.42 U	0.38 U	0.40 U	0.40 U	0.60 =
Chrysene	0.660	d	d	d	d	d	d
Dibenzo(a,h)anthracene	0.660	0.84 =	0.42 U	0.38 U	0.40 U	0.42 =	1.1 =
Fluoranthene	NRC	0.36 U	0.42 U	0.38 U	0.40 U	0.40 U	0.41 U
Fluorene	NRC	0.36 U	0.42 U	0.38 U	0.40 U	0.40 U	0.41 U
Indeno(1,2,3-cd)pyrene	0.660	0.36 U	0.42 U	0.38 U	0.40 U	0.40 U	0.41 U
Naphthalene	NRC	0.36 U	0.42 U	0.38 U	0.40 U	0.40 U	0.41 U
Phenanthrene	NRC	1.1 =	0.42 U	0.38 U	0.40 U	0.40 U	0.58 =
Pyrene	NRC	0.65 =	0.42 U	0.38 U	0.40 U	0.40 U	0.70 =
<i>OTHER ANALYTES</i>							
TPH-DRO	NRC	50 =	15 =	11 U	12 U	23 J	27 J
TPH-GRO	NRC	4000 J	3.4 =	1200 J	200 J	21000 J	1400 J

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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 Former Pumphouse #1 CAP-Part A Soil Analytical Results (continued)

Station:	GUST	P1-MW11	P1-MW11	P1-MW12	P1-MW12	P1-SB01	P1-SB01
Sample ID:	Soil	WB1101	WB1102	WB1201	WB1202	SB0101	SB0102
Sample Interval (ft BGS):	Threshold	8.0 - 10.0	13.0 - 15.0	8.0 - 10.0	13.0 - 15.0	4.0 - 6.0	8.0 - 10.0
Sample Date:	Levels ¹	11/21/1996	11/21/1996	11/21/1996	11/21/1996	11/18/1996	11/18/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	3.1 U	0.57 U	0.048 U	0.0003 U	0.16 J	0.0014 U
Toluene	115	41 U	7.6 U	0.77 U	0.0040 U	0.63 =	0.019 =
Ethylbenzene	18	71 J	14 J	0.72 U	0.0037 U	0.67 =	0.052 =
Xylenes, total	700	84 J	13 J	1.9 J	0.0014 U	5.7 =	0.082 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	2.1 U	0.39 U	0.40 U	0.41 U	0.37 U	0.38 U
2-Methylnaphthalene	NRC	2.1 U	0.39 U	0.40 U	0.41 U	0.37 U	0.38 U
Acenaphthene	NRC	2.1 U	0.39 U	0.40 U	0.41 U	0.37 U	0.38 U
Acenaphthylene	NRC	2.1 U	0.39 U	0.40 U	0.41 U	0.37 U	0.38 U
Anthracene	NRC	a	a	a	a	a	a
Benzo(a)anthracene	0.660	b	b	b	b	b	b
Benzo(a)pyrene	0.660	2.1 U	0.39 U	0.40 U	0.41 U	0.37 U	0.38 U
Benzo(b)fluoranthene	0.660	3.9 J	0.39 U	0.40 U	0.41 U	0.52 =	0.38 U
Benzo(g,h,i)perylene	NRC	2.1 U	0.39 U	0.40 U	0.41 U	0.37 U	0.38 U
Benzo(k)fluoranthene	0.660	c	c	c	c	c	c
Chrysene	0.660	5.4 J	0.39 U	0.40 U	0.41 U	0.37 U	0.55 =
Dibenzo(a,h)anthracene	0.660	d	d	d	d	d	d
Fluoranthene	NRC	2.1 U	0.39 U	0.40 U	0.41 U	0.47 =	0.47 =
Fluorene	NRC	2.1 U	0.39 U	0.40 U	0.41 U	0.37 U	0.38 U
Indeno(1,2,3-cd)pyrene	0.660	2.1 U	0.39 U	0.40 U	0.41 U	0.37 U	0.38 U
Naphthalene	NRC	2.1 U	0.39 U	0.40 U	0.41 U	0.37 U	0.38 U
Phenanthrene	NRC	2.1 U	0.39 U	0.40 U	0.41 U	0.52 =	0.42 =
Pyrene	NRC	2.1 U	0.39 U	0.40 U	0.41 U	0.37 U	0.39 =
<i>OTHER ANALYTES</i>							
TPH-DRO	NRC	150 J	15 =	33 =	12 U	85 =	45 =
TPH-GRO	NRC	20000 J	7800 J	200 =	0.22 U	210 J	17 =

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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 Former Pumphouse #1 CAP-Part A Soil Analytical Results (continued)

Station:	GUST	P1-SB02	P1-SB02	P1-SB03	P1-SB03	P1-SB04	P1-SB04
Sample ID:	Soil	SB0201	SB0202	SB0301	SB0302	SB0401	SB0402
Sample Interval (ft BGS):	Threshold	4.0 - 6.0	8.0 - 10.0	4.0 - 6.0	8.0 - 10.0	4.0 - 6.0	8.0 - 10.0
Sample Date:	Levels ¹	11/18/1996	11/18/1996	11/18/1996	11/18/1996	11/18/1996	11/18/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.062 U	0.0014 U	2.1 J	5.5 J	0.26 J	3 J
Toluene	115	0.82 U	0.019 U	16 J	9.7 J	2.6 J	53 J
Ethylbenzene	18	0.77 U	0.07 J	8.2 J	16 J	1.5 =	14 J
Xylenes, total	700	0.9 J	0.032 J	34 J	68 J	10 =	73 J
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.42 U	0.40 U	0.36 U	0.41 U	0.38 U	0.41 U
2-Methylnaphthalene	NRC	0.42 U	0.40 U	0.36 U	0.41 U	0.38 U	0.41 U
Acenaphthene	NRC	0.42 U	0.40 U	0.36 U	0.41 U	0.38 U	0.41 U
Acenaphthylene	NRC	0.42 U	0.40 U	0.36 U	0.41 U	0.38 U	0.41 U
Anthracene	NRC	a	a	a	a	a	a
Benzo(a)anthracene	0.660	b	b	b	b	b	b
Benzo(a)pyrene	0.660	0.42 U	0.40 U	0.36 U	0.41 U	0.38 U	0.41 U
Benzo(b)fluoranthene	0.660	0.76 J	0.40 U	0.36 U	0.41 U	0.38 U	0.41 U
Benzo(g,h,i)perylene	NRC	0.42 U	0.40 U	0.36 U	0.41 U	0.38 U	0.41 U
Benzo(k)fluoranthene	0.660	c	c	c	c	c	c
Chrysene	0.660	0.42 U	0.40 U	0.36 U	0.41 U	0.38 U	0.41 U
Dibenzo(a,h)anthracene	0.660	d	d	d	d	d	d
Fluoranthene	NRC	0.46 J	0.40 U	0.36 U	0.41 U	0.38 U	0.41 U
Fluorene	NRC	0.42 U	0.40 U	0.36 U	0.41 U	0.38 U	0.41 U
Indeno(1,2,3-cd)pyrene	0.660	0.42 U	0.40 U	0.36 U	0.41 U	0.38 U	0.41 U
Naphthalene	NRC	0.42 U	0.40 U	0.36 U	0.41 U	0.38 U	0.41 U
Phenanthrene	NRC	0.42 U	0.53 J	0.36 U	0.41 U	0.38 U	0.41 U
Pyrene	NRC	0.42 U	0.40 U	0.36 U	0.41 U	0.38 U	0.41 U
<i>OTHER ANALYTES</i>							
TPH-DRO	NRC	140 J	44 J	26 =	18 J	11 U	24 =
TPH-GRO	NRC	370 J	99 J	4700 J	2100 J	1000 J	7200 J

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- NRC No regulatory criteria

Laboratory Qualifiers

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- UJ Indicates that the compound was not detected above an approximated sample quantitation limit.
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Table V-A. Summary of Former Pumphouse #1 CAP-Part A Soil Analytical Results (continued)

Station:	GUST	P1-SB05	P1-SB05	P1-SB06	P1-SB06	P1-SB07	P1-SB07
Sample ID:	Soil	SB0501	SB0502	SB0601	SB0602	SB0701	SB0702
Sample Interval (ft BGS):	Threshold	4.0 - 6.0	8.0 - 10.0	4.0 - 6.0	10.0 - 12.0	4.0 - 6.0	10.0 - 12.0
Sample Date:	Levels ¹	11/18/1996	11/18/1996	11/18/1996	11/18/1996	11/19/1996	11/19/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0015 U	0.13 J	0.00029 U	1.6 J	0.00028 U	0.00029 U
Toluene	115	0.59 =	0.3 U	0.0041 J	3.1 J	0.0038 U	0.022 =
Ethylbenzene	18	0.1 =	0.29 U	0.0032 J	6.3 J	0.0067 =	0.022 =
Xylenes, total	700	0.61 =	0.37 J	0.0084 =	30 J	0.046 =	0.13 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.40 U	0.39 U	0.40 U	0.39 U	0.39 U	0.40 U
2-Methylnaphthalene	NRC	0.40 U	0.39 U	0.40 U	0.39 U	0.39 U	0.40 U
Acenaphthene	NRC	0.40 U	0.39 U	0.40 U	0.39 U	0.39 U	0.40 U
Acenaphthylene	NRC	0.40 U	0.39 U	0.40 U	0.39 U	0.39 U	0.40 U
Anthracene	NRC	a	a	a	a	a	a
Benzo(a)anthracene	0.660	b	b	b	b	b	b
Benzo(a)pyrene	0.660	0.40 U	0.39 U	0.40 U	0.39 U	0.39 U	0.40 U
Benzo(b)fluoranthene	0.660	0.40 U	0.39 U	0.62 =	1.1 =	1.6 =	0.40 U
Benzo(g,h,i)perylene	NRC	0.40 U	0.39 U	0.40 U	0.39 U	0.55 =	0.40 U
Benzo(k)fluoranthene	0.660	c	c	c	c	c	c
Chrysene	0.660	0.40 U	0.39 U	0.40 U	0.39 U	0.39 U	0.52 =
Dibenzo(a,h)anthracene	0.660	d	d	d	d	d	d
Fluoranthene	NRC	0.40 U	0.39 U	0.40 U	0.74 =	0.39 U	0.40 U
Fluorene	NRC	0.40 U	0.39 U	0.40 U	0.39 U	0.39 U	0.40 U
Indeno(1,2,3-cd)pyrene	0.660	0.40 U	0.39 U	0.40 U	0.53 =	0.39 U	0.40 U
Naphthalene	NRC	0.40 U	0.39 U	0.40 U	0.39 U	0.39 U	0.40 U
Phenanthrene	NRC	0.40 U	0.39 U	0.40 U	0.39 U	0.39 U	0.40 U
Pyrene	NRC	0.40 U	0.39 U	0.40 U	0.39 U	0.39 U	0.40 U
<i>OTHER ANALYTES</i>							
TPH-DRO	NRC	52 =	180 J	130 J	24 =	92 J	12 UJ
TPH-GRO	NRC	5.6 J	88 J	1.2 J	5000 J	0.31 =	1.8 =

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- NRC No regulatory criteria

Laboratory Qualifiers

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Table V-A. Summary of Former Pumphouse #1 CAP-Part A Soil Analytical Results (continued)

Station:	GUST	P1-SB08	P1-SB08	P1-SB19	P1-SB19	P1-SB20	P1-SB20
Sample ID:	Soil	SB0801	SB0802	SB1901	SB1902	SB2001	SB2002
Sample Interval (ft BGS):	Threshold	4.0 - 6.0	10.0 - 12.0	4.0 - 6.0	6.0 - 8.0	4.0 - 6.0	6.0 - 8.0
Sample Date:	Levels ¹	11/19/1996	11/19/1996	11/20/1996	11/20/1996	11/20/1996	11/20/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.00028 U	0.0003 U	0.0056 U	0.0063 U	0.18 J	6.2 U
Toluene	115	0.0038 U	0.004 U	0.0056 U	0.0063 U	0.22 J	1.3 J
Ethylbenzene	18	0.0036 U	0.0037 U	0.0056 U	0.0063 U	5.9 =	34 =
Xylenes, total	700	0.0039 J	0.0012 J	0.0056 U	0.0063 U	46 =	220 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.39 U	0.41 U	0.37 U	0.42 U	0.38 U	0.58 =
2-Methylnaphthalene	NRC	0.39 U	0.41 U	0.37 U	0.42 U	0.38 U	0.95 =
Acenaphthene	NRC	0.39 U	0.41 U	0.37 U	0.42 U	0.38 U	0.40 U
Acenaphthylene	NRC	0.39 U	0.41 U	0.37 U	0.42 U	0.38 U	0.40 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.39 U	0.41 U	0.37 U	0.42 U	0.38 U	0.40 U
Benzo(b)fluoranthene	0.660	1.6 =	0.41 U	0.37 U	0.42 U	0.38 U	0.40 U
Benzo(g,h,i)perylene	NRC	1.5 =	0.41 U	0.37 U	0.42 U	0.38 U	0.40 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	1.2 =	0.41 U	0.37 U	0.42 U	0.38 U	0.40 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.39 U	0.41 U	0.37 U	0.42 U	0.38 U	0.40 U
Fluorene	NRC	0.39 U	0.41 U	0.37 U	0.42 U	0.38 U	0.40 U
Indeno(1,2,3-cd)pyrene	0.660	0.39 U	0.41 U	0.37 U	0.42 U	0.38 U	0.40 U
Naphthalene	NRC	0.39 U	0.41 U	0.37 U	0.42 U	0.38 U	1.1 =
Phenanthrene	NRC	0.39 U	0.41 U	0.37 U	0.42 U	0.38 U	0.40 U
Pyrene	NRC	0.39 U	0.41 U	0.37 U	0.42 U	0.38 U	0.40 U
<i>OTHER ANALYTES</i>							
TPH-DRO	NRC	12 UJ	12 UJ	22 =	4.2 =	140 =	550 =
TPH-GRO	NRC	4.2 =	0.22 U	0.28 U	0.51 =	800 J	4000 J

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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 Former Pumphouse #1 CAP-Part A Soil Analytical Results (continued)

Station:	GUST	P1-SB21	P1-SB21	P1-SB22	P1-SB22	P1-SB23	P1-SB23
Sample ID:	Soil	SB2101	SB2102	SB2201	SB2202	SB2301	SB2302
Sample Interval (ft BGS):	Threshold	1.0 - 3.0	9.0 - 11.0	6.0 - 8.0	8.0 - 10.0	5.0 - 7.0	7.0 - 9.0
Sample Date:	Levels ¹	11/20/1996	11/20/1996	11/20/1996	11/20/1996	11/21/1996	11/21/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0052 U	0.0066 U	0.0052 U	0.26 J	0.00027 U	0.00028 U
Toluene	115	0.038 =	0.0078 =	0.0052 U	10 J	0.0036 U	0.0037 U
Ethylbenzene	18	0.0052 U	0.0066 U	0.0052 U	5.3 J	0.0033 U	0.0035 U
Xylenes, total	700	0.0082 =	0.008 =	0.0052 U	38 J	0.0026 J	0.0015 J
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
2-Methylnaphthalene	NRC	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
Acenaphthene	NRC	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
Acenaphthylene	NRC	0.35 U _a	0.44 U _a	0.34 U _a	0.39 U _a	0.37 U _a	0.38 U _a
Anthracene	NRC						
Benzo(a)anthracene	0.660	b	b	b	b	b	b
Benzo(a)pyrene	0.660	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
Benzo(b)fluoranthene	0.660	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
Benzo(g,h,i)perylene	NRC	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
Benzo(k)fluoranthene	0.660	c	c	c	c	c	c
Chrysene	0.660	0.35 U _d	0.44 U _d	0.34 U _d	0.39 U _d	0.37 U _d	0.38 U _d
Dibenzo(a,h)anthracene	0.660						
Fluoranthene	NRC	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
Fluorene	NRC	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
Indeno(1,2,3-cd)pyrene	0.660	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
Naphthalene	NRC	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
Phenanthrene	NRC	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
Pyrene	NRC	0.35 U	0.44 U	0.34 U	0.39 U	0.37 U	0.38 U
<i>OTHER ANALYTES</i>							
TPH-DRO	NRC	5.3 =	11 =	8.3 =	23 =	13 =	18 =
TPH-GRO	NRC	0.26 U	1400 J	0.26 U	630 J	0.2 U	0.2 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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 Former Pumphouse #1 CAP-Part A Soil Analytical Results (continued)

Station:	GUST	P1-SB24	P1-SB24
Sample ID:	Soil	SB2401	SB2402
Sample Interval (ft BGS):	Threshold	5.0 - 7.0	9.0 - 11.0
Sample Date:	Levels ¹	11/21/1996	11/21/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>			
Benzene	0.017	0.00026 U	0.0003 U
Toluene	115	0.008 J	0.004 U
Ethylbenzene	18	0.0033 U	0.0037 U
Xylenes, total	700	0.0041 J	0.0023 J
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>			
1-Methylnaphthalene	NRC	0.36 U	0.41 U
2-Methylnaphthalene	NRC	0.36 U	0.41 U
Acenaphthene	NRC	0.36 U	0.41 U
Acenaphthylene	NRC	0.36 U	0.41 U
Anthracene	NRC	^a	^a
Benzo(a)anthracene	0.660	^b	^b
Benzo(a)pyrene	0.660	0.97 =	0.41 U
Benzo(b)fluoranthene	0.660	1.8 =	0.41 U
Benzo(g,h,i)perylene	NRC	0.71 =	0.55 =
Benzo(k)fluoranthene	0.660	^c	^c
Chrysene	0.660	2.2 =	0.41 U
Dibenzo(a,h)anthracene	0.660	^d	^d
Fluoranthene	NRC	2.4 =	0.41 U
Fluorene	NRC	0.73 =	0.41 U
Indeno(1,2,3-cd)pyrene	0.660	0.57 =	0.41 U
Naphthalene	NRC	0.36 U	0.41 U
Phenanthrene	NRC	2.9 =	0.41 U
Pyrene	NRC	1.8 =	0.41 U
<i>OTHER ANALYTES</i>			
TPH-DRO	NRC	11 U	12 U
TPH-GRO	NRC	0.2 U	0.22 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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.

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Insert 1996 CAP-Part A soil laboratory data sheets here (pages V-13 to V-77)

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**FORMER PUMPHOUSE #1 CAP-PART A
SEDIMENT ANALYTICAL RESULTS**

DECEMBER 1996

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Table V-B. Summary of Former Pumphouse #1 CAP-Part A Sediment Analytical Results

Station:	GUST	P1-SWE07	P1-SWE08	P1-SWE09	P1-SWE10
Sample ID:	Soil	HT4-SE07	HT4-SE08	HT4-SE09	HT4-SE10
Sample Interval (ft BGS):	Threshold	0.0	0.0	0.0	0.0
Sample Date:	Levels ¹	12/10/1996	12/10/1996	12/10/1996	12/10/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>					
Benzene	0.017	0.62 U	0.011 U	0.0094 U	0.013 U
Toluene	115	0.62 U	0.011 U	0.0094 U	0.013 U
Ethylbenzene	18	0.62 U	0.011 U	0.0094 U	0.013 U
Xylenes	700	0.62 U	0.011 U	0.0094 U	0.013 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>					
1-Methylnaphthalene	NRC	0.51 U	0.70 U	0.62 U	0.85 U
2-Methylnaphthalene	NRC	0.51 U	0.70 U	0.62 U	0.85 U
Acenaphthene	NRC	0.51 U	0.70 U	0.62 U	0.85 U
Acenaphthylene	NRC	0.51 U	0.70 U	0.62 U	0.85 U
Anthracene	NRC	a	a	a	a
Benzo(a)anthracene	0.660	b	b	b	b
Benzo(a)pyrene	0.660	0.6 =	0.70 U	1.0 =	1.9 =
Benzo(b)fluoranthene	0.660	0.51 U	0.70 U	2.4 =	3.6 =
Benzo(g,h,i)perylene	NRC	0.51 U	0.70 U	1.8 =	2.3 =
Benzo(k)fluoranthene	0.660	c	c	c	c
Chrysene	0.660	0.51 U	0.70 U	1.9 =	2.7 =
Dibenzo(a,h)anthracene	0.660	d	d	d	d
Fluoranthene	NRC	0.51 U	0.70 U	1.7 =	1.9 =
Fluorene	NRC	0.51 U	0.70 U	0.62 U	0.85 U
Indeno(1,2,3-cd)pyrene	0.660	0.51 U	0.70 U	0.8 =	1.3 =
Naphthalene	NRC	0.51 U	0.70 U	0.62 U	0.85 U
Phenanthrene	NRC	0.51 U	0.70 U	1.2 =	0.85 U
Pyrene	NRC	0.51 U	0.70 U	1.6 J	2.0 J
<i>OTHER ANALYTES</i>					
TPH-DRO	NRC	15 U	21 U	24 =	26 U
TPH-GRO	NRC	130 J	0.38 U	0.34 U	0.98 J

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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.

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Insert CAP-Part A sediment laboratory data sheets (pages V-83 to V-95)

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FORMER PUMPHOUSE #1 CAP-PART B
SOIL ANALYTICAL RESULTS
MAY 1997 & SEPTEMBER 1999

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Table V-C. Summary of Former Pumphouse #1 CAP-Part B Soil Analytical Results

Station:	GUST	P1-MW13	P1-MW13	P1-MW14	P1-MW14	P1-MW15	P1-MW15
Sample ID:	Soil	WB1301	WB1302	WB1401	WB1402	WB1501	WB1502
Sample Interval (ft BGS):	Threshold	05/12/1997	05/12/1997	05/12/1997	05/12/1997	05/12/1997	05/12/1997
Sample Date:	Levels ¹	8.0 - 10.0	13.0 - 15.0	4.0 - 6.0	8.0 - 10.0	4.0 - 6.0	8.0 - 10.0
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.022 UJ	0.0014 U	0.0056 U	0.0059 U	0.0059 U	0.0062 U
Toluene	115	0.5 J	0.39 J	0.0056 U	0.05 =	0.0094 =	0.0062 U
Ethylbenzene	18	5.8 J	1.0 =	0.0056 U	0.014 =	0.0059 U	0.0062 U
Xylene (total)	700	5.1 J	1.7 =	0.0056 U	0.059 =	0.0062 =	0.0072 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.38 U	0.4 U	0.37 U	0.39 U	0.39 U	0.41 U
2-Methylnaphthalene	NRC	0.38 U	0.4 U	0.37 U	0.39 U	0.39 U	0.41 U
Acenaphthene	NRC	0.38 U	0.4 U	0.37 U	0.39 U	0.39 U	0.41 U
Acenaphthylene	NRC	0.38 U	0.4 U	0.37 U	0.39 U	0.39 U	0.41 U
Anthracene	NRC	a	a	a	a	a	a
Benzo(a)anthracene	0.660	b	b	b	b	b	b
Benzo(a)pyrene	0.660	0.38 U	0.4 U	0.37 U	0.39 U	0.24 J	0.41 U
Benzo(b)fluoranthene	0.660	0.38 U	0.4 U	0.37 U	0.39 U	0.39 U	0.41 U
Benzo(g,h,i)perylene	NRC	0.38 U	0.4 U	0.37 U	0.39 U	0.23 J	0.41 U
Benzo(k)fluoroanthene	0.660	c	c	c	c	c	c
Chrysene	0.660	0.38 U	0.4 U	0.37 U	0.39 U	0.39 U	0.41 U
Dibenzo(a,h)anthracene	0.660	d	d	d	d	d	d
Fluoranthene	NRC	0.38 U	0.4 U	0.37 U	0.39 U	0.31 J	0.41 U
Fluorene	NRC	0.38 U	0.4 U	0.37 U	0.39 U	0.058 J	0.41 U
Indeno(1,2,3-cd)pyrene	0.660	0.38 U	0.4 U	0.37 U	0.39 U	0.2 J	0.41 U
Naphthalene	NRC	0.38 U	0.4 U	0.37 U	0.39 U	0.39 U	0.41 U
Phenanthrene	NRC	0.38 U	0.4 U	0.37 U	0.39 U	0.39 U	0.41 U
Pyrene	NRC	0.38 U	0.4 U	0.064 J	0.39 U	0.12 J	0.41 U
<i>OTHER ANALYTES</i>							
Lead	NRC	18 =					4.5 =
Total Organic Carbon	NRC	740 =					3700 =
TPH - Diesel Range Organics	NRC	55 =	34 =	11 U	12 U	17 =	12 U
TPH - Gasoline Range Organics	NRC	190 J	700 =	0.2 U	0.21 U	0.21 U	0.22 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- NRC No regulatory criteria

Laboratory Qualifiers

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- 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-C. Summary of Former Pumphouse #1 CAP-Part B Soil Analytical Results (continued)

Station:	GUST	P1-MW16	P1-MW16	P1-MW17	P1-MW17	P1-MW18	P1-MW18
Sample ID:	Soil	WB1601	WB1602	WB1701	WB1702	WB1801	WB1802
Sample Interval (ft BGS):	Threshold	05/12/1997	05/12/1997	05/05/1997	05/05/1997	05/05/1997	05/05/1997
Sample Date:	Levels ¹	4.0 - 6.0	8.0 - 10.0	4.0 - 6.0	8.0 - 10.0	8.0 - 10.0	13.0 - 15.0
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.017	0.0061 U	0.0062 U	0.0057 UJ	0.0060 UJ	0.0013 UJ	0.0063 U
Toluene	115	0.017 =	0.0062 U	0.0057 U	0.0060 U	0.018 UJ	0.0063 U
Ethylbenzene	18	0.0062 =	0.0062 U	0.0057 U	0.0060 U	0.017 UJ	0.0063 U
Xylene (total)	700	0.026 =	0.0062 U	0.0057 U	0.0060 U	0.4 =	0.0063 U
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	0.40 U	0.41 U	0.38 U	0.39 U	0.03 J	0.42 U
2-Methylnaphthalene	NRC	0.40 U	0.41 U	0.38 U	0.39 U	0.043 J	0.42 U
Acenaphthene	NRC	0.40 U	0.41 U	0.38 U	0.39 U	0.059 J	0.42 U
Acenaphthylene	NRC	0.40 U	0.41 U	0.38 U	0.39 U	0.37 U	0.42 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.13 J	0.41 U	0.38 U	0.39 U	0.17 J	0.42 U
Benzo(b)fluoranthene	0.660	0.13 J	0.41 U	0.38 U	0.39 U	0.37 U	0.42 U
Benzo(g,h,i)perylene	NRC	0.24 J	0.41 U	0.38 U	0.39 U	0.2 J	0.42 U
Benzo(k)fluoroanthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.40 U	0.41 U	0.38 U	0.39 U	0.21 J	0.1 J
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.096 J	0.073 J	0.38 U	0.39 U	0.12 J	0.066 J
Fluorene	NRC	0.40 U	0.41 U	0.38 U	0.39 U	0.054 J	0.42 U
Indeno(1,2,3-cd)pyrene	0.660	0.40 U	0.41 U	0.38 U	0.39 U	0.37 U	0.42 U
Naphthalene	NRC	0.40 U	0.41 U	0.38 U	0.39 U	0.37 U	0.42 U
Phenanthrene	NRC	0.40 U	0.41 U	0.38 U	0.39 U	0.11 J	0.42 U
Pyrene	NRC	0.40 U	0.41 U	0.38 U	0.39 U	0.09 J	0.42 U
OTHER ANALYTES							
Lead	NRC						
Total Organic Carbon	NRC						
TPH - Diesel Range Organics	NRC	12 U	12 U	11 U	12 U	11 U	13 U
TPH - Gasoline Range Organics	NRC	0.22 U	0.22 U	0.2 U	0.21 U	2.4 =	22 J

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- NRC No regulatory criteria

Laboratory Qualifiers

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Table V-C. Summary of Former Pumphouse #1 CAP-Part B Soil Analytical Results (continued)

Station:	GUST	P1-MW19	P1-MW19	P1-MW20	P1-MW20	P1-MW21	P1-MW21
Sample ID:	Soil	WB1901	WB1902	WB2001	WB2002	WB2101	WB2102
Sample Interval (ft BGS):	Threshold	05/05/1997	05/05/1997	05/13/1997	05/13/1997	05/06/1997	05/06/1997
Sample Date:	Levels ¹	8.0 - 10.0	13.0 - 15.0	4.0 - 6.0	8.0 - 10.0	8.0 - 10.0	13.0 - 15.0
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.017	0.0053 U	0.0062 U	0.0058 U	0.0056 U	0.0054 U	0.0060 U
Toluene	115	0.0053 U	0.0062 U	0.0058 U	0.0056 U	0.0054 U	0.01 =
Ethylbenzene	18	0.0053 U	0.0062 U	0.0058 U	0.0056 U	0.015 =	0.0060 U
Xylene (total)	700	0.0053 U	0.0062 U	0.0058 U	0.0056 U	0.11 =	0.0060 U
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	0.025 J	0.016 J	0.018 J	0.37 U	0.051 J	0.40 U
2-Methylnaphthalene	NRC	0.35 U	0.41 U	0.38 U	0.37 U	0.36 U	0.40 U
Acenaphthene	NRC	0.053 J	0.14 J	0.38 U	0.37 U	0.36 U	0.40 U
Acenaphthylene	NRC	0.35 U _a	0.41 U _a	0.38 U _a	0.37 U _a	0.36 U _a	0.063 J _a
Anthracene	NRC	b	b	b	b	b	b
Benzo(a)anthracene	0.660	b	b	b	b	b	b
Benzo(a)pyrene	0.660	0.35 U	0.41 U	0.38 U	0.37 U	0.13 J	0.40 U
Benzo(b)fluoranthene	0.660	0.35 U	0.41 U	0.38 U	0.37 U	0.36 U	0.40 U
Benzo(g,h,i)perylene	NRC	0.35 U _c	0.41 U _c	0.38 U _c	0.37 U _c	0.36 U _c	0.40 U _c
Benzo(k)fluoroanthene	0.660	c	c	c	c	c	c
Chrysene	0.660	0.35 U _d	0.41 U _d	0.38 U _d	0.37 U _d	0.48 = _d	0.40 U _d
Dibenzo(a,h)anthracene	0.660	d	d	d	d	d	d
Fluoranthene	NRC	0.35 U	0.41 U	0.38 U	0.37 U	0.2 J	0.40 U
Fluorene	NRC	0.35 U	0.41 U	0.38 U	0.37 U	0.31 J	0.40 U
Indeno(1,2,3-cd)pyrene	0.660	0.35 U	0.41 U	0.38 U	0.37 U	0.36 U	0.40 U
Naphthalene	NRC	0.35 U	0.41 U	0.38 U	0.37 U	0.1 J	0.40 U
Phenanthrene	NRC	0.35 U	0.41 U	0.38 U	0.37 U	1 =	0.22 J
Pyrene	NRC	0.051 J	0.41 U	0.38 U	0.37 U	0.037 J	0.40 U
OTHER ANALYTES							
Lead	NRC		2.1 =				
Total Organic Carbon	NRC		2700 =				
TPH - Diesel Range Organics	NRC	17 =	12 U	12 U	11 U	61 =	12 U
TPH - Gasoline Range Organics	NRC	0.19 U	0.22 U	0.21 U	0.2 J U	2 =	0.24 =

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- _a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- _b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- _c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- _d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- NRC No regulatory criteria

Laboratory Qualifiers

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- J Indicates that the value for the compound was an estimated value.
- = Indicates that the compound was detected at the concentration reported.

Table V-C. Summary of Former Pumphouse #1 CAP-Part B Soil Analytical Results (continued)

Station:	GUST	P1-MW22	P1-MW22	P1-MW23	P1-MW23	P1-MW24	P1-MW24
Sample ID:	Soil	WB2201	WB2202	WB2301	WB2302	WB2401	WB2402
Sample Interval (ft BGS):	Threshold	05/06/1997	05/06/1997	05/13/1997	05/13/1997	05/06/1997	05/06/1997
Sample Date:	Levels ¹	4.0 - 6.0	8.0 - 10.0	8.0 - 10.0	13.0 - 15.0	8.0 - 10.0	13.0 - 15.0
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.017	0.0013 UJ	0.9 =	0.0056 U	0.0062 U	0.0056 U	0.006 U
Toluene	115	0.079 =	1.2 =	0.0056 U	0.0062 U	0.007 =	0.017 =
Ethylbenzene	18	0.17 =	3.3 =	0.0056 U	0.0062 U	0.011 =	0.006 U
Xylene (total)	700	4.1 =	55 =	0.0056 U	0.0062 U	0.14 =	0.0078 =
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	0.082 J	0.1 J	0.37 U	0.41 U	0.037 =	0.40 U
2-Methylnaphthalene	NRC	0.11 J	0.23 J	0.37 U	0.41 U	0.051 J	0.40 U
Acenaphthene	NRC	0.35 U	0.38 U	0.05 J	0.41 U	0.047 J	0.40 U
Acenaphthylene	NRC	0.35 U _a	0.12 J _a	0.37 U _a	0.41 U _a	0.12 J _a	0.40 U _a
Anthracene	NRC						
Benzo(a)anthracene	0.660	_b	_b	_b	_b	_b	_b
Benzo(a)pyrene	0.660	0.35 U	0.38 U	0.097 J	0.41 U	0.37 U	0.40 U
Benzo(b)fluoranthene	0.660	0.35 U	0.38 U	0.37 U	0.41 U	0.37 U	0.40 U
Benzo(g,h,i)perylene	NRC	0.35 U	0.38 U	0.37 U	0.41 U	0.37 U	0.40 U
Benzo(k)fluoroanthene	0.660	_c	_c	_c	_c	_c	_c
Chrysene	0.660	0.35 U _d	0.38 U _d	0.16 J _d	0.41 U _d	0.37 U _d	0.40 U _d
Dibenzo(a,h)anthracene	0.660						
Fluoranthene	NRC	0.35 U	0.15 J	0.42 =	0.41 U	0.069 J	0.40 U
Fluorene	NRC	0.35 U	0.063 J	0.37 U	0.41 U	0.37 U	0.40 U
Indeno(1,2,3-cd)pyrene	0.660	0.35 U	0.38 U	0.37 U	0.41 U	0.37 U	0.40 U
Naphthalene	NRC	0.14 J	0.19 J	0.37 U	0.41 U	0.37 U	0.40 U
Phenanthrene	NRC	0.35 U	0.11 J	0.37 U	0.41 U	0.085 =	0.40 U
Pyrene	NRC	0.053 J	0.068 J	0.31 J	0.41 U	0.37 U	0.40 U
OTHER ANALYTES							
Lead	NRC						
Total Organic Carbon	NRC						
TPH - Diesel Range Organics	NRC	64 =	150 =	11 U	12 U	68 =	12 U
TPH - Gasoline Range Organics	NRC	4.6 =	750 J	21 J	0.22 UJ	1.0 =	0.22 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- _a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- _b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- _c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- _d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-C. Summary of Former Pumphouse #1 CAP-Part B Soil Analytical Results (continued)

Station:	GUST	P1-SB25	P1-SB25	P1-SB26	P1-SB26	P1-SB27	P1-SB27
Sample ID:	Soil	SB2501	SB2502	SB2601	SB2602	SB2701	SB2702
Sample Interval (ft BGS):	Threshold	05/13/1997	05/13/1997	05/13/1997	05/13/1997	05/13/1997	05/13/1997
Sample Date:	Levels ¹	4.0 - 6.0	8.0 - 10.0	4.0 - 6.0	8.0 - 10.0	4.0 - 6.0	8.0 - 10.0
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.021 UJ	0.29 UJ	0.0054 U	0.022 UJ	0.0059 U	0.120 UJ
Toluene	115	2.6 J	64 J	0.011 =	0.290 UJ	0.013 =	8.5 J
Ethylbenzene	18	23 J	82 J	0.0085 =	2 =	0.0083 =	20 J
Xylene (total)	700	47 J	190 J	0.071 =	3.1 =	0.043 =	37 J
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	1.5 J	0.39 U	0.35 U	0.38 U	0.39 U	0.073 J
2-Methylnaphthalene	NRC	0.9 J	0.042 J	0.041 J	0.091 J	0.39 U	0.15 J
Acenaphthene	NRC	1 J	0.39 U	0.35 U	0.38 U	0.39 U	0.071 J
Acenaphthylene	NRC	2.5 J	0.39 U	0.35 U	0.38 U	0.39 U	0.40 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	1.9 J	0.39 U	0.35 U	0.38 U	0.21 J	0.40 U
Benzo(b)fluoranthene	0.660	1.8 U	0.39 U	0.35 U	0.38 U	0.39 U	0.40 U
Benzo(g,h,i)perylene	NRC	1.8 U	0.39 U	0.35 U	0.38 U	0.39 U	0.40 U
Benzo(k)fluoroanthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	10 J	0.39 U	0.35 U	0.079 J	0.43 =	0.12 J
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	2.7 J	0.18 J	0.14 J	0.14 J	1.2 =	0.34 J
Fluorene	NRC	5.8 J	0.39 U	0.35 U	0.38 U	0.39 U	0.40 U
Indeno(1,2,3-cd)pyrene	0.660	1.8 U	0.39 U	0.35 U	0.38 U	0.39 U	0.40 U
Naphthalene	NRC	1.8 U	0.39 U	0.35 U	0.069 J	0.062 J	0.20 J
Phenanthrene	NRC	11 J	0.39 U	0.35 U	0.082 J	0.39 U	0.40 U
Pyrene	NRC	16 J	0.13 J	0.066 J	0.1 J	0.82 =	0.27 J
<i>OTHER ANALYTES</i>							
Lead	NRC					5.8 =	
Total Organic Carbon	NRC					19000 =	
TPH - Diesel Range Organics	NRC	180 =	17 =	20 =	22 =	13 =	66 =
TPH - Gasoline Range Organics	NRC	950 J	140 J	0.38 J	72 J	0.53 J	730 J

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-C. Summary of Former Pumphouse #1 CAP-Part B Soil Analytical Results (continued)

Station:	GUST	P1-SB28	P1-SB28	P1-SB29	P1-SB29	P1-SB30	P1-SB30
Sample ID:	Soil	SB2801	SB2802	SB2901	SB2902	SB3001	SB3002
Sample Interval (ft BGS):	Threshold	05/13/1997	05/13/1997	05/13/1997	05/13/1997	05/13/1997	05/13/1997
Sample Date:	Levels ¹	4.0 - 6.0	8.0 - 10.0	4.0 - 6.0	8.0 - 10.0	4.0 - 6.0	8.0 - 10.0
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0056 U	0.0060 U	0.021 UJ	0.022 UJ	0.0055 U	0.023 UJ
Toluene	115	0.0056 U	0.0060 U	0.64 =	1.1 =	0.0055 U	7 J
Ethylbenzene	18	0.0056 U	0.0060 U	2.7 =	2.3 =	0.0055 U	21 J
Xylene (total)	700	0.0056 U	0.0060 U	4.4 =	9.6 =	0.12 =	64 J
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.37 U	0.40 U	0.36 U	0.38 U	0.36 U	0.39 U
2-Methylnaphthalene	NRC	0.37 U	0.40 U	0.074 J	0.037 J	0.23 J	0.39 U
Acenaphthene	NRC	0.37 U	0.40 U	0.13 J	0.38 U	2.2 =	0.082 J
Acenaphthylene	NRC	0.37 U	0.40 U	0.36 U	0.38 U	0.54 =	0.39 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.37 U	0.40 U	0.36 U	0.38 U	0.36 U	0.39 U
Benzo(b)fluoranthene	0.660	0.37 U	0.40 U	0.36 U	0.38 U	0.36 U	0.39 U
Benzo(g,h,i)perylene	NRC	0.37 U	0.40 U	0.36 U	0.38 U	0.36 U	0.39 U
Benzo(k)fluoroanthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.37 U	0.40 U	0.36 U	0.38 U	0.36 U	0.39 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.37 U	0.40 U	0.24 J	0.15 J	0.14 J	0.054 J
Fluorene	NRC	0.37 U	0.40 U	0.36 U	0.38 U	1.2 =	0.07 J
Indeno(1,2,3-cd)pyrene	0.660	0.37 U	0.40 U	0.36 U	0.38 U	0.36 U	0.39 U
Naphthalene	NRC	0.37 U	0.40 U	0.36 U	0.38 U	0.36 U	0.39 U
Phenanthrene	NRC	0.37 U	0.40 U	0.23 J	0.38 U	0.36 U	0.39 U
Pyrene	NRC	0.37 U	0.40 U	0.21 J	0.094 J	0.36 U	0.39 U
<i>OTHER ANALYTES</i>							
Lead	NRC						
Total Organic Carbon	NRC						
TPH - Diesel Range Organics	NRC	11 U	12 U	24 =	18 =	240 =	50 =
TPH - Gasoline Range Organics	NRC	0.2 U	0.22 U	74 J	65 J	0.57 J	15 J

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- NRC No regulatory criteria

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 that the compound was detected at the concentration reported.

Table V-C. Summary of Former Pumphouse #1 CAP-Part B Soil Analytical Results (continued)

Station:	GUST	P1-SB31	P1-SB31	P1-SB32	P1-SB32	P1-SB33	P1-SB33
Sample ID:	Soil	SB3101	SB3102	SB3201	SB3202	SB3301	SB3302
Sample Interval (ft BGS):	Threshold	05/13/1997	05/13/1997	05/12/1997	05/12/1997	05/12/1997	05/12/1997
Sample Date:	Levels ¹	4.0 - 6.0	8.0 - 10.0	4.0 - 6.0	8.0 - 10.0	4.0 - 6.0	10.0 - 12.0
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0013 J	0.022 UJ	0.0054 U	0.0060 U	0.0058 U	0.0015 UJ
Toluene	115	0.017 UJ	0.32 J	0.0054 U	0.0060 U	0.0058 U	0.220 J
Ethylbenzene	18	0.016 UJ	2.5 J	0.0054 U	0.0060 U	0.016 =	0.098 J
Xylene (total)	700	0.016 J	6.3 J	0.0054 U	0.0060 U	0.107 =	0.050 J
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.36 U	0.38 U	0.36 U	0.40 U	0.38 U	0.41 U
2-Methylnaphthalene	NRC	0.041 J	0.38 U	0.36 U	0.40 U	0.38 U	0.41 U
Acenaphthene	NRC	0.074 J	0.38 U	0.36 U	0.40 U	0.38 U	0.41 U
Acenaphthylene	NRC	0.36 U	0.38 U	0.36 U	0.40 U	0.38 U	0.41 U
Anthracene	NRC	a	a	a	a	a	a
Benzo(a)anthracene	0.660	b	b	b	b	b	b
Benzo(a)pyrene	0.660	0.36 U	0.38 U	0.36 U	0.40 U	0.38 U	0.41 U
Benzo(b)fluoranthene	0.660	0.36 U	0.38 U	0.36 U	0.40 U	0.38 U	0.41 U
Benzo(g,h,i)perylene	NRC	0.36 U	0.38 U	0.36 U	0.40 U	0.38 U	0.41 U
Benzo(k)fluoroanthene	0.660	c	c	c	c	c	c
Chrysene	0.660	0.36 U	0.38 U	0.36 U	0.40 U	0.38 U	0.41 U
Dibenzo(a,h)anthracene	0.660	d	d	d	d	d	d
Fluoranthene	NRC	0.32 J	0.29 J	0.36 U	0.40 U	0.38 U	0.35 J
Fluorene	NRC	0.36 U	0.38 U	0.36 U	0.40 U	0.38 U	0.41 U
Indeno(1,2,3-cd)pyrene	0.660	0.36 U	0.38 U	0.36 U	0.40 U	0.38 U	0.41 U
Naphthalene	NRC	0.36 U	0.38 U	0.36 U	0.40 U	0.38 U	0.41 U
Phenanthrene	NRC	0.36 U	0.2 J	0.36 U	0.40 U	0.38 U	0.41 U
Pyrene	NRC	0.22 J	0.22 J	0.36 U	0.40 U	0.38 U	0.37 J
<i>OTHER ANALYTES</i>							
Lead	NRC		8.6 =				
Total Organic Carbon	NRC		8800 =				
TPH - Diesel Range Organics	NRC	11 =	18 =	11 U	12 U	15 =	20 =
TPH - Gasoline Range Organics	NRC	2.8 J	110 J	0.20 U	0.22 U	0.21 U	50 =

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- NRC No regulatory criteria

Laboratory Qualifiers

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

Table V-C. Summary of Former Pumphouse #1 CAP-Part B Soil Analytical Results (continued)

Station:	GUST	P1-SB34	P1-SB34	P1-SB35	P1-SB35	P1-SB36	P1-SB36
Sample ID:	Soil	SB3401	SB3402	SB3501	SB3502	SB3601	SB3602
Sample Interval (ft BGS):	Threshold	05/12/1997	05/12/1997	05/08/1997	05/08/1997	05/08/1997	05/08/1997
Sample Date:	Levels ¹	4.0 - 6.0	8.0 - 10.0	4.0 - 6.0	10.0 - 12.0	4.0 - 6.0	10.0 - 12.0
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.017	0.0060 U	0.0014 J	0.0057 U	0.097 U	0.0056 U	0.0059 U
Toluene	115	0.0110 =	0.018 UJ	0.0057 U	0.44 U	0.0056 U	0.0059 U
Ethylbenzene	18	0.0060 U	0.017 UJ	0.0057 U	1.6 =	0.0056 U	0.0059 U
Xylene (total)	700	0.060 =	0.75 J	0.0057 U	18 =	0.0056 U	0.0059 U
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	0.4 U	0.38 U	0.37 U	0.35 U	0.37 U	0.39 U
2-Methylnaphthalene	NRC	0.4 U	0.38 U	0.37 U	0.35 U	0.37 U	0.39 U
Acenaphthene	NRC	0.4 U	0.38 U	0.37 U	0.35 U	0.37 U	0.39 U
Acenaphthylene	NRC	0.4 U	0.38 U	0.37 U	0.35 U	0.37 U	0.39 U
Anthracene	NRC	a	a	a	a	a	a
Benzo(a)anthracene	0.660	b	b	b	b	b	b
Benzo(a)pyrene	0.660	0.35 J	0.38 U	0.37 U	0.35 U	0.37 U	0.39 U
Benzo(b)fluoranthene	0.660	0.15 J	0.38 U	0.37 U	0.35 U	0.37 U	0.39 U
Benzo(g,h,i)perylene	NRC	0.4 U	0.38 U	0.37 U	0.35 U	0.37 U	0.39 U
Benzo(k)fluoroanthene	0.660	c	c	c	c	c	c
Chrysene	0.660	0.4 U	0.38 U	0.37 U	0.35 U	0.37 U	0.39 U
Dibenzo(a,h)anthracene	0.660	d	d	d	d	d	d
Fluoranthene	NRC	0.062 J	0.38 U	0.37 U	0.35 U	0.37 U	0.39 U
Fluorene	NRC	0.4 U	0.38 U	0.37 U	0.35 U	0.37 U	0.39 U
Indeno(1,2,3-cd)pyrene	0.660	0.4 U	0.38 U	0.37 U	0.35 U	0.37 U	0.39 U
Naphthalene	NRC	0.4 U	0.38 U	0.37 U	0.35 U	0.37 U	0.39 U
Phenanthrene	NRC	0.095 J	0.38 U	0.37 U	0.35 U	0.37 U	0.39 U
Pyrene	NRC	0.061 J	0.38 U	0.37 U	0.35 U	0.37 U	0.39 U
OTHER ANALYTES							
Lead	NRC						
Total Organic Carbon	NRC						
TPH - Diesel Range Organics	NRC	12 U	19 =	11 U	11 U	6.2 J	12 U
TPH - Gasoline Range Organics	NRC	0.71 =	5.9 J	0.2 U	260 J	0.2 U	0.21 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- NRC No regulatory criteria

Laboratory Qualifiers

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Table V-C. Summary of Former Pumphouse #1 CAP-Part B Soil Analytical Results (continued)

Station:	GUST	P1-SB37	P1-SB37	P1-SB38	P1-SB38	P1-SB39	P1-SB39
Sample ID:	Soil	SB3701	SB3702	SB3801	SB3802	SB3901	SB3902
Sample Interval (ft BGS):	Threshold	05/08/1997	05/08/1997	05/13/1997	05/13/1997	05/08/1997	05/08/1997
Sample Date:	Levels ¹	4.0 - 6.0	10.0 - 12.0	4.0 - 6.0	8.0 - 10.0	4.0 - 6.0	8.0 - 10.0
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.017	0.0060 U	0.0014 U	0.0058 U	0.0058 U	0.0059 U	0.0062 U
Toluene	115	0.0060 U	0.390 U	0.012 =	0.0058 U	0.022 =	0.28 U
Ethylbenzene	18	0.0060 U	0.760 J	0.022 =	0.0058 U	0.026 =	0.28 U
Xylene (total)	700	0.0060 U	6.2 =	0.082 =	0.0058 U	0.26 =	0.56 U
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	2.0 U	0.42 U	0.028 J	0.38 U	0.39 U	0.38 U
2-Methylnaphthalene	NRC	2.0 U	0.42 U	0.081 J	0.38 U	0.39 U	0.38 U
Acenaphthene	NRC	2.0 U	0.42 U	0.18 J	0.38 U	0.39 U	0.38 U
Acenaphthylene	NRC	2.0 U	0.42 U	0.38 U	0.38 U	0.39 U	0.38 U
Anthracene	NRC	a	a	a	a	a	a
Benzo(a)anthracene	0.660	b	b	b	b	b	b
Benzo(a)pyrene	0.660	2.0 U	0.42 U	0.31 J	0.38 U	0.39 U	0.38 U
Benzo(b)fluoranthene	0.660	2.0 U	0.42 U	0.38 U	0.38 U	0.39 U	0.38 U
Benzo(g,h,i)perylene	NRC	2.0 U	0.42 U	0.38 U	0.38 U	0.39 U	0.38 U
Benzo(k)fluoroanthene	0.660	c	c	c	c	c	c
Chrysene	0.660	2.0 U	0.42 U	1.3	0.38 U	0.39 U	0.38 U
Dibenzo(a,h)anthracene	0.660	d	d	d	d	d	d
Fluoranthene	NRC	2.0 U	0.42 U	0.14 J	0.38 U	0.39 U	0.38 U
Fluorene	NRC	2.0 U	0.42 U	0.42 =	0.38 U	0.39 U	0.38 U
Indeno(1,2,3-cd)pyrene	0.660	2.0 U	0.42 U	0.38 U	0.38 U	0.39 U	0.38 U
Naphthalene	NRC	2.4 =	0.42 U	0.38 U	0.38 U	0.39 U	0.38 U
Phenanthrene	NRC	2.0 U	0.42 U	1.3 =	0.38 U	0.39 U	0.38 U
Pyrene	NRC	2.0 U	0.42 U	1.3 =	0.38 U	0.39 U	0.38 U
OTHER ANALYTES							
Lead	NRC						
Total Organic Carbon	NRC						
TPH - Diesel Range Organics	NRC	390 =	9.7 J	35 =	14 =	29 =	25 =
TPH - Gasoline Range Organics	NRC	0.091 J	240 J	0.21 U	2.1 U	0.7 J	35 J

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- NRC No regulatory criteria

Laboratory Qualifiers

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- 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-C. Summary of Former Pumphouse #1 CAP-Part B Soil Analytical Results (continued)

Station:	GUST	P1-SB40	P1-SB40	P1-SB41	P1-SB41	P1-MW40	P1-MW40
Sample ID:	Soil	SB4001	SB4002	SB4101	SB4102	PH1-WB4001	PH1-WB4002
Sample Interval (ft BGS):	Threshold	05/08/1997	05/08/1997	05/08/1997	05/08/1997	09/29/1999	09/29/1999
Sample Date:	Levels ¹	4.0 - 6.0	8.0 - 10.0	4.0 - 6.0	10.0 - 12.0	8.0 - 10.0	48.0 - 50.0
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.017	0.067 U	0.32 U	0.0058 U	0.0062 U	5.1 J	0.029 U
Toluene	115	0.77 =	180 =	0.0058 U	0.0062 U	190 =	0.029 U
Ethylbenzene	18	0.99 =	44 =	0.0058 U	0.0062 U	110 =	0.029 U
Xylene (total)	700	6.5 =	220 =	0.012 =	0.0062 U	530 =	0.058 U
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	0.4 U	0.39 U	0.39 U	0.41 U	0.036 =	0.023 U
2-Methylnaphthalene	NRC	0.4 U	0.39 U	0.39 U	0.41 U	0.097 =	0.023 U
Acenaphthene	NRC	0.4 U	0.39 U	0.39 U	0.41 U	0.066 U	0.057 U
Acenaphthylene	NRC	0.4 U	0.39 U	0.39 U	0.41 U	0.026 U	0.023 U
Anthracene	NRC	^a	^a	^a	^a	0.0053 U	0.0046 U
Benzo(a)anthracene	0.660	^b	^b	^b	^b	0.0053 U	0.0046 U
Benzo(a)pyrene	0.660	0.4 U	0.39 U	0.39 U	0.41 U	0.0053 U	0.0046 U
Benzo(b)fluoranthene	0.660	0.4 U	0.39 U	0.39 U	0.41 U	0.0053 U	0.0046 U
Benzo(g,h,i)perylene	NRC	0.4 U	0.39 U	0.39 U	0.41 U	0.013 U	0.011 U
Benzo(k)fluoroanthene	0.660	^c	^c	^c	^c	0.0053 U	0.0046 U
Chrysene	0.660	0.4 U	0.39 U	0.39 U	0.41 U	0.0053 U	0.0046 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	0.013 U	0.011 U
Fluoranthene	NRC	0.4 U	0.39 U	0.39 U	0.41 U	0.021 =	0.011 U
Fluorene	NRC	0.4 U	0.39 U	0.39 U	0.41 U	0.013 U	0.011 U
Indeno(1,2,3-cd)pyrene	0.660	0.4 U	0.39 U	0.39 U	0.41 U	0.013 U	0.011 U
Naphthalene	NRC	0.4 U	0.39 U	0.39 U	0.41 U	0.1 =	0.023 U
Phenanthrene	NRC	0.4 U	0.39 U	0.39 U	0.41 U	0.017 =	0.0046 U
Pyrene	NRC	0.4 U	0.39 U	0.39 U	0.41 U	0.013 U	0.011 U
OTHER ANALYTES							
Lead	NRC						
Total Organic Carbon	NRC						
TPH - Diesel Range Organics	NRC	21 =	35 =	7.8 J	12 U	43 J	3.8 U
TPH - Gasoline Range Organics	NRC	86 J	3700 J	0.052 J	0.22 U	9900 J	1.4 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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.

Insert CAP-Part B soil analytical laboratory sheets (pages V-109 to V-216)

**DAACG FACILITY CAP-PART B
SOIL ANALYTICAL RESULTS**

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Table V-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results

Station: Sample ID:	GUST Soil	D-MW01 H833- WB0101	D-MW01 H833- WB0102	D-MW02 H833- WB0201	D-MW02 H833- WB0202	D-MW03 H833- WB0301	D-MW03 H833- WB0302
Sample Interval (ft BGS):	Threshold	5.2 - 7.2	13.0 - 15.0	3.3 - 5.3	13.0 - 15.0	3.0 - 5.0	8.0 - 10.0
Collection Date:	Levels ¹	04/23/1996	04/23/1996	04/23/1996	04/23/1996	04/24/1996	04/24/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0054 U	0.0062 U	0.0056 =	23 =	0.0073 J	0.0061 U
Toluene	115	0.0054 U	0.0062 U	0.0055 U	1.7 =	0.0053 U	0.0061 U
Ethylbenzene	18	0.0054 U	0.0062 U	0.0055 U	2.2 =	0.0053 U	0.0061 U
Xylene (total)	700	0.0054 U	0.0062 U	0.0055 U	2.5 =	0.0066 =	0.0061 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
2-Methylnaphthalene	NRC	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Acenaphthene	NRC	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Acenaphthylene	NRC	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Benzo(b)fluoranthene	0.660	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Benzo(g,h,i)perylene	NRC	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Fluorene	NRC	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Indeno(1,2,3-cd)pyrene	0.660	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Naphthalene	NRC	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Phenanthrene	NRC	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
Pyrene	NRC	0.36 U	0.41 U	0.36 U	0.41 U	0.35 U	0.40 U
<i>OTHER ANALYTES</i>							
TPH - Diesel Range Organics	NRC	11 U	12 U	11 U	13 =	11 U	12 U
TPH - Gasoline Range Organics	NRC	0.20 U	0.22 U	0.20 U	680 =	0.19 UJ	0.22 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-MW04 H833- WB0401	D-MW04 H833- WB0402	D-MW05 H833- WB0501	D-MW05 H833- WB0502	D-MW06 H833- WB0601	D-MW06 H833- WB0602
Sample Interval (ft BGS):	Threshold	5.3 - 7.3	8.0 - 10.0	8.0 - 10.0	13.0 - 15.0	1.3 - 3.3	8.0 - 10.0
Collection Date:	Levels ¹	04/24/1996	04/24/1996	04/25/1996	04/25/1996	04/25/1996	04/25/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.017	0.0056 U	0.006 U	5.6 U	0.0077 J	0.0054 U	12 U
Toluene	115	0.0056 U	0.006 U	12 J	0.0062 U	0.0054 U	12 U
Ethylbenzene	18	0.0056 U	0.006 U	13 J	0.027 J	0.033 =	23 J
Xylene (total)	700	0.0056 U	0.006 U	28 J	0.009 J	0.13 =	44 J
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	0.37 U	0.39 U	0.36 U	0.41 U	0.36 U	0.40 U
2-Methylnaphthalene	NRC	0.37 U	0.39 U	0.36 U	0.41 U	0.36 U	0.40 U
Acenaphthene	NRC	0.37 U	0.39 U	0.36 U	0.41 U	0.36 U	0.40 U
Acenaphthylene	NRC	0.37 U	0.39 U	0.36 U	0.41 U	0.36 U	0.40 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.37 U	0.39 U	0.36 U	0.41 U	0.36 U	0.40 U
Benzo(b)fluoranthene	0.660	0.37 U	0.39 U	0.36 U	0.41 U	0.36 U	0.40 U
Benzo(g,h,i)perylene	NRC	0.37 U	0.39 U	0.36 U	0.41 U	0.36 U	0.40 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.37 U	0.39 U	0.36 U	0.41 U	0.36 U	0.40 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.37 U	0.39 U	0.36 U	0.41 U	0.36 U	0.40 U
Fluorene	NRC	0.37 U	0.39 U	0.36 U	0.41 U	0.36 U	0.40 U
Indeno(1,2,3-cd)pyrene	0.660	0.37 U	0.39 U	0.36 U	0.41 U	0.36 U	0.40 U
Naphthalene	NRC	0.37 U	0.39 U	0.36 U	0.41 U	0.36 U	0.40 U
Phenanthrene	NRC	0.37 U	0.39 U	0.36 U	0.41 U	0.36 U	0.40 U
Pyrene	NRC	0.37 U	0.39 U	0.36 U	0.41 U	0.36 U	0.40 U
OTHER ANALYTES							
TPH - Diesel Range Organics	NRC	11 U	12 U	11 =	12 U	11 U	12 U
TPH - Gasoline Range Organics	NRC	0.2 UJ	0.21 U	2900 J	35 J	2.2 J	6400 J

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-MW07 H833- WB0701	D-MW07 H833- WB0702	D-MW08 H833- WB0801	D-MW08 H833- WB0802	D-MW09 H833- WB0901	D-MW09 H833- WB0902
Sample Interval (ft BGS):	Threshold	1.3 - 3.3	8.0 - 10.0	5.3 - 7.3	8.0 - 10.0	4.4 - 6.4	13.0 - 15.0
Collection Date:	Levels ¹	04/29/1996	04/29/1996	04/24/1996	04/24/1996	04/24/1996	04/24/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.017	0.0054 U	0.0058 U	0.0054 U	28 J	0.0054 U	0.0060 U
Toluene	115	0.0054 U	0.0058 U	0.0054 U	5 U	0.0054 U	0.0060 U
Ethylbenzene	18	0.0054 U	0.0058 U	0.0054 U	5.1 J	0.0054 U	0.0060 U
Xylene (total)	700	0.0054 U	0.0058 U	0.0054 U	10 J	0.0054 U	0.0060 U
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	0.36 U	0.38 U	0.36 U	0.37 U	0.35 U	0.39 U
2-Methylnaphthalene	NRC	0.36 U	0.38 U	0.36 U	0.37 U	0.35 U	0.39 U
Acenaphthene	NRC	0.36 U	0.38 U	0.36 U	0.37 U	0.35 U	0.39 U
Acenaphthylene	NRC	0.36 U	0.38 U	0.36 U	0.37 U	0.35 U	0.39 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.36 U	0.38 U	0.46 =	0.37 U	0.35 U	0.39 U
Benzo(b)fluoranthene	0.660	0.36 U	0.38 U	0.94 =	0.37 U	0.35 U	0.39 U
Benzo(g,h,i)perylene	NRC	0.36 U	0.38 U	0.36 U	0.37 U	0.35 U	0.39 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.36 U	0.38 U	0.43 =	0.37 U	0.35 U	0.39 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.36 U	0.38 U	0.4 =	0.37 U	0.35 U	0.39 U
Fluorene	NRC	0.36 U	0.38 U	0.36 U	0.37 U	0.35 U	0.39 U
Indeno(1,2,3-cd)pyrene	0.660	0.36 U	0.38 U	0.36 U	0.37 U	0.35 U	0.39 U
Naphthalene	NRC	0.36 U	0.38 U	0.36 U	0.37 U	0.35 U	0.39 U
Phenanthrene	NRC	0.36 U	0.38 U	0.36 U	0.37 U	0.35 U	0.39 U
Pyrene	NRC	0.36 U	0.38 U	0.54 =	0.37 U	0.35 U	0.39 U
OTHER ANALYTES							
TPH - Diesel Range Organics	NRC	15 =	12 U	13 =	11 U	11 U	12 U
TPH - Gasoline Range Organics	NRC	0.20 U	0.21 U	0.20 UJ	1.1 J	0.19 J	0.21 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- NRC No regulatory criteria

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Table V-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station:	GUST	D-MW10	D-MW10	D-MW11	D-MW11	D-MW12	D-MW12
Sample ID:	Soil	H833-	H833-	H883-	H833-	H833-	H833-
Sample Interval (ft BGS):	Threshold	WB1001	WB1002	WB1101	WB1102	WB1201	WB1202
Collection Date:	Levels ¹	2.4 - 4.4	8.0 - 10.0	3.5 - 5.3	8.0 - 10.0	5.3 - 7.3	8.0 - 10.0
Units:	(mg/kg)	04/24/1996	04/24/1996	04/23/1996	04/23/1996	04/22/1996	04/22/1996
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0054 U	0.0060 U	0.0054 U	0.92 =	0.0085 =	4.3 =
Toluene	115	0.0054 U	0.0060 U	0.0054 U	0.55 =	0.0057 U	0.46 U
Ethylbenzene	18	0.0054 U	0.0060 U	0.0054 U	0.47 U	0.017 =	1.4 =
Xylene (total)	700	0.0054 U	0.0060 U	0.0054 U	0.49 =	0.012 =	0.92 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
2-Methylnaphthalene	NRC	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Acenaphthene	NRC	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Acenaphthylene	NRC	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Benzo(b)fluoranthene	0.660	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Benzo(g,h,i)perylene	NRC	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Fluorene	NRC	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Indeno(1,2,3-cd)pyrene	0.660	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Naphthalene	NRC	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Phenanthrene	NRC	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
Pyrene	NRC	0.36 U	0.40 U	0.35 U	0.39 U	0.38 U	0.38 U
<i>OTHER ANALYTES</i>							
TPH - Diesel Range Organics	NRC	11 U	12 U	11 U	19 =	28 =	13 =
TPH - Gasoline Range Organics	NRC	0.20 U	0.22 U	0.19 U	51 =	1.5 J	210 J

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- NRC No regulatory criteria

Laboratory Qualifiers

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- J Indicates that the value for the compound was an estimated value.
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Table V-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-MW13 H833- WB1301	D-MW13 H833- WB1302	D-MW14 H833- WB1401	D-MW14 H833- WB1402	D-MW15 H833- WB1501	D-MW15 H833- WB1502
Sample Interval (ft BGS):	Threshold	3.5 - 5.5	8.0 - 10.0	8.0 - 10.0	15.0 - 17.0	5.3 - 7.3	8.0 - 10.0
Collection Date:	Levels ¹	04/22/1996	04/22/1996	04/22/1996	04/22/1996	04/25/1996	04/25/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0056 U	3.2 =	0.0060 U	0.0063 U	0.0060 U	0.0062 U
Toluene	115	0.0056 U	0.45 U	0.0060 U	0.0063 U	0.0060 U	0.0062 U
Ethylbenzene	18	0.0056 U	1.2 =	0.0060 U	0.0063 U	0.0060 U	0.0062 U
Xylene (total)	700	0.0056 U	1.3 =	0.0060 U	0.0063 U	0.0060 U	0.0062 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.37 U	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
2-Methylnaphthalene	NRC	0.37 U	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Acenaphthene	NRC	0.37 U	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Acenaphthylene	NRC	0.61 =	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	2.4 =	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Benzo(b)fluoranthene	0.660	4.8 =	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Benzo(g,h,i)perylene	NRC	1.9 =	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	4 =	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	1.4 =	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Fluorene	NRC	0.37 U	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Indeno(1,2,3-cd)pyrene	0.660	2 =	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Naphthalene	NRC	0.37 U	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Phenanthrene	NRC	0.37 U	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
Pyrene	NRC	1.5 =	0.38 U	0.40 U	0.42 U	0.40 U	0.41 U
<i>OTHER ANALYTES</i>							
TPH - Diesel Range Organics	NRC	18 =	36 =	12 U	13 UJ	12 U	12 U
TPH - Gasoline Range Organics	NRC	1.5 J	160 J	0.22 U	0.23 UJ	0.22 U	0.22 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-MW16 H833- WB1601	D-MW16 H833- WB1602	D-MW17 H833- WB1701	D-MW17 H833- WB1702	D-MW18 H833- WB1801	D-MW18 H833- WB1802
Sample Interval (ft BGS):	Threshold	3.3 - 5.3	8.0 - 10.0	5.4 - 7.4	8.0 - 10.0	3.3 - 5.3	8.0 - 10.0
Collection Date:	Levels ¹	04/25/1996	04/25/1996	04/22/1996	04/22/1996	04/23/1996	04/23/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0062 U	0.0060 U	0.0054 U	410 J	0.0053 U	0.0056 U
Toluene	115	0.0062 U	0.0060 U	0.0054 U	30 J	0.0053 U	0.0056 U
Ethylbenzene	18	0.0062 U	0.0060 U	0.0054 U	50 J	0.0053 U	0.0056 U
Xylene (total)	700	0.0062 U	0.0060 U	0.0054 U	120 J	0.0053 U	0.0056 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
2-Methylnaphthalene	NRC	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Acenaphthene	NRC	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Acenaphthylene	NRC	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Benzo(b)fluoranthene	0.660	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Benzo(g,h,i)perylene	NRC	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Fluorene	NRC	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Indeno(1,2,3-cd)pyrene	0.660	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Naphthalene	NRC	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Phenanthrene	NRC	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
Pyrene	NRC	0.41 U	0.39 U	0.36 U	0.38 U	0.35 U	0.37 U
<i>OTHER ANALYTES</i>							
TPH - Diesel Range Organics	NRC	12 U	12 UJ	17 =	64 =	11 U	11 U
TPH - Gasoline Range Organics	NRC	0.22 U	0.21 U	0.20 UJ	20000 J	0.19 U	0.20 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-MW19 H833- WB1901	D-MW19 H833- WB1902	D-MW20 H833- WB2001	D-MW20 H833- WB2002	D-MW21 H833- WB2101	D-MW21 H833- WB2102
Sample Interval (ft BGS):	Threshold	8.0 - 10.0	13.0 - 15.0	8.0 - 10.0	13.0 - 15.0	5.3 - 7.3	8.0 - 10.0
Collection Date:	Levels ¹	04/22/1996	04/22/1996	04/23/1996	04/23/1996	04/23/1996	04/23/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.017	11 J	0.3 =	0.0060 U	0.0064 U	0.0056 U	0.0061 U
Toluene	115	0.46 U	0.031 U	0.0060 U	0.0064 U	0.0056 U	0.0061 U
Ethylbenzene	18	2 J	0.031 U	0.0060 U	0.0064 U	0.0056 U	0.0061 U
Xylene (total)	700	1.3 J	0.044 =	0.0060 U	0.0064 U	0.0056 U	0.0061 U
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
2-Methylnaphthalene	NRC	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Acenaphthene	NRC	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Acenaphthylene	NRC	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Benzo(b)fluoranthene	0.660	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Benzo(g,h,i)perylene	NRC	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Fluorene	NRC	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Indeno(1,2,3-cd)pyrene	0.660	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Naphthalene	NRC	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Phenanthrene	NRC	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
Pyrene	NRC	0.38 U	0.41 U	0.40 U	0.42 U	0.37 U	0.40 U
OTHER ANALYTES							
TPH - Diesel Range Organics	NRC	22 =	12 U	12 U	13 U	11 U	12 U
TPH - Gasoline Range Organics	NRC	860 J	7.7 J	0.22 U	0.23 UJ	0.20 UJ	0.22 UJ

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- NRC No regulatory criteria

Laboratory Qualifiers

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- J Indicates that the value for the compound was an estimated value.
- = Indicates that the compound was detected at the concentration reported.

Table V-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-MW22 H833- WB2201	D-MW22 H833- WB2202	D-MW23 H833- WB2301	D-MW23 H833- WB2302	D-MW24 H833- WB2401	D-MW24 H833- WB2402
Sample Interval (ft BGS):	Threshold	5.3 - 7.3	8.0 - 10.0	5.3 - 7.3	8.0 - 10.0	3.3 - 5.3	8.0 - 10.0
Collection Date:	Levels ¹	04/23/1996	04/23/1996	04/23/1996	04/23/1996	04/23/1996	04/23/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0056 U	0.0058 U	0.0058 U	0.0067 U	0.0055 U	0.0064 U
Toluene	115	0.0056 U	0.0058 U	0.0058 U	0.0067 U	0.0055 U	0.0064 U
Ethylbenzene	18	0.0056 U	0.0058 U	0.0058 U	0.0067 U	0.0055 U	0.0064 U
Xylene (total)	700	0.0056 U	0.0058 U	0.0058 U	0.0067 U	0.0055 U	0.0064 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
2-Methylnaphthalene	NRC	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Acenaphthene	NRC	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Acenaphthylene	NRC	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Benzo(b)fluoranthene	0.660	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Benzo(g,h,i)perylene	NRC	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Fluorene	NRC	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Indeno(1,2,3-cd)pyrene	0.660	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Naphthalene	NRC	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Phenanthrene	NRC	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
Pyrene	NRC	0.37 U	0.38 U	0.38 U	0.44 U	0.36 U	0.42 U
<i>OTHER ANALYTES</i>							
TPH - Diesel Range Organics	NRC	11 U	12 U	12 U	13 U	11 U	13 U
TPH - Gasoline Range Organics	NRC	0.20 UJ	0.21 UJ	0.21 U	0.24 U	0.20 U	0.23 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- NRC No regulatory criteria

Laboratory Qualifiers

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- J Indicates that the value for the compound was an estimated value.
- = Indicates that the compound was detected at the concentration reported.

Table V-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-MW25 H833- WB2501	D-MW25 H833- WB2502	D-MW26 H833- WB2601	D-MW26 H833- WB2602	D-MW27 H833- WB2701	D-MW27 H833- WB2702
Sample Interval (ft BGS):	Threshold	3.4 - 5.4	8.0 - 10.0	5.3 - 7.3	8.0 - 10.0	3.3 - 5.3	8.0 - 10.0
Collection Date:	Levels ¹	04/24/1996	04/24/1996	04/24/1996	04/24/1996	04/24/1996	04/24/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0053 U	0.0062 U	0.0054 U	0.0062 U	0.0057 U	0.0061 U
Toluene	115	0.0053 U	0.0085 =	0.0054 U	0.0062 U	0.0057 U	0.0061 U
Ethylbenzene	18	0.0053 U	0.0062 U	0.0054 U	0.0062 U	0.0057 U	0.0061 U
Xylene (total)	700	0.0053 U	0.009 =	0.0054 U	0.0062 U	0.0057 U	0.0061 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.35 U	0.41 U	0.35 U	0.41 U	0.38 U	0.4 U
2-Methylnaphthalene	NRC	0.35 U	0.41 U	0.35 U	0.41 U	0.38 U	0.4 U
Acenaphthene	NRC	0.35 U	0.41 U	0.35 U	0.41 U	0.38 U	0.4 U
Acenaphthylene	NRC	0.35 U	0.41 U	0.35 U	0.41 U	0.38 U	0.4 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.35 U	0.41 U	0.45 =	0.41 U	0.38 U	0.4 U
Benzo(b)fluoranthene	0.660	0.35 U	0.41 U	0.8 =	0.41 U	0.38 U	0.4 U
Benzo(g,h,i)perylene	NRC	0.35 U	0.41 U	0.35 U	0.41 U	0.38 U	0.4 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.35 U	0.41 U	0.39 =	0.41 U	0.38 U	0.4 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.35 U	0.41 U	0.44 =	0.41 U	0.38 U	0.4 U
Fluorene	NRC	0.35 U	0.41 U	0.35 U	0.41 U	0.38 U	0.4 U
Indeno(1,2,3-cd)pyrene	0.660	0.35 U	0.41 U	0.35 U	0.41 U	0.38 U	0.4 U
Naphthalene	NRC	0.35 U	0.41 U	0.35 U	0.41 U	0.38 U	0.4 U
Phenanthrene	NRC	0.35 U	0.41 U	0.35 U	0.41 U	0.38 U	0.4 U
Pyrene	NRC	0.35 U	0.41 U	0.48 =	0.41 U	0.38 U	0.4 U
<i>OTHER ANALYTES</i>							
TPH - Diesel Range Organics	NRC	10 U	12 U	11 U	12 U	11 U	12 U
TPH - Gasoline Range Organics	NRC	0.19 U	0.22 U	0.19 U	0.22 U	0.21 U	0.22 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-MW28 H833- WB2801	D-MW28 H833- WB2802	D-MW29 H833- WB2901	D-MW29 H833- WB2902	D-MW30 H833- WB3001	D-MW30 H833- WB3002
Sample Interval (ft BGS):	Threshold	4.0 - 6.0	13.0 - 15.0	1.3 - 3.3	8.0 - 10.0	5.3 - 7.3	8.0 - 10.0
Collection Date:	Levels ¹	04/25/1996	04/25/1996	04/29/1996	04/29/1996	04/29/1996	04/29/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0053 U	0.0068 U	0.0056 U	0.0062 U	0.0059 U	0.0063 U
Toluene	115	0.0053 U	0.0068 U	0.0056 U	0.0062 U	0.0078 =	0.0063 U
Ethylbenzene	18	0.0053 U	0.0068 U	0.0056 U	0.0062 U	0.0061 =	0.0063 U
Xylene (total)	700	0.0053 U	0.0068 U	0.0075 J	0.0062 U	0.023 =	0.0063 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.35 U	0.45 U	3.7 U	0.41 U	0.39 U	0.42 U
2-Methylnaphthalene	NRC	0.35 U	0.45 U	3.7 U	0.41 U	0.39 U	0.42 U
Acenaphthene	NRC	0.35 U	0.45 U	3.7 U	0.41 U	0.39 U	0.42 U
Acenaphthylene	NRC	0.35 U	0.45 U	3.7 U	0.41 U	0.39 U	0.42 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.35 U	0.45 U	4.3 J	0.41 U	1.2 =	0.42 U
Benzo(b)fluoranthene	0.660	0.35 U	0.45 U	3.7 U	0.41 U	2 =	0.42 U
Benzo(g,h,i)perylene	NRC	0.35 U	0.45 U	3.7 U	0.41 U	0.39 U	0.42 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.35 U	0.45 U	5.2 J	0.41 U	0.64 =	0.42 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.35 U	0.45 U	5.9 J	0.41 U	0.43 =	0.42 U
Fluorene	NRC	0.35 U	0.45 U	3.7 U	0.41 U	0.39 U	0.42 U
Indeno(1,2,3-cd)pyrene	0.660	0.35 U	0.45 U	3.7 U	0.41 U	0.39 U	0.42 U
Naphthalene	NRC	0.35 U	0.45 U	3.7 U	0.41 U	0.39 U	0.42 U
Phenanthrene	NRC	0.35 U	0.45 U	3.7 U	0.41 U	0.39 U	0.42 U
Pyrene	NRC	0.35 U	0.45 U	5.7 J	0.41 U	0.83 =	0.42 U
<i>OTHER ANALYTES</i>							
TPH - Diesel Range Organics	NRC	10 U	14 U	33 =	34 =	27 =	24 =
TPH - Gasoline Range Organics	NRC	0.19 U	0.25 U	0.20 UJ	0.22 U	0.22 J	0.23 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-MW31 H833- WB3101	D-MW31 H833- WB3102	D-MW32 H833- WB3201	D-MW32 H833- WB3202	D-SB01 H833- SB0101	D-SB01 H833- SB0102
Sample Interval (ft BGS):	Threshold	3.5 - 5.5	8.0 - 10.0	5.4 - 7.4	8.0 - 10.0	1.3 - 3.3	7.3 - 9.3
Collection Date:	Levels ¹	04/29/1996	04/29/1996	04/29/1996	04/29/1996	03/05/1996	03/05/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0060 U	0.0062 U	0.0060 U	0.0062 U	0.0053 U	0.0053 U
Toluene	115	0.0060 U	0.0062 U	0.0060 U	0.0062 U	0.0053 U	0.0053 U
Ethylbenzene	18	0.0060 U	0.0062 U	0.0060 U	0.0062 U	0.0053 U	0.0053 U
Xylene (total)	700	0.0060 U	0.0062 U	0.0260 =	0.0062 U	0.0053 U	0.0053 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.40 U	0.41 U	0.40 U	0.41 U	0.35 U	0.35 U
2-Methylnaphthalene	NRC	0.40 U	0.41 U	0.40 U	0.41 U	0.35 U	0.35 U
Acenaphthene	NRC	0.40 U	0.41 U	0.40 U	0.41 U	0.35 U	0.35 U
Acenaphthylene	NRC	0.40 U	0.41 U	0.40 U	0.41 U	0.35 U	0.35 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.40 U	0.41 U	0.40 U	0.41 U	0.35 U	0.35 U
Benzo(b)fluoranthene	0.660	0.40 U	0.41 U	0.40 U	0.41 U	0.35 U	0.35 U
Benzo(g,h,i)perylene	NRC	0.40 U	0.41 U	0.40 U	0.41 U	0.35 U	0.35 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.40 U	0.41 U	0.40 U	0.41 U	0.35 U	0.35 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.40 U	0.41 U	0.40 U	0.41 U	0.35 U	0.35 U
Fluorene	NRC	0.40 U	0.41 U	0.40 U	0.41 U	0.35 U	0.35 U
Indeno(1,2,3-cd)pyrene	0.660	0.40 U	0.41 U	0.40 U	0.41 U	0.35 U	0.35 U
Naphthalene	NRC	0.40 U	0.41 U	0.40 U	0.41 U	0.35 U	0.35 U
Phenanthrene	NRC	0.40 U	0.41 U	0.40 U	0.41 U	0.35 U	0.35 U
Pyrene	NRC	0.40 U	0.41 U	0.40 U	0.41 U	0.35 U	0.35 U
<i>OTHER ANALYTES</i>							
TPH - Diesel Range Organics	NRC	20 =	22 =	19 =	44 =	11 U	10 U
TPH - Gasoline Range Organics	NRC	0.22 U	0.22 U	0.29 J	0.22 U	0.26 U	0.26 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-SB02 H833- SB0201	D-SB02 H833- SB0202	D-SB02 H833- SB0203	D-SB02 H833- SB0204	D-SB03 H833- SB0301	D-SB03 H833- SB0302
Sample Interval (ft BGS):	Threshold	1.5 - 3.5	8.0 - 10.0	13.0 - 15.0	18.0 - 20.0	1.3 - 3.3	7.3 - 9.3
Collection Date:	Levels ¹	02/27/1996	02/27/1996	02/27/1996	02/27/1996	03/05/1996	03/05/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.017	0.0053 U	0.0055 U	0.0064 U	0.0067 U	1.5 =	0.47 U
Toluene	115	0.0053 U	0.0055 U	0.0064 U	0.0067 U	2.2 =	11 J
Ethylbenzene	18	0.0053 U	0.0055 U	0.0064 U	0.0067 U	1.0 =	6 J
Xylene (total)	700	0.0053 U	0.0055 U	0.0064 U	0.0067 U	3.2 =	13 J
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	0.35 U	0.36 U	0.42 U	0.44 U	1.7 R	0.39 U
2-Methylnaphthalene	NRC	0.35 U	0.36 U	0.42 U	0.44 U	1.7 R	0.39 U
Acenaphthene	NRC	0.35 U	0.36 U	0.42 U	0.44 U	1.7 R	0.39 U
Acenaphthylene	NRC	0.35 U	0.36 U	0.42 U	0.44 U	1.7 R	0.39 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.35 U	0.82 J	0.42 U	0.44 U	4.2 J	0.39 U
Benzo(b)fluoranthene	0.660	0.35 U	2.1 =	0.42 U	0.44 U	4.9 J	0.39 U
Benzo(g,h,i)perylene	NRC	0.35 U	0.91 =	0.42 U	0.44 U	4.3 J	0.39 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.35 U	2.4 =	0.42 U	0.44 U	8.6 J	0.39 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.35 U	2.1 =	0.42 U	0.44 U	4.0 J	0.39 U
Fluorene	NRC	0.35 U	0.36 U	0.42 U	0.44 U	1.7 R	0.39 U
Indeno(1,2,3-cd)pyrene	0.660	0.35 U	0.92 =	0.42 U	0.44 U	2.7 J	0.39 U
Naphthalene	NRC	0.35 U	0.36 U	0.42 U	0.44 U	1.7 R	0.39 U
Phenanthrene	NRC	0.35 U	1.3 =	0.42 U	0.44 U	2.7 J	0.39 U
Pyrene	NRC	0.35 U	1.9 J	0.42 U	0.44 U	7.4 J	0.39 U
OTHER ANALYTES							
TPH - Diesel Range Organics	NRC	16 J	25 J	13 UJ	13 UJ	84 =	46 =
TPH - Gasoline Range Organics	NRC	0.26 UJ	0.27 UJ	0.32 U	0.33 U	51 J	600 =

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- NRC No regulatory criteria

Laboratory Qualifiers

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- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-SB04 H833- SB0401	D-SB04 H833- SB0402	D-SB05 H833- SB0501	D-SB05 H833- SB0502	D-SB06 H833- SB0601	D-SB06 H833- SB0602
Sample Interval (ft BGS):	Threshold	1.5 - 3.5	8.0 - 10.0	1.3 - 3.3	7.3 - 9.3	1.5 - 3.5	8.0 - 10.0
Collection Date:	Levels ¹	02/27/1996	02/27/1996	03/05/1996	03/05/1996	02/27/1996	02/27/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0057 U	0.0054 U	0.0054 U	0.0055 U	0.0053 U	9.3 =
Toluene	115	0.0071 =	0.0054 U	0.0054 U	0.0055 U	0.0053 U	0.4 U
Ethylbenzene	18	0.0057 U	0.0054 U	0.0054 U	0.0055 U	0.0053 U	4.2 =
Xylene (total)	700	0.0088 =	0.0054 U	0.0054 U	0.0055 U	0.0053 U	2.1 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.38 U	0.36 U	0.35 U	0.36 U	0.35 U	0.38 U
2-Methylnaphthalene	NRC	0.38 U	0.36 U	0.35 U	0.36 U	0.35 U	0.38 U
Acenaphthene	NRC	0.38 U	0.36 U	0.35 U	0.36 U	0.35 U	0.38 U
Acenaphthylene	NRC	0.38 U	0.36 U	0.35 U	0.36 U	0.35 U	0.38 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.38 U	0.36 U	0.35 U	0.36 U	0.35 U	0.38 U
Benzo(b)fluoranthene	0.660	0.38 U	0.36 U	0.35 U	0.36 U	0.35 U	0.38 U
Benzo(g,h,i)perylene	NRC	0.38 U	0.54 =	0.35 U	0.36 U	0.35 U	0.38 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.38 U	0.36 U	0.35 U	0.36 U	0.35 U	0.38 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.38 U	0.36 U	0.35 U	0.36 U	0.35 U	0.38 U
Fluorene	NRC	0.38 U	0.36 U	0.35 U	0.36 U	0.35 U	0.38 U
Indeno(1,2,3-cd)pyrene	0.660	0.38 U	0.36 U	0.35 U	0.36 U	0.35 U	0.38 U
Naphthalene	NRC	0.38 U	0.36 U	0.35 U	0.36 U	0.35 U	0.38 U
Phenanthrene	NRC	0.38 U	0.36 U	0.35 U	0.36 U	0.35 U	0.38 U
Pyrene	NRC	0.38 U	0.36 U	0.35 U	0.36 U	0.35 U	0.38 U
<i>OTHER ANALYTES</i>							
TPH - Diesel Range Organics	NRC	16 J	11 J	40 =	14 =	10 UJ	22 J
TPH - Gasoline Range Organics	NRC	0.29 U	0.27 UJ	0.27 UJ	0.27 U	0.26 U	180 =

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- NRC No regulatory criteria

Laboratory Qualifiers

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- J Indicates that the value for the compound was an estimated value.
- = Indicates that the compound was detected at the concentration reported.

Table V-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-SB06 H833- SB0603	D-SB06 H833- SB0604	D-SB07 H833- SB0701	D-SB07 H833- SB0702	D-SB08 H833- SB0801	D-SB08 H833- SB0802
Sample Interval (ft BGS):	Threshold	13.0 - 15.0	18.0 - 20.0	1.3 - 3.3	7.3 - 9.3	1.3 - 3.3	7.3 - 9.3
Collection Date:	Levels ¹	02/27/1996	02/27/1996	02/28/1999	02/28/1999	03/05/1996	03/05/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0063 U	0.0065 U	0.0053 U	9 =	0.0054 U	0.0053 U
Toluene	115	0.0063 U	0.0065 U	0.0053 U	0.49 U	0.0054 U	0.0053 U
Ethylbenzene	18	0.0063 U	0.0065 U	0.0053 U	3.6 =	0.0054 U	0.0053 U
Xylene (total)	700	0.0063 U	0.0065 U	0.0053 U	2.6 =	0.0054 U	0.0053 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.42 U	0.43 U	0.35 U	0.40 U	0.36 U	0.35 U
2-Methylnaphthalene	NRC	0.42 U	0.43 U	0.35 U	0.40 U	0.36 U	0.35 U
Acenaphthene	NRC	0.42 U	0.43 U	0.35 U	0.40 U	0.36 U	0.35 U
Acenaphthylene	NRC	0.42 U	0.43 U	0.35 U	0.40 U	0.36 U	0.35 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.42 U	0.43 U	0.35 U	0.40 U	0.36 U	0.35 U
Benzo(b)fluoranthene	0.660	0.42 U	0.43 U	0.35 U	0.40 U	0.36 U	0.35 U
Benzo(g,h,i)perylene	NRC	0.42 U	0.43 U	0.35 U	0.40 U	0.36 U	0.35 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.42 U	0.43 U	0.35 U	0.40 U	0.36 U	0.35 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.42 U	0.43 U	0.35 U	0.40 U	0.36 U	0.35 U
Fluorene	NRC	0.42 U	0.43 U	0.35 U	0.40 U	0.36 U	0.35 U
Indeno(1,2,3-cd)pyrene	0.660	0.42 U	0.43 U	0.35 U	0.40 U	0.36 U	0.35 U
Naphthalene	NRC	0.42 U	0.43 U	0.35 U	0.40 U	0.36 U	0.35 U
Phenanthrene	NRC	0.42 U	0.43 U	0.35 U	0.40 U	0.36 U	0.35 U
Pyrene	NRC	0.42 U	0.43 U	0.35 U	0.40 U	0.36 U	0.35 U
<i>OTHER ANALYTES</i>							
TPH - Diesel Range Organics	NRC	13 UJ	13 UJ	11 U	32 =	11 U	11 U
TPH - Gasoline Range Organics	NRC	0.32 U	0.32 U	0.26 U	170 =	0.27 UJ	0.26 UJ

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-SB09 H833- SB0901	D-SB09 H833- SB0902	D-SB10 H833- SB1001	D-SB10 H833- SB1002	D-SB10 H833- SB1003	D-SB10 H833- SB1004
Sample Interval (ft BGS):	Threshold	1.5 - 3.5	5.0 - 7.0	1.5 - 3.5	8.0 - 10.0	13.0 - 15.0	18.0 - 20.0
Collection Date:	Levels ¹	02/29/1996	02/29/1996	02/28/1996	02/28/1996	02/28/1996	02/28/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0056 U	0.0053 U	0.0054 U	260 J	0.19 =	0.22 =
Toluene	115	0.0056 U	0.0053 U	0.0054 U	140 J	0.019 =	0.034 =
Ethylbenzene	18	0.0056 U	0.0053 U	0.0054 U	76 J	0.029 =	0.046 =
Xylene (total)	700	0.0056 U	0.0053 U	0.0054 U	200 J	0.052 =	0.2 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.37 U	0.35 U	0.35 U	0.39 U	0.41 U	0.42 U
2-Methylnaphthalene	NRC	0.37 U	0.35 U	0.35 U	0.60 =	0.41 U	0.42 U
Acenaphthene	NRC	0.37 U	0.35 U	0.35 U	0.39 U	0.41 U	0.42 U
Acenaphthylene	NRC	0.37 U	0.35 U	0.35 U	0.39 U	0.41 U	0.42 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.37 U	0.35 U	0.35 U	0.39 U	0.41 U	0.42 U
Benzo(b)fluoranthene	0.660	0.37 U	0.35 U	0.35 U	0.39 U	0.41 U	0.42 U
Benzo(g,h,i)perylene	NRC	0.37 U	0.35 U	0.35 U	0.39 U	0.41 U	0.42 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.37 U	0.35 U	0.35 U	0.39 U	0.41 U	0.42 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.37 U	0.35 U	0.35 U	0.39 U	0.41 U	0.42 U
Fluorene	NRC	0.37 U	0.35 U	0.35 U	0.39 U	0.41 U	0.42 U
Indeno(1,2,3-cd)pyrene	0.660	0.37 U	0.35 U	0.35 U	0.39 U	0.41 U	0.42 U
Naphthalene	NRC	0.37 U	0.35 U	0.35 U	0.68 =	0.41 U	0.42 U
Phenanthrene	NRC	0.37 U	0.35 U	0.35 U	0.39 U	0.41 U	0.42 U
Pyrene	NRC	0.37 U	0.35 U	0.35 U	0.39 U	0.41 U	0.42 U
<i>OTHER ANALYTES</i>							
TPH - Diesel Range Organics	NRC	11 U	10 U	11 U	470 =	12 =	13 U
TPH - Gasoline Range Organics	NRC	0.28 U	0.26 UJ	0.27 U	3600 J	1.1 =	2.5 J

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-SB11 H833- SB1101	D-SB11 H833- SB1102	D-SB12 H833- SB1201	D-SB12 H833- SB1202	D-SB13 H833- SB1301	D-SB13 H833- SB1302
Sample Interval (ft BGS):	Threshold	1.3 - 3.3	5.3 - 7.3	0.0 - 2.0	6.0 - 8.0	1.3 - 3.3	5.3 - 7.3
Collection Date:	Levels ¹	02/28/1996	02/28/1996	02/28/1996	02/28/1996	02/28/1996	02/28/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0054 U	0.0057 U	0.0055 U	0.0057 U	0.0054 U	0.0055 U
Toluene	115	0.0054 U	0.0057 U	0.0055 U	0.0057 U	0.0054 U	0.0055 U
Ethylbenzene	18	0.0054 U	0.0057 U	0.0055 U	0.0057 U	0.0054 U	0.0055 U
Xylene (total)	700	0.0054 U	0.0057 U	0.0055 U	0.0057 U	0.0054 U	0.0055 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.35 U	0.38 U	0.36 U	0.38 U	0.36 U	0.36 U
2-Methylnaphthalene	NRC	0.35 U	0.38 U	0.36 U	0.38 U	0.36 U	0.36 U
Acenaphthene	NRC	0.35 U	0.38 U	0.36 U	0.38 U	0.36 U	0.36 U
Acenaphthylene	NRC	0.35 U	0.38 U	0.36 U	0.38 U	0.36 U	0.36 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.35 U	0.38 U	0.36 U	0.38 U	0.36 U	0.36 U
Benzo(b)fluoranthene	0.660	0.38 =	0.38 U	0.36 U	0.38 U	0.36 U	0.36 U
Benzo(g,h,i)perylene	NRC	0.35 U	0.38 U	0.36 U	0.38 U	0.36 U	0.36 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.39 =	0.38 U	0.36 U	3.8 =	0.36 U	0.36 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.35 U	0.38 U	0.36 U	0.38 U	0.36 U	0.36 U
Fluorene	NRC	0.35 U	0.38 U	0.36 U	0.38 U	0.36 U	0.36 U
Indeno(1,2,3-cd)pyrene	0.660	0.35 U	0.38 U	0.36 U	0.38 U	0.36 U	0.36 U
Naphthalene	NRC	0.35 U	0.38 U	0.36 U	0.38 U	0.36 U	0.36 U
Phenanthrene	NRC	0.35 U	0.38 U	0.36 U	0.38 U	0.36 U	0.36 U
Pyrene	NRC	0.35 U	0.38 U	0.36 U	0.38 U	0.36 U	0.36 U
<i>OTHER ANALYTES</i>							
TPH - Diesel Range Organics	NRC	11 U	11 U	11 U	11 U	11 U	11 U
TPH - Gasoline Range Organics	NRC	0.27 U	0.29 UJ	0.27 U	0.29 U	0.27 U	0.27 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-SB14 H833- SB1401	D-SB14 H833- SB1402	D-SB15 H833- SB1501	D-SB15 H833- SB1502	D-SB16 H833- SB1601	D-SB16 H833- SB1602
Sample Interval (ft BGS):	Threshold	0.0 - 2.0	6.0 - 8.0	1.5 - 3.5	8.0 - 10.0	1.3 - 3.3	5.3 - 7.3
Collection Date:	Levels ¹	02/29/1996	02/29/1996	02/29/1996	02/29/1996	02/29/1996	02/29/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.017	0.0053 U	0.0062 U	0.0053 U	0.0066 U	0.0052 U	0.0058 U
Toluene	115	0.0053 U	0.0062 U	0.0053 U	0.0081 =	0.0052 U	0.0058 U
Ethylbenzene	18	0.0053 U	0.0062 U	0.0053 U	0.0066 U	0.0052 U	0.0058 U
Xylene (total)	700	0.0053 U	0.0062 U	0.0053 U	0.01 =	0.0052 U	0.0058 U
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	0.35 U	0.41 U	0.35 U	0.43 U	0.34 U	0.38 U
2-Methylnaphthalene	NRC	0.35 U	0.41 U	0.35 U	0.43 U	0.34 U	0.38 U
Acenaphthene	NRC	0.35 U	0.41 U	0.35 U	0.43 U	0.34 U	0.38 U
Acenaphthylene	NRC	0.35 U	0.41 U	0.35 U	0.43 U	0.34 U	0.38 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.35 U	0.41 U	0.35 U	0.43 U	0.34 U	0.38 U
Benzo(b)fluoranthene	0.660	0.35 U	0.41 U	0.35 U	0.43 U	0.34 U	0.38 U
Benzo(g,h,i)perylene	NRC	0.35 U	0.41 U	0.35 U	0.43 U	0.34 U	0.38 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.35 U	0.41 U	0.35 U	0.43 U	0.34 U	0.38 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.35 U	0.41 U	0.35 U	0.43 U	0.34 U	0.38 U
Fluorene	NRC	0.35 U	0.41 U	0.35 U	0.43 U	0.34 U	0.38 U
Indeno(1,2,3-cd)pyrene	0.660	0.35 U	0.41 U	0.35 U	0.43 U	0.34 U	0.38 U
Naphthalene	NRC	0.35 U	0.41 U	0.35 U	0.43 U	0.34 U	0.38 U
Phenanthrene	NRC	0.35 U	0.41 U	0.35 U	0.43 U	0.34 U	0.38 U
Pyrene	NRC	0.35 U	0.41 U	0.35 U	0.43 U	0.34 U	0.38 U
OTHER ANALYTES							
TPH - Diesel Range Organics	NRC	11 U	12 U	10 U	13 U	10 U	12 U
TPH - Gasoline Range Organics	NRC	0.26 U	0.31 U	0.26 UJ	0.33 UJ	0.26 U	0.29 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-SB17 H833- SB1701	D-SB17 H833- SB1702	D-SB18 H833- SB1801	D-SB18 H833- SB1802	D-SB19 H833- SB1901	D-SB19 H833- SB1902
Sample Interval (ft BGS):	Threshold	1.5 - 3.5	8.0 - 10.0	1.3 - 3.3	5.3 - 7.3	1.5 - 3.5	8.0 - 10.0
Collection Date:	Levels ¹	02/29/1996	02/29/1996	02/29/1996	02/29/1996	02/29/1996	02/29/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.017	0.0055 U	0.0062 U	0.0054 U	0.0056 U	0.0054 U	0.0062 U
Toluene	115	0.0055 U	0.0062 U	0.0054 U	0.0056 U	0.0054 U	0.0062 U
Ethylbenzene	18	0.0055 U	0.0062 U	0.0054 U	0.0056 U	0.0054 U	0.0062 U
Xylene (total)	700	0.0055 U	0.0062 U	0.0054 U	0.0056 U	0.0054 U	0.0062 U
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	1.8 U	0.41 U	0.72 U	0.37 U	0.36 U	0.41 U
2-Methylnaphthalene	NRC	1.8 U	0.41 U	0.72 U	0.37 U	0.36 U	0.41 U
Acenaphthene	NRC	1.8 U	0.41 U	0.72 U	0.37 U	0.36 U	0.41 U
Acenaphthylene	NRC	1.8 U	0.41 U	0.98 =	0.37 U	0.36 U	0.41 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	12 =	0.41 U	6 =	0.37 U	0.36 U	0.41 U
Benzo(b)fluoranthene	0.660	20 =	0.41 U	9.4 =	0.37 U	0.36 U	0.41 U
Benzo(g,h,i)perylene	NRC	7.7 =	0.41 U	4.4 =	0.37 U	0.36 U	0.41 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	27 =	0.41 U	8.2 =	0.37 U	0.36 U	0.41 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	24 =	0.41 U	4.6 =	0.37 U	0.36 U	0.41 U
Fluorene	NRC	1.8 U	0.41 U	0.72 U	0.37 U	0.36 U	0.41 U
Indeno(1,2,3-cd)pyrene	0.660	10 =	0.41 U	4.9 =	0.37 U	0.36 U	0.41 U
Naphthalene	NRC	1.8 U	0.41 U	0.72 U	0.37 U	0.36 U	0.41 U
Phenanthrene	NRC	16 =	0.41 U	0.72 U	0.37 U	0.36 U	0.41 U
Pyrene	NRC	14 =	0.41 U	4.6 =	0.37 U	0.36 U	0.41 U
OTHER ANALYTES							
TPH - Diesel Range Organics	NRC	300 J	12 U	25 =	11 U	31 =	12 U
TPH - Gasoline Range Organics	NRC	0.27 UJ	0.31 U	0.27 U	0.28 U	0.27 U	0.31 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- NRC No regulatory criteria

Laboratory Qualifiers

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- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-SB20 H833- SB2001	D-SB20 H833- SB2002	D-SB21 H833- SB2101	D-SB21 H833- SB2102	D-SB22 H833- SB2201	D-SB22 H833- SB2202
Sample Interval (ft BGS):	Threshold	1.1 - 3.1	5.1 - 7.1	1.5 - 3.5	8.0 - 10.0	1.3 - 3.3	7.3 - 9.3
Collection Date:	Levels ¹	02/29/1996	02/29/1996	02/29/1996	02/29/1996	02/29/1996	02/29/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.017	0.0054 U	0.0055 U	0.0054 U	0.0062 U	13 =	160 J
Toluene	115	0.0054 U	0.0055 U	0.082 J	0.0062 U	0.61 =	43 J
Ethylbenzene	18	0.0054 U	0.0055 U	0.019 J	0.0062 U	2.2 =	31 J
Xylene (total)	700	0.0054 U	0.0055 U	0.076 J	0.0062 U	8.2 =	74 J
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	0.35 U	0.36 U	0.35 U	0.41 U	0.36 U	0.39 U
2-Methylnaphthalene	NRC	0.35 U	0.36 U	0.35 U	0.41 U	0.36 U	0.39 U
Acenaphthene	NRC	0.35 U	0.36 U	0.35 U	0.41 U	0.36 U	0.39 U
Acenaphthylene	NRC	0.35 U	0.36 U	0.35 U	0.41 U	0.36 U	0.39 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.35 U	0.36 U	0.35 U	0.41 U	0.36 U	0.39 U
Benzo(b)fluoranthene	0.660	0.35 U	0.36 U	0.35 U	0.41 U	0.36 U	0.39 U
Benzo(g,h,i)perylene	NRC	0.35 U	0.36 U	0.58 =	0.41 U	0.36 U	0.39 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.35 U	0.36 U	0.35 U	0.41 U	0.36 U	0.39 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.35 U	0.36 U	0.35 U	0.41 U	0.36 U	0.39 U
Fluorene	NRC	0.35 U	0.36 U	0.35 U	0.41 U	0.36 U	0.39 U
Indeno(1,2,3-cd)pyrene	0.660	0.35 U	0.36 U	0.35 U	0.41 U	0.36 U	0.39 U
Naphthalene	NRC	0.35 U	0.36 U	0.35 U	0.41 U	0.36 U	0.39 U
Phenanthrene	NRC	0.35 U	0.36 U	0.35 U	0.41 U	0.36 U	0.39 U
Pyrene	NRC	0.35 U	0.36 U	0.35 U	0.41 U	0.36 U	0.39 U
OTHER ANALYTES							
TPH - Diesel Range Organics	NRC	11 U	11 U	11 U	12 U	16 =	88 =
TPH - Gasoline Range Organics	NRC	0.27 U	0.27 UJ	0.27 UJ	0.31 U	200 =	1900 J

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-SB23 H833- SB2301	D-SB23 H833- SB2302	D-SB23 H833- SB2303	D-SB23 H833- B2304	D-SB24 H833- SB2401	D-SB24 H833- SB2402
Sample Interval (ft BGS):	Threshold	1.5 - 3.5	8.0 - 10.0	13.0 - 15.0	18.0 - 20.0	1.3 - 3.3	7.3 - 9.3
Collection Date:	Levels ¹	02/28/1996	02/28/1996	02/28/1996	02/28/1996	02/29/1996	02/29/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.34 =	8.5 J	0.0062 U	0.091 =	0.0056 U	0.0057 U
Toluene	115	0.0056 U	1.1 J	0.0062 U	0.0063 U	0.013 =	0.0057 U
Ethylbenzene	18	0.027 =	6.1 J	0.0062 U	0.026 =	0.0056 U	0.0057 U
Xylene (total)	700	0.047 =	12 J	0.025 =	0.028 =	0.012 =	0.0057 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.37 U	0.36 U	0.41 U	0.42 U	0.37 U	0.38 U
2-Methylnaphthalene	NRC	0.37 U	0.36 U	0.41 U	0.42 U	0.37 U	0.38 U
Acenaphthene	NRC	0.37 U	0.36 U	0.41 U	0.42 U	0.37 U	0.38 U
Acenaphthylene	NRC	0.37 U	0.36 U	0.41 U	0.42 U	0.37 U	0.38 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.37 U	0.36 U	0.41 U	0.42 U	0.37 U	0.38 U
Benzo(b)fluoranthene	0.660	0.37 U	0.36 U	0.41 U	0.42 U	0.37 U	0.38 U
Benzo(g,h,i)perylene	NRC	0.84 =	0.36 U	0.41 U	0.42 U	0.37 U	0.38 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.37 U	0.36 U	0.41 U	0.42 U	0.37 U	0.38 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.37 U	0.36 U	0.41 U	0.42 U	0.37 U	0.38 U
Fluorene	NRC	0.37 U	0.36 U	0.41 U	0.42 U	0.37 U	0.38 U
Indeno(1,2,3-cd)pyrene	0.660	0.37 U	0.36 U	0.41 U	0.42 U	0.37 U	0.38 U
Naphthalene	NRC	0.37 U	0.36 U	0.41 U	0.42 U	0.37 U	0.38 U
Phenanthrene	NRC	0.37 U	0.36 U	0.41 U	0.42 U	0.37 U	0.38 U
Pyrene	NRC	0.37 U	0.36 U	0.41 U	0.42 U	0.37 U	0.38 U
<i>OTHER ANALYTES</i>							
TPH - Diesel Range Organics	NRC	17 =	23 =	12 U	13 U	11 U	12 U
TPH - Gasoline Range Organics	NRC	0.28 U	210 J	0.31 U	1.1 =	0.28 UJ	0.29 UJ

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-SB25 H833- SB2501	D-SB25 H833- SB2502	D-SB26 H833- SB2601	D-SB26 H833- B2602	D-SB27 H833- SB2701	D-SB27 H833- SB2702
Sample Interval (ft BGS):	Threshold	1.5 - 3.5	8.0 - 10.0	1.5 - 3.5	8.0 - 10.0	1.5 - 3.5	8.0 - 10.0
Collection Date:	Levels ¹	02/29/1996	02/29/1996	03/04/1996	03/04/1996	02/29/1996	02/29/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.017	0.0067 =	0.0062 U	0.0056 U	0.0060 U	0.0056 U	0.0059 U
Toluene	115	0.0054 U	0.0062 U	0.0056 U	0.0060 U	0.0056 U	0.0059 U
Ethylbenzene	18	0.0054 U	0.0062 U	0.0095 =	0.0060 U	0.0056 U	0.0059 U
Xylene (total)	700	0.0054 U	0.0062 U	0.039 =	0.0060 U	0.0056 U	0.0059 U
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	0.36 U	0.41 U	0.37 U	0.40 U	0.37 U	0.39 U
2-Methylnaphthalene	NRC	0.36 U	0.41 U	0.37 U	0.40 U	0.37 U	0.39 U
Acenaphthene	NRC	0.36 U	0.41 U	0.37 U	0.40 U	0.37 U	0.39 U
Acenaphthylene	NRC	0.36 U	0.41 U	0.37 U	0.40 U	0.37 U	0.39 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.36 U	0.41 U	0.37 U	0.40 U	0.37 U	0.39 U
Benzo(b)fluoranthene	0.660	0.36 U	0.41 U	0.37 U	0.40 U	0.37 U	0.39 U
Benzo(g,h,i)perylene	NRC	0.36 U	0.41 U	0.37 U	0.40 U	0.37 U	0.39 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.36 U	0.41 U	0.37 U	0.40 U	0.37 U	0.39 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.36 U	0.41 U	0.37 U	0.40 U	0.37 U	0.39 U
Fluorene	NRC	0.36 U	0.41 U	0.37 U	0.40 U	0.37 U	0.39 U
Indeno(1,2,3-cd)pyrene	0.660	0.36 U	0.41 U	0.37 U	0.40 U	0.37 U	0.39 U
Naphthalene	NRC	0.36 U	0.41 U	0.37 U	0.40 U	0.37 U	0.39 U
Phenanthrene	NRC	0.36 U	0.41 U	0.37 U	0.40 U	0.37 U	0.39 U
Pyrene	NRC	0.36 U	0.41 U	0.37 U	0.40 U	0.37 U	0.39 U
OTHER ANALYTES							
TPH - Diesel Range Organics	NRC	11 U	12 U	11 U	12 U	11 U	12 U
TPH - Gasoline Range Organics	NRC	0.27 U	0.31 U	0.71 =	0.30 U	0.28 U	0.29 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station:		D-SB28	D-SB28	D-SB29	D-SB29	D-SB29	D-SB29
Sample ID:	GUST	H833-	H833-	H833-	H833-	H833-	H833-
	Soil	SB2801	SB2802	SB2901	SB2902	SB2903	SB2904
Sample Interval (ft BGS):	Threshold	1.2 - 3.2	5.2 - 7.2	1.5 - 3.5	8.0 - 10.0	13.0 - 15.0	18.0 - 20.0
Collection Date:	Levels ¹	02/29/1996	02/29/1996	02/28/1996	02/28/1996	02/28/1996	02/28/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.017	0.0054 U	0.0059 U	0.0057 U	0.0057 U	0.0063 U	0.0062 U
Toluene	115	0.0054 U	0.0059 U	0.0057 U	0.0057 U	0.0063 U	0.0062 U
Ethylbenzene	18	0.0054 U	0.0059 U	0.0057 U	0.0057 U	0.0063 U	0.0062 U
Xylene (total)	700	0.0054 U	0.0059 U	0.0067 =	0.0077 =	0.0063 U	0.0062 U
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	0.36 U	0.39 U	0.38 U	0.76 U	0.42 U	0.41 U
2-Methylnaphthalene	NRC	0.36 U	0.39 U	0.38 U	0.76 U	0.42 U	0.41 U
Acenaphthene	NRC	0.36 U	0.39 U	0.38 U	0.76 U	0.42 U	0.41 U
Acenaphthylene	NRC	0.36 U	0.39 U	0.38 U	1.3 =	0.42 U	0.41 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.36 U	0.39 U	0.38 U	3.8 =	0.42 U	0.41 U
Benzo(b)fluoranthene	0.660	0.36 U	0.39 U	0.38 U	5.1 =	0.42 U	0.41 U
Benzo(g,h,i)perylene	NRC	0.36 U	0.39 U	0.38 U	2.9 =	0.42 U	0.41 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.36 U	0.39 U	0.38 U	6.7 =	0.42 U	0.41 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.36 U	0.39 U	0.38 U	1.3 =	0.42 U	0.41 U
Fluorene	NRC	0.36 U	0.39 U	0.38 U	0.76 U	0.42 U	0.41 U
Indeno(1,2,3-cd)pyrene	0.660	0.36 U	0.39 U	0.38 U	1.9 =	0.42 U	0.41 U
Naphthalene	NRC	0.36 U	0.39 U	0.38 U	0.76 U	0.42 U	0.41 U
Phenanthrene	NRC	0.36 U	0.39 U	0.38 U	0.76 U	0.42 U	0.41 U
Pyrene	NRC	0.36 U	0.39 U	0.38 U	3 =	0.42 U	0.41 U
OTHER ANALYTES							
TPH - Diesel Range Organics	NRC	11 U	12 U	11 U	33 =	13 U	12 U
TPH - Gasoline Range Organics	NRC	0.27 UJ	0.29 U	0.29 U	0.29 U	0.32 U	0.31 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-SB30 H833- SB3001	D-SB30 H833- SB3002	D-SB31 H833- SB3101	D-SB31 H833- SB3102	D-SB32 H833- SB3201	D-SB32 H833- SB3202
Sample Interval (ft BGS):	Threshold	1.6 - 3.6	8.0 - 10.0	1.5 - 3.5	8.0 - 10.0	1.5 - 3.5	8.0 - 10.0
Collection Date:	Levels ¹	03/04/1996	03/04/1996	03/04/1996	03/04/1996	02/28/1996	02/29/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0059 U	0.0060 U	0.0067 U	0.0062 U	0.0056 U	0.0062 U
Toluene	115	0.0059 U	0.0060 U	0.0067 U	0.0062 U	0.0059 =	0.0062 U
Ethylbenzene	18	0.0059 U	0.0060 U	0.0067 U	0.0062 U	0.0056 U	0.0062 U
Xylene (total)	700	0.0059 U	0.0060 U	0.0067 U	0.0084 =	0.013 =	0.0062 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.39 U	0.40 U	0.39 U	0.41 U	0.37 U	0.41 U
2-Methylnaphthalene	NRC	0.39 U	0.40 U	0.39 U	0.41 U	0.37 U	0.41 U
Acenaphthene	NRC	0.39 U	0.40 U	0.39 U	0.41 U	0.37 U	0.41 U
Acenaphthylene	NRC	0.39 U	0.40 U	0.39 U	0.41 U	0.37 U	0.41 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.39 U	0.40 U	0.39 U	0.41 U	0.37 U	0.41 U
Benzo(b)fluoranthene	0.660	0.39 U	0.40 U	0.39 U	0.41 U	0.37 U	0.41 U
Benzo(g,h,i)perylene	NRC	0.39 U	0.40 U	0.39 U	0.41 U	0.37 U	0.41 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.39 U	0.40 U	0.39 U	0.41 U	0.37 U	0.41 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.39 U	0.40 U	0.39 U	0.41 U	0.37 U	0.41 U
Fluorene	NRC	0.39 U	0.40 U	0.39 U	0.41 U	0.37 U	0.41 U
Indeno(1,2,3-cd)pyrene	0.660	0.39 U	0.40 U	0.39 U	0.41 U	0.37 U	0.41 U
Naphthalene	NRC	0.39 U	0.40 U	0.39 U	0.41 U	0.37 U	0.41 U
Phenanthrene	NRC	0.39 U	0.40 U	0.39 U	0.41 U	0.37 U	0.41 U
Pyrene	NRC	0.39 U	0.40 U	0.39 U	0.41 U	0.37 U	0.41 U
<i>OTHER ANALYTES</i>							
TPH - Diesel Range Organics	NRC	12 U	12 U	12 U	12 U	11 U	12 U
TPH - Gasoline Range Organics	NRC	0.29 U	0.3 U	0.29 U	0.31 UJ	0.28 U	0.31 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- NRC No regulatory criteria

Laboratory Qualifiers

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- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-SB32 H833- SB3203	D-SB32 H833- SB3204	D-SB33 H833- SB3301	D-SB33 H833- SB3302	D-SB34 H833- SB3401	D-SB34 H833- SB3402
Sample Interval (ft BGS):	Threshold	13.0 - 15.0	18.0 - 20.0	1.5 - 3.5	8.0 - 10.0	1.1 - 3.1	6.0 - 8.0
Collection Date:	Levels ¹	02/29/1996	02/29/1996	03/04/1996	03/04/1996	03/04/1996	03/04/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.017	0.0063 U	0.0062 U	0.0054 U	0.0062 U	0.0054 U	0.0060 U
Toluene	115	0.0063 U	0.0062 U	0.0054 U	0.0062 U	0.0054 U	0.0060 U
Ethylbenzene	18	0.0063 U	0.0062 U	0.0054 U	0.0062 U	0.0054 U	0.0060 U
Xylene (total)	700	0.0063 U	0.0062 U	0.0054 U	0.0062 U	0.0054 U	0.0060 U
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	0.42 U	0.41 U	0.36 U	0.41 U	0.36 U	0.39 U
2-Methylnaphthalene	NRC	0.42 U	0.41 U	0.36 U	0.41 U	0.36 U	0.39 U
Acenaphthene	NRC	0.42 U	0.41 U	0.36 U	0.41 U	0.36 U	0.39 U
Acenaphthylene	NRC	0.42 U	0.41 U	0.36 U	0.41 U	0.36 U	0.39 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.42 U	0.41 U	0.36 U	0.41 U	0.36 U	0.39 U
Benzo(b)fluoranthene	0.660	0.42 U	0.41 U	0.36 U	0.41 U	0.36 U	0.39 U
Benzo(g,h,i)perylene	NRC	0.42 U	0.41 U	0.36 U	0.41 U	0.36 U	0.39 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.42 U	0.41 U	0.36 U	0.41 U	0.36 U	0.39 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.42 U	0.41 U	0.36 U	0.41 U	0.36 U	0.39 U
Fluorene	NRC	0.42 U	0.41 U	0.36 U	0.41 U	0.36 U	0.39 U
Indeno(1,2,3-cd)pyrene	0.660	0.42 U	0.41 U	0.36 U	0.41 U	0.36 U	0.39 U
Naphthalene	NRC	0.42 U	0.41 U	0.36 U	0.41 U	0.36 U	0.39 U
Phenanthrene	NRC	0.42 U	0.41 U	0.36 U	0.41 U	0.36 U	0.39 U
Pyrene	NRC	0.42 U	0.41 U	0.36 U	0.41 U	0.36 U	0.39 U
OTHER ANALYTES							
TPH - Diesel Range Organics	NRC	13 UJ	20 =	11 U	12 U	11 U	12 U
TPH - Gasoline Range Organics	NRC	0.32 UJ	0.31 U	0.27 U	0.31 U	0.27 U	0.30 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- NRC No regulatory criteria

Laboratory Qualifiers

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- J Indicates that the value for the compound was an estimated value.
- = Indicates that the compound was detected at the concentration reported.

Table V-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-SB35 H833- SB3501	D-SB35 H833- B3502	D-SB36 H833- SB3601	D-SB36 H833- SB3602	D-SB37 H833- SB3701	D-SB37 H833- SB3702
Sample Interval (ft BGS):	Threshold	1.5 - 3.5	6.0 - 8.0	1.3 - 3.3	6.0 - 8.0	1.3 - 3.3	3.3 - 5.3
Collection Date:	Levels ¹	03/04/1996	03/04/1996	03/04/1996	03/04/1996	03/05/1996	03/05/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.017	0.0055 U	0.0063 U	0.0056 U	0.0060 U	0.0054 U	0.0054 U
Toluene	115	0.0055 U	0.0063 U	0.0056 U	0.0060 U	0.0054 U	0.0054 U
Ethylbenzene	18	0.0055 U	0.0063 U	0.0056 U	0.0060 U	0.0054 U	0.0054 U
Xylene (total)	700	0.0055 U	0.0063 U	0.0056 U	0.0060 U	0.0054 U	0.0054 U
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	0.36 U	0.42 U	0.37 U	0.39 U	1.8 R	1.8 R
2-Methylnaphthalene	NRC	0.36 U	0.42 U	0.37 U	0.39 U	1.8 R	1.8 R
Acenaphthene	NRC	0.36 U	0.42 U	0.37 U	0.39 U	1.8 R	1.8 R
Acenaphthylene	NRC	0.36 U	0.42 U	0.37 U	0.39 U	1.8 R	2.2 J
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.36 U	0.42 U	0.37 U	0.39 U	9.1 J	10 J
Benzo(b)fluoranthene	0.660	0.36 U	0.42 U	0.37 U	0.39 U	15 J	22 J
Benzo(g,h,i)perylene	NRC	0.36 U	0.42 U	0.37 U	0.39 U	7.3 J	11 J
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.36 U	0.42 U	0.37 U	0.39 U	19 J	22 J
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.36 U	0.42 U	0.37 U	0.39 U	10 J	9.2 J
Fluorene	NRC	0.36 U	0.42 U	0.37 U	0.39 U	1.8 R	1.8 R
Indeno(1,2,3-cd)pyrene	0.660	0.36 U	0.42 U	0.37 U	0.39 U	9.2 J	14 J
Naphthalene	NRC	0.36 U	0.42 U	0.37 U	0.39 U	1.8 R	1.8 R
Phenanthrene	NRC	0.36 U	0.42 U	0.37 U	0.39 U	4.1 J	6.5 J
Pyrene	NRC	0.36 U	0.42 U	0.37 U	0.39 U	11 J	11 J
OTHER ANALYTES							
TPH - Diesel Range Organics	NRC	11 U	13 U	11 U	12 U	36 =	51 =
TPH - Gasoline Range Organics	NRC	0.27 U	0.32 U	0.28 UJ	0.30 U	0.27 UJ	0.27 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-SB37 H833- SB3703	D-SB37 H833- SB3704	D-SB38 H833- SB3801	D-SB38 H833- SB3802	D-SB39 H833- SB3901	D-SB39 H833- SB3902
Sample Interval (ft BGS):	Threshold	13.0 - 15.0	18.0 - 20.0	1.3 - 3.3	3.3 - 5.3	1.5 - 3.5	6.0 - 8.0
Collection Date:	Levels ¹	03/05/1996	03/05/1996	03/04/1996	03/04/1996	03/04/1996	03/04/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.017	0.0060 U	0.0060 U	0.0056 U	0.0057 U	0.0058 U	0.0063 U
Toluene	115	0.0060 U	0.0060 U	0.0056 U	0.0057 U	0.0058 U	0.0063 U
Ethylbenzene	18	0.0060 U	0.0060 U	0.0056 U	0.0057 U	0.0058 U	0.0063 U
Xylene (total)	700	0.0060 U	0.0060 U	0.0056 U	0.0057 U	0.0058 U	0.0063 U
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	0.40 U	0.40 U	0.37 U	0.38 U	0.38 U	0.42 U
2-Methylnaphthalene	NRC	0.40 U	0.40 U	0.37 U	0.38 U	0.38 U	0.42 U
Acenaphthene	NRC	0.40 U	0.40 U	0.37 U	0.38 U	0.38 U	0.42 U
Acenaphthylene	NRC	0.40 U	0.40 U	0.37 U	0.38 U	0.38 U	0.42 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.76 =	0.43 =	0.37 U	0.38 U	0.38 U	0.42 U
Benzo(b)fluoranthene	0.660	1.3 =	0.83 =	0.37 U	0.38 U	0.38 U	0.42 U
Benzo(g,h,i)perylene	NRC	0.63 =	0.40 U	0.37 U	0.38 U	0.38 U	0.42 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	1.4 =	1.1 =	0.37 U	0.38 U	0.38 U	0.42 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.77 =	1.0 =	0.37 U	0.38 U	0.38 U	0.42 U
Fluorene	NRC	0.40 U	0.40 U	0.37 U	0.38 U	0.38 U	0.42 U
Indeno(1,2,3-cd)pyrene	0.660	0.63 =	0.40 U	0.37 U	0.38 U	0.38 U	0.42 U
Naphthalene	NRC	0.40 U	0.40 U	0.37 U	0.38 U	0.38 U	0.42 U
Phenanthrene	NRC	0.51 =	1.1 =	0.37 U	0.38 U	0.38 U	0.42 U
Pyrene	NRC	0.81 =	0.9 =	0.37 U	0.38 U	0.38 U	0.42 U
OTHER ANALYTES							
TPH - Diesel Range Organics	NRC	12 U	12 U	11 U	11 U	12 U	13 U
TPH - Gasoline Range Organics	NRC	0.30 U	0.30 U	0.28 U	0.28 U	0.29 UJ	0.32 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-SB40 H833- SB4001	D-SB40 H833- SB4002	D-SB40 H833- SB4003	D-SB40 H833- SB4004	D-SB41 H833- SB4101	D-SB41 H833- SB4102
Sample Interval (ft BGS):	Threshold	1.5 - 3.5	5.0 - 7.0	13.0 - 15.0	18.0 - 20.0	1.5 - 3.5	5.0 - 7.0
Collection Date:	Levels ¹	03/05/1996	03/05/1996	03/05/1996	03/05/1996	03/04/1996	03/04/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0061 U	0.0062 U	0.0064 U	0.0064 U	0.0056 U	0.0060 U
Toluene	115	0.0061 U	0.0062 U	0.0064 U	0.0064 U	0.0056 U	0.0060 U
Ethylbenzene	18	0.0061 U	0.0062 U	0.0064 U	0.0064 U	0.0056 U	0.0060 U
Xylene (total)	700	0.0061 U	0.0062 U	0.0064 U	0.014 =	0.0056 U	0.0060 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.8 U	0.41 U	0.42 U	0.42 U	0.37 U	0.39 U
2-Methylnaphthalene	NRC	0.8 U	0.41 U	0.42 U	0.42 U	0.37 U	0.39 U
Acenaphthene	NRC	0.8 U	0.41 U	0.42 U	0.42 U	0.37 U	0.39 U
Acenaphthylene	NRC	0.8 U	0.41 U	0.42 U	0.42 U	0.37 U	0.39 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.8 U	0.41 U	0.42 U	0.42 U	0.37 U	0.39 U
Benzo(b)fluoranthene	0.660	0.8 U	0.41 U	0.42 U	0.42 U	0.37 U	0.39 U
Benzo(g,h,i)perylene	NRC	0.8 U	0.41 U	0.42 U	0.42 U	0.37 U	0.39 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.8 U	0.41 U	0.42 U	0.42 U	0.37 U	0.39 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.8 U	0.41 U	0.42 U	0.42 U	0.37 U	0.39 U
Fluorene	NRC	0.8 U	0.41 U	0.42 U	0.42 U	0.37 U	0.39 U
Indeno(1,2,3-cd)pyrene	0.660	0.8 U	0.41 U	0.42 U	0.42 U	0.37 U	0.39 U
Naphthalene	NRC	0.8 U	0.41 U	0.42 U	0.42 U	0.37 U	0.39 U
Phenanthrene	NRC	0.8 U	0.41 U	0.42 U	0.42 U	0.37 U	0.39 U
Pyrene	NRC	0.8 U	0.41 U	0.42 U	0.42 U	0.37 U	0.39 U
<i>OTHER ANALYTES</i>							
TPH - Diesel Range Organics	NRC	65 =	12 U	13 U	13 U	13 =	12 U
TPH - Gasoline Range Organics	NRC	0.3 U	0.31 U	0.32 UJ	0.32 UJ	0.28 U	0.30 UJ

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-SB42 H833- SB4201	D-SB42 H833- SB4202	D-SB43 H833- SB4301	D-SB43 H833- SB4302	D-SB44 H833- SB4401	D-SB44 H833- SB4402
Sample Interval (ft BGS):	Threshold	1.3 - 3.3	6.0 - 8.0	1.5 - 3.5	5.0 - 7.0	1.5 - 3.5	5.0 - 7.0
Collection Date:	Levels ¹	03/04/1996	03/04/1996	03/04/1996	03/04/1996	03/05/1996	03/05/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.017	0.0054 U	0.0062 U	0.0055 U	0.0057 U	0.0054 U	0.0058 U
Toluene	115	0.0054 U	0.0062 U	0.0065 =	0.0057 U	0.0054 U	0.0058 U
Ethylbenzene	18	0.0054 U	0.0062 U	0.0055 U	0.0057 U	0.0054 U	0.0058 U
Xylene (total)	700	0.0054 U	0.0062 U	0.0055 U	0.0057 U	0.0054 U	0.0058 U
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	0.36 U	0.41 U	0.36 U	0.38 U	0.36 U	0.38 U
2-Methylnaphthalene	NRC	0.36 U	0.41 U	0.36 U	0.38 U	0.36 U	0.38 U
Acenaphthene	NRC	0.36 U	0.41 U	0.36 U	0.38 U	0.36 U	0.38 U
Acenaphthylene	NRC	0.36 U	0.41 U	0.36 U	0.38 U	0.36 U	0.38 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.36 U	0.41 U	0.36 U	0.38 U	0.36 U	0.38 U
Benzo(b)fluoranthene	0.660	0.36 U	0.41 U	0.36 U	0.38 U	0.36 U	0.38 U
Benzo(g,h,i)perylene	NRC	0.36 U	0.41 U	0.36 U	1.1 =	0.36 U	0.38 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.36 U	0.41 U	0.36 U	0.38 U	0.36 U	0.38 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.36 U	0.41 U	0.36 U	0.38 U	0.36 U	0.38 U
Fluorene	NRC	0.36 U	0.41 U	0.36 U	0.38 U	0.36 U	0.38 U
Indeno(1,2,3-cd)pyrene	0.660	0.36 U	0.41 U	0.36 U	0.38 U	0.36 U	0.38 U
Naphthalene	NRC	0.36 U	0.41 U	0.36 U	0.38 U	0.36 U	0.38 U
Phenanthrene	NRC	0.36 U	0.41 U	0.36 U	0.38 U	0.36 U	0.38 U
Pyrene	NRC	0.36 U	0.41 U	0.36 U	0.38 U	0.36 U	0.38 U
OTHER ANALYTES							
TPH - Diesel Range Organics	NRC	11 U	12 U	15 =	11 U	11 U	12 U
TPH - Gasoline Range Organics	NRC	0.27 U	0.31 U	0.27 U	0.29 UJ	0.27 U	0.29 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-SB44 H833- SB4403	D-SB44 H833- SB4404	D-SB45 H833- SB4501	D-SB45 H833- SB4502	D-SB46 H833- SB4601	D-SB46 H833- SB4602
Sample Interval (ft BGS):	Threshold	13.0 - 15.0	18.0 - 20.0	0.5 - 2.5	5.0 - 7.0	1.5 - 3.5	8.0 - 10.0
Collection Date:	Levels ¹	03/05/1996	03/05/1996	03/04/1996	03/04/1996	03/04/1996	03/04/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0063 U	0.0061 U	0.0055 U	0.0060 U	0.0054 U	0.0056 U
Toluene	115	0.0063 U	0.0061 U	0.0055 U	0.0060 U	0.0054 U	0.0056 U
Ethylbenzene	18	0.0063 U	0.0061 U	0.0055 U	0.0060 U	0.0054 U	0.0056 U
Xylene (total)	700	0.0063 U	0.0061 U	0.0055 U	0.0077 =	0.0054 U	0.0056 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.42 U	0.4 U	0.36 U	0.4 U	0.36 U	0.37 U
2-Methylnaphthalene	NRC	0.42 U	0.4 U	0.36 U	0.4 U	0.36 U	0.37 U
Acenaphthene	NRC	0.42 U	0.4 U	0.36 U	0.4 U	0.36 U	0.37 U
Acenaphthylene	NRC	0.42 U	0.4 U	0.36 U	0.4 U	0.36 U	0.37 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.42 U	0.4 U	0.36 U	0.4 U	0.36 U	0.37 U
Benzo(b)fluoranthene	0.660	0.42 U	0.4 U	0.36 U	0.4 U	0.36 U	0.37 U
Benzo(g,h,i)perylene	NRC	0.42 U	0.4 U	0.36 U	0.47 =	0.36 U	0.64 =
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.42 U	0.4 U	0.36 U	0.4 U	0.36 U	0.37 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.42 U	0.4 U	0.36 U	0.4 U	0.36 U	0.37 U
Fluorene	NRC	0.42 U	0.4 U	0.36 U	0.4 U	0.36 U	0.37 U
Indeno(1,2,3-cd)pyrene	0.660	0.42 U	0.4 U	0.36 U	0.4 U	0.36 U	0.37 U
Naphthalene	NRC	0.42 U	0.4 U	0.36 U	0.4 U	0.36 U	0.37 U
Phenanthrene	NRC	0.42 U	0.4 U	0.36 U	0.4 U	0.36 U	0.37 U
Pyrene	NRC	0.42 U	0.4 U	0.36 U	0.4 U	0.36 U	0.37 U
<i>OTHER ANALYTES</i>							
TPH - Diesel Range Organics	NRC	13 U	12 U	11 U	12 U	30 =	11 U
TPH - Gasoline Range Organics	NRC	0.32 U	0.30 U	0.27 UJ	0.30 U	0.27 U	0.28 UJ

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-SB47 H833- SB4701	D-SB47 H833- SB4702	D-SB48 H833- SB4801	D-SB48 H833- SB4802	D-SB48 H833- SB4803	D-SB48 H833- SB4804
Sample Interval (ft BGS):	Threshold	1.5 - 3.5	5.0 - 7.0	1.5 - 3.5	5.0 - 7.0	13.0 - 15.0	18.0 - 20.0
Collection Date:	Levels ¹	03/04/1996	03/05/1996	03/05/1996	03/05/1996	03/05/1996	03/05/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	0.017	0.0056 U	0.0057 U	0.0061 U	0.0060 U	0.0063 U	0.0061 U
Toluene	115	0.0056 U	0.0057 U	0.0061 U	0.0060 U	0.0063 U	0.0061 U
Ethylbenzene	18	0.0056 U	0.0057 U	0.0082 =	0.0060 U	0.0063 U	0.0061 U
Xylene (total)	700	0.0056 U	0.0057 U	0.15 =	0.094 =	0.0063 U	0.0061 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	0.37 U	0.38 U	0.40 U	0.40 U	0.42 U	0.40 U
2-Methylnaphthalene	NRC	0.37 U	0.38 U	0.40 U	0.40 U	0.42 U	0.40 U
Acenaphthene	NRC	0.37 U	0.38 U	0.40 U	0.40 U	0.42 U	0.40 U
Acenaphthylene	NRC	0.37 U	0.38 U	0.40 U	0.40 U	0.42 U	0.40 U
Anthracene	NRC	^a	^a	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.37 U	0.38 U	0.40 U	0.40 U	0.42 U	0.40 U
Benzo(b)fluoranthene	0.660	0.37 U	0.38 U	0.40 U	0.40 U	0.42 U	0.40 U
Benzo(g,h,i)perylene	NRC	0.37 U	0.38 U	0.40 U	0.40 U	0.42 U	0.40 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c	^c	^c
Chrysene	0.660	0.37 U	0.38 U	0.40 U	0.40 U	0.42 U	0.40 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d	^d	^d
Fluoranthene	NRC	0.37 U	0.38 U	0.40 U	0.40 U	0.42 U	0.40 U
Fluorene	NRC	0.37 U	0.38 U	0.40 U	0.40 U	0.42 U	0.40 U
Indeno(1,2,3-cd)pyrene	0.660	0.37 U	0.38 U	0.40 U	0.40 U	0.42 U	0.40 U
Naphthalene	NRC	0.37 U	0.38 U	0.40 U	0.40 U	0.42 U	0.40 U
Phenanthrene	NRC	0.37 U	0.38 U	0.40 U	0.40 U	0.42 U	0.40 U
Pyrene	NRC	0.37 U	0.38 U	0.40 U	0.40 U	0.42 U	0.40 U
<i>OTHER ANALYTES</i>							
TPH - Diesel Range Organics	NRC	11 U	11 =	12 U	12 U	13 U	12 U
TPH - Gasoline Range Organics	NRC	0.28 U	0.29 U	1.6 =	0.54 =	0.32 U	0.30 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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-D. Summary of DAACG Facility CAP-Part B Soil Analytical Results (continued)

Station: Sample ID:	GUST Soil	D-SB49 H833- SB4901	D-SB49 H833- SB4902	D-SB50 H833- B5001	D-SB50 H833- SB5002
Sample Interval (ft BGS):	Threshold	1.3 - 3.3	6.0 - 8.0	1.1 - 3.1	8.0 - 10.0
Collection Date:	Levels ¹	03/05/1996	03/05/1996	03/04/1996	03/04/1996
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>VOLATILE ORGANIC COMPOUNDS</i>					
Benzene	0.017	0.0054 U	0.0057 U	0.0056 U	0.0060 U
Toluene	115	0.0054 U	0.0057 U	0.0056 U	0.0060 U
Ethylbenzene	18	0.0054 U	0.0057 U	0.0056 U	0.0060 U
Xylene (total)	700	0.0054 U	0.0057 U	0.0056 U	0.0060 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>					
1-Methylnaphthalene	NRC	0.36 U	0.38 U	0.37 U	0.39 U
2-Methylnaphthalene	NRC	0.36 U	0.38 U	0.37 U	0.39 U
Acenaphthene	NRC	0.36 U	0.38 U	0.37 U	0.39 U
Acenaphthylene	NRC	0.36 U	0.38 U	0.37 U	0.39 U
Anthracene	NRC	^a	^a	^a	^a
Benzo(a)anthracene	0.660	^b	^b	^b	^b
Benzo(a)pyrene	0.660	0.36 U	0.38 U	0.37 U	0.39 U
Benzo(b)fluoranthene	0.660	0.36 U	0.38 U	0.37 U	0.39 U
Benzo(g,h,i)perylene	NRC	0.36 U	0.38 U	0.37 U	0.39 U
Benzo(k)fluoranthene	0.660	^c	^c	^c	^c
Chrysene	0.660	0.36 U	0.38 U	0.37 U	0.39 U
Dibenzo(a,h)anthracene	0.660	^d	^d	^d	^d
Fluoranthene	NRC	0.36 U	0.38 U	0.37 U	0.39 U
Fluorene	NRC	0.36 U	0.38 U	0.37 U	0.39 U
Indeno(1,2,3-cd)pyrene	0.660	0.36 U	0.38 U	0.37 U	0.39 U
Naphthalene	NRC	0.36 U	0.38 U	0.37 U	0.39 U
Phenanthrene	NRC	0.36 U	0.38 U	0.37 U	0.39 U
Pyrene	NRC	0.36 U	0.38 U	0.37 U	0.39 U
<i>OTHER ANALYTES</i>					
TPH - Diesel Range Organics	NRC	11 U	11 U	11 U	12 U
TPH - Gasoline Range Organics	NRC	0.27 U	0.29 U	0.28 U	0.30 U

NOTES:

- ¹ Georgia Department of Natural Resources Applicable Soil Threshold Levels (Table B, Column 1)
- ^a Phenanthrene & anthracene co-eluted and could not be determined individually, results are presented under phenanthrene
- ^b Chrysene & benzo(a)anthracene co-eluted and could not be determined individually, results are presented under chrysene
- ^c Benzo(b)fluoranthene & benzo(k)fluoranthene co-eluted and could not be determined individually, results are presented under benzo(b)fluoranthene
- ^d Indeno(1,2,3-cd)pyrene & dibenzo(a,h)anthracene co-eluted and could not be determined individually, results are presented under indeno(1,2,3-cd)pyrene
- 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.

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Insert DAACG Facility CAP-Part B soil analytical laboratory sheets (pages V-251 to V-216)

APPENDIX VI

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

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1.0 Alternate Concentration Limits

Benzene, toluene, ethylbenzene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene were selected as COPCs for groundwater at the either the Former Fuel Pit 1A/DAACG area (Release #1) or the Former Pumphouse #1 tank pit area (Release #2). Each release was modeled separately. For the Former Fuel Pit 1A/DAACG area, the closest receptor is located approximately 450 feet from the D-MW2 (i.e., the well with the highest benzene concentration), thus the DAF for lateral migration of benzene in groundwater from the source to the receptor was calculated to be 4. For the Former Pumphouse #1 tank pit area, the closest receptor is located approximately 300 feet from the former tank pits, thus the DAF for lateral migration of benzene in groundwater from the source to the receptor was calculated to be 5.25. For the purpose of calculating ACLs, the most conservative modeling results were used to develop one set of ACLs for both plumes; therefore, the Former Fuel Pit 1A/DAACG area DAF of 4 will be used to calculate the ACLs.

PAH constituents are much less mobile in the environment than benzene and the DAF for naphthalene is at least 500 times that of the DAF for benzene. A conservative approach for estimating the DAF for PAH constituents was to use a DAF that was 10 times that of the DAF for benzene. Thus, the DAF for PAH constituents used in the ACL calculations was 40. 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. Benzene is the only constituent in groundwater at both the Former Fuel Pit 1A/DAACG Area (Release #1) and Former Pumphouse #1 Tank Pit Area (Release #2) where the concentrations exceed its ACL.

Table VI-A. Alternate Concentration Limits for Contaminants in Groundwater

Contaminant	Regulatory Level (µg/L)	Storm Drain (Release #1) or Drainage Ditch (Release #2)		Maximum Observed Concentration			
		DAF ¹	ACL ² (µg/L)	Former Fuel Pit 1A/DAACG Area (Release #1)		Former Pumphouse #1 Tank Pit Area (Release #2)	
				1996/1997	1999/2000	1996/1997	1999/2000
Benzene	71.28 ^a	4	285	700	398	4,100	3,600
Toluene	200,000 ^a	4	800,000	16,000	16,200	19,000	19,000
Ethylbenzene	28,718	4	114,800	1,500	1,440	2,000	1,800
Benzo(a)anthracene	0.0311 ^a	40	1.2	ND	^c	0.29	^c
Benzo(a)pyrene	0.0311 ^a	40	1.2	0.026	^c	0.29	^c
Benzo(b)fluoranthene	0.092 ^b	40	3.6	0.023	^c	0.19	^c
Benzo(k)fluoranthene	0.0311 ^a	40	1.2	ND	^c	0.42	^c
Chrysene	0.0311 ^a	40	1.2	0.032	^c	0.96	^c
dibenzo(a,h)anthracene	0.0311 ^a	40	1.2	ND	^c	0.73	^c
indeno(1,2,3-cd)pyrene	0.0311 ^a	40	1.2	ND	^c	0.32	^c
Naphthalene	6.5 ^b	40	260	41	^c	11	^c

¹ DAF = Predicted Benzene Concentration at the Source ÷ Predicted Benzene Concentration at the Receptor
= 12500 ÷ 3100 ≈ 4 at the storm drain.

² ACL = Regulatory Level × DAF.

^a In-Stream Water Quality Standard

^b Risk-based screening criteria

^c Only wells installed in November 1999 were sampled for PAH compounds, wells previously sampled in 1996 or 1997 were not resampled for PAH compounds.

ND Not detected.

Bold values exceed the calculated ACL.

2.0 Alternate Threshold Levels

Benzene, ethylbenzene, toluene, xylenes, benzo(a)pyrene, benze(b)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene were selected as COPCs for soil at the either the Former Fuel Pit 1A/DAACG area (Release #1) or the Former Pumphouse #1 tank pit area (Release #2). As discussed in Section 1.0 above, the DAF for the lateral migration of BTEX compounds was determined to be 4. Since the soil contamination is located at or above the water and the observed groundwater concentrations do not correspond to an equilibrium partitioning between soil and groundwater, the dilution for migration of leachate to the water table was calculated using SESOIL modeling. For the Former Fuel Pit 1A/DAACG area, the DAF for vertical migration of benzene in leachate from the source to the groundwater was calculated to be 58. Each release was modeled separately, but the vertical DAF for the Former Fuel Pit 1A/DAACG area was used since it had the most conservative lateral DAF. The ATLs for soil are presented in Table VI-B along with the maximum observed concentrations for each constituent. For the Former Fuel Pit 1A/DAACG area (Release #1), benzene, benzo(a)pyrene, chrysene, and indeno(1,2,3-cd)pyrene are the only constituents in soil at the where the concentrations exceed the respective ATL. For the Former Pumphouse #1 tank pit area (Release #2), benzene and chrysene are the only constituents in soil where the concentrations exceed the respective ATL.

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:

$$f_{cs} = 0.007 \text{ (geometric mean of site specific total organic carbon data, dimensionless).}$$

- Step 2 – calculate the dilution attenuation factor for vertical migration of leachage (DAF_1) to the water table based on the SESOIL predicted maximum contaminant concentration in groundwater:

$$DAF_1 = \frac{\frac{C_s}{K_{oc} f_{cs}}}{C_{\text{source max, w}}} = \frac{\frac{410 \text{ mg / kg}}{(81 \text{ mg / L})(0.007)}}{12.5 \text{ mg / L}} = 58 \text{ (dimensionless)}$$

where: C_s = maxim 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)
 $C_{\text{source max, w}}$ = AT123D predicted maximum groundwater concentration at the source.

- Step 3 – calculate the dilution attenuation factor for lateral migration of groundwater (DAF_w) based on the predicted maximum contaminant concentration at the source and the predicted maximum contaminant concentration at the receptor:

$$DAF_w = \frac{C_{\text{source max, w}}}{C_{\text{receptor max, w}}} = \frac{12.5 \text{ mg / L}}{3.1 \text{ mg / L}} = 4.0 \text{ (dimensionless)}$$

where: $C_{\text{source max, w}}$ = AT123D predicted maximum groundwater concentration at the source based on SESOIL predicted leachate loading at the source.
 $C_{\text{receptor max, w}}$ = AT123D predicted maximum groundwater concentration at the receptor location.

- Step 4 – calculate the alternate threshold level:

$$ATL = (K_{oc}) (f_{cs}) (C_{std}) (DAF_1) (DAF_w)$$

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)

C_{std} = applicable water quality standard

DAF_w = dilution attenuation factor for the lateral migration of groundwater

DAF_1 = dilution attenuation factor for the vertical migration of leachate.

Constituent	K_{oc} (mL/g)	f_{cs}	C_{std} (mg/L)	DAF_1	DAF_w	Calculated ATL (mg/kg)
Benzene	81	0.007	0.07128 ^a	58	4	9.3
Toluene	133	0.007	200 ^a	58	4	43,200
Ethylbenzene	176	0.007	28.718 ^a	58	4	8,200
Xylenes	639	0.007	10 ^b	58	4	10,300
Benzo(a)pyrene	282,185	0.007	3.11E-5 ^a	58	4	1.4
Benzo(b)fluoranthene	1,148,497	0.007	3.11E-5 ^c	58	4	5.8
Chrysene	426,108	0.007	3.11E-5 ^a	58	4	2.1
Indeno(1,2,3-cd)pyrene	6310	0.007	3.11E-5 ^a	58	4	0.32

^a In-Stream Water Quality Standard.

^b Maximum Contaminant Level, the constituent does not have an IWQS.

^c IWQS for benzo(k)fluoranthene used.

Calculated ATL for indeno(1,2,3-cd)pyrene is less than its STL, thus the STL will be used for this constituent.

Calculated ATLs for toluene, ethylbenzene, and xylenes exceed the constituents soil saturation limit, thus the ATLs for these constituents will be soil saturation limits of 479 mg/kg, 187 mg/kg, and 893 mg/kg, respectively.

Table VI-B. Alternate Threshold Levels for Contaminates in Soil

Constituent	ATL (mg/kg)	Maximum Observed Concentration (mg/kg)	
		Former Fuel Pit 1A/ DAACG Area (Release #1)	Former Pumphouse #1 Tank Pit Area (Release #2)
Benzene	9.3	410	160
Toluene	479	140	43
Ethylbenzene	187	76	31
Xylenes	893	200	74
Benzo(a)pyrene	1.4	4.2	0.97
Benzo(b)fluoranthene	5.8	4.9	1.8
Chrysene	2.1	8.6	2.2
Indeno(1,2,3-cd)pyrene	0.66	2.7	0.57

Bold values exceed the calculated ATL.

There were isolated borings (i.e., D-SB17, D-SB18, D-SB29, and D-SB37) during the DAACG Facility investigation in 1996 where detected PAH COPC concentrations were above the proposed ATLs; however, these isolated borings were not in the vicinity of Release #1 or Release #2. As a result, the concentrations from these borings are not included in this table.

APPENDIX VII

MONITORING WELL DETAILS

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**FORMER PUMPHOUSE #1 CAP-PART B
INVESTIGATION WELLS**

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DAACG FACILITY INVESTIGATION WELLS

Note: The “H833” prefix provided in these well construction diagrams has been replaced with a “D” prefix throughout this document.

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Insert Pumphouse #1 CAP-Part B Investigation Wells (pages 23to 54)

APPENDIX VIII

**GROUNDWATER AND SURFACE WATER
LABORATORY RESULTS**

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**FORMER PUMPHOUSE #1 CAP-PART A
GROUNDWATER ANALYTICAL RESULTS
DECEMBER 1996**

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**Table VIII-A. Summary of Former Pumphouse #1 CAP-Part A
Groundwater Analytical Results (1996)**

Station:	In-Stream	P1-MW01	P1-MW02	P1-MW03	P1-MW11	P1-MW12
Sample ID:	Federal Water	HT4-MW01	HT4-MW02	HT4-MW03	HT4-MW11	HT4-MW12
Screened Interval (ft BGS):	SDWA Quality	6.8 - 16.8	7.0 - 17.0	6.0 - 16.0	7.0-17.0	6.5-16.5
Sample Date:	MCLs ¹	12/09/1996	12/09/1996	12/09/1996	12/10/1996	12/10/1996
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
<i>VOLATILE ORGANIC COMPOUNDS</i>						
Benzene	5	71.28	500 U	1100 =	740 =	40 =
Toluene	1,000	200,000	16000 =	25000 =	19000 =	610 =
Ethylbenzene	700	28,718	1900 =	1400 =	2000 =	1000 =
Xylenes	10,000	NRC	9500 =	5900 =	7400 =	4200 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>						
1-Methylnaphthalene	NRC	NRC	1 U	1 U	1 U	1 U
2-Methylnaphthalene	NRC	NRC	2.8 =	1.3 =	1.9 =	2.4 =
Acenaphthene	NRC	NRC	1 U	1 U	1 U	1 U
Acenaphthylene	NRC	NRC	1 U	1 U	1 U	1 U
Anthracene	NRC	110000	0.58 =	0.2 U	0.2 U	0.2 U
Benzo(a)anthracene	NRC	0.0311	0.2 U	0.2 U	0.2 U	0.2 U
Benzo(a)pyrene	0.2	0.0311	0.2 U	0.2 U	0.21 =	0.2 U
Benzo(b)fluoranthene	NRC	NRC	0.2 U	0.2 U	0.28 =	0.2 U
Benzo(g,h,i)perylene	NRC	NRC	0.5 U	0.5 U	0.5 U	0.5 U
Benzo(k)fluoranthene	NRC	0.0311	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	NRC	0.0311	0.2 U	0.2 U	0.26 =	0.2 U
Dibenzo(a,h)anthracene	NRC	0.0311	1 U	1 U	1 U	1 U
Fluoranthene	NRC	370	0.6 =	0.5 U	0.76 =	0.5 U
Fluorene	NRC	14000	0.6 =	0.5 U	0.5 U	0.5 U
Indeno(1,2,3-cd)pyrene	NRC	0.0311	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	NRC	NRC	16 =	7 =	9.2 =	9.8 =
Phenanthrene	NRC	NRC	2.2 =	0.2 U	0.42 J	0.2 U
Pyrene	NRC	11000	0.5 U	0.5 U	0.5 U	0.5 U

NOTES:

- ¹ U.S. Environmental Protection Agency maximum contaminant level
² GA EPD in-stream water quality standards (Chapter 391-03-6.03)

Laboratory Qualifiers

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

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Insert Pumphouse #1 CAP-Part A Groundwater laboratory data sheets (pages VIII-7 to VIII-17)

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**FORMER PUMPHOUSE #1 CAP-PART A
SURFACE WATER ANALYTICAL RESULTS**

DECEMBER 1996

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**Table VIII-B. Summary of Former Pumphouse #1 CAP-Part A
Surface Water Analytical Results (1996)**

Station: Sample ID: Sample Date:	In-Stream Water Quality Standards ¹	P1-SWE07 HT4-SW07 12/10/1996	P1-SWE08 HT4-SW08 12/10/1996	P1-SWE09 HT4-SW09 12/10/1996	P1-SWE10 HT4-SW10 12/10/1996
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
<i>VOLATILE ORGANIC COMPOUNDS</i>					
Benzene	71.28	19 J	5.2 J	1 J	1 U
Toluene	200,000	230 J	50 J	1.8 =	1 U
Ethylbenzene	28,718	30 J	3.8 J	1 U	1 U
Xylenes	NRC	270 J	55 J	3.1 J	2 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>					
1-Methylnaphthalene		1 U	1 U	1 U	1 U
2-Methylnaphthalene		1 U	1 U	1 U	1 U
Acenaphthene	NRC	1 U	1 U	1 U	1 U
Acenaphthylene	NRC	1 U	1 U	1 U	1 U
Anthracene	110000	0.2 U	0.2 U	0.2 U	0.2 U
Benzo(a)anthracene	0.0311	0.2 U	0.2 U	0.2 U	0.2 U
Benzo(a)pyrene	0.0311	0.2 U	0.2 U	0.2 U	0.2 U
Benzo(b)fluoranthene	NRC	0.2 U	0.2 U	0.2 U	0.2 U
Benzo(g,h,i)perylene	NRC	0.5 U	0.5 U	0.5 U	0.5 U
Benzo(k)fluoranthene	0.0311	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	0.0311	0.2 U	0.2 U	0.2 U	0.2 U
Dibenzo(a,h)anthracene	0.0311	1 U	1 U	1 U	1 U
Fluoranthene	370	0.5 U	0.5 U	0.2 U	0.5 U
Fluorene	14000	0.5 U	0.5 U	0.2 U	0.5 U
Indeno(1,2,3-cd)pyrene	0.0311	0.5 U	0.5 U	0.2 U	0.5 U
Naphthalene	NRC	1 U	1 U	1 U	1 U
Phenanthrene	NRC	0.2 U	0.2 U	0.2 U	0.2 U
Pyrene	11000	0.5 U	0.5 U	0.2 U	0.5 U

NOTES:

¹ GA EPD IWQS (Chapter 391-03-6.03)

Laboratory Qualifiers

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

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Insert Pumphouse #1 CAP-Part A Surface Water laboratory data sheets (VIII-25 to VIII-32)

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**FORMER PUMPHOUSE #1 CAP-PART B
GROUNDWATER ANALYTICAL RESULTS**

MAY 1997

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**Table VIII-C. Summary of Former Pumphouse #1 CAP-Part B
Groundwater Analytical Results (1997)**

Station: Sample ID: Screened Interval (ft BGS): Sample Date: Units:	Federal SDWA MCLs ¹ (ug/L)	In-Stream Water Quality Standard ² (ug/L)	P1-MW13 MW1301 7.0-17.0 05/30/1997 (ug/L)	P1-MW14 MW1401 7.0-17.0 05/30/1997 (ug/L)	P1-MW15 MW1501 6.0-16.0 05/30/1997 (ug/L)	P1-MW16 MW1601 6.0-16.0 05/30/1997 (ug/L)
VOLATILE ORGANIC COMPOUNDS						
Benzene	5	71.28	62 =	1 U	1 U	1 U
Toluene	1,000	200,000	1100 =	1 U	1 U	1 U
Ethylbenzene	700	28,718	170 =	1 U	1 U	1 U
Xylene (total)	10,000	NRC	630 =	2 U	2 U	2 U
POLYNUCLEAR AROMATIC HYDROCARBONS						
1-Methylnaphthalene	NRC	NRC	1 U	1 U	1 U	1 U
2-Methylnaphthalene	NRC	NRC	0.077 J	1 U	1 U	1 U
Acenaphthene	NRC	NRC	1 UJ	1 UJ	1 UJ	1 UJ
Acenaphthylene	NRC	NRC	1 U	1 U	1 U	1 U
Anthracene	NRC	110,000	0.2 U	0.2 U	0.2 U	0.2 U
Benzo(a)anthracene	NRC	0.0311	0.0311 U	0.0311 U	0.0311 U	0.0311 U
Benzo(a)pyrene	0.2	0.0311	0.0311 U	0.0311 U	0.026 J	0.0311 U
Benzo(b)fluoranthene	NRC	NRC	0.0099 J	0.2 U	0.023 J	0.2 U
Benzo(ghi)perylene	NRC	NRC	0.5 U	0.5 U	0.026 J	0.5 U
Benzo(k)fluoranthene	NRC	0.0311	0.0311 U	0.0311 U	0.0311 U	0.0311 U
Chrysene	NRC	0.0311	0.0081 J	0.012 J	0.032 =	0.031 U
Dibenzo(a,h)anthracene	NRC	0.0311	0.036 U	0.036 U	0.036 U	0.036 U
Fluoranthene	NRC	370	0.058 J	0.14 J	0.15 J	0.5 U
Fluorene	NRC	14,000	0.5 U	0.5 U	0.5 U	0.5 U
Indeno(1,2,3-cd)pyrene	NRC	0.0311	0.0311 U	0.0311 U	0.0311 U	0.0311 U
Naphthalene	NRC	NRC	1 U	1 U	1 U	1 U
Phenanthrene	NRC	NRC	0.042 J	0.098 J	0.054 J	0.025 J
Pyrene	NRC	11,000	0.5 U	0.1 J	0.2 J	0.075 J
OTHER ANALYTES						
Alkalinity as CaCO ₃						
Ethane						
Ethene						
Iron, Total			870 =		550 =	
Iron, Ferrous +2			700 =		150 =	
Iron, Ferric +3			100 =		400 =	
Methane						
Nitrate/Nitrite						
Oxygen, dissolved			5700 =		5900 =	
Oxidation Reduction Potential						
Sulfate as SO ₄			5000 U		5000 U	
Total Organic Carbon						

NOTES:

- ¹ U.S. Environmental Protection Agency maximum contaminant level
² GA EPD IWQS (Chapter 391-03-6.03)

Laboratory Qualifiers

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UJ Indicates the compound was not detected above an approximated sample quantitation limit.
J Indicates the value for the compound is an estimated value.
= Indicates the compound was detected at the concentration reported.
R Indicates the result was rejected during the data validation process.

**Table VIII-C. Summary of Former Pumphouse #1 CAP-Part B
Groundwater Analytical Results (1997) (continued)**

Station:	In-Stream	P1-MW17	P1-MW18	P1-MW19	P1-MW20	
Sample ID:	Water	MW1701	MW1801	MW1901	MW2001	
Screened Interval (ft BGS):	Quality	6.5-16.5	9.5-19.5	9.0-19.0	7.0-17.0	
Sample Date:	MCLs ¹	05/29/1997	05/30/1997	05/29/1997	05/30/1997	
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
<i>VOLATILE ORGANIC COMPOUNDS</i>						
Benzene	5	71.28	1 U	4.2 J	630 =	1 U
Toluene	1,000	200,000	1 U	57 =	1900 =	1 U
Ethylbenzene	700	28,718	2.3 =	19 =	530 =	1 U
Xylene (total)	10,000	NRC	2 U	110 =	2400 =	2 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>						
1-Methylnaphthalene	NRC	NRC	1 U	0.16 J	1 U	1 U
2-Methylnaphthalene	NRC	NRC	1 U	0.68 J	0.59 J	1 U
Acenaphthene	NRC	NRC	1 R	0.31 J	1 R	1 UJ
Acenaphthylene	NRC	NRC	1 U	1 U	1 U	1 U
Anthracene	NRC	110,000	0.2 U	0.022 J	0.2 U	0.076 J
Benzo(a)anthracene	NRC	0.0311	0.066 =	0.014 J	0.0311 U	0.29 =
Benzo(a)pyrene	0.2	0.0311	0.094 =	0.0311 U	0.0311 U	0.29 =
Benzo(b)fluoranthene	NRC	NRC	0.077 J	0.022 J	0.011 J	0.19 J
Benzo(ghi)perylene	NRC	NRC	0.068 J	0.5 U	0.5 U	0.43 J
Benzo(k)fluoranthene	NRC	0.0311	0.036 =	0.0311 U	0.0311 U	0.42 =
Chrysene	NRC	0.0311	0.12 =	0.024 J	0.0311 U	0.96 =
Dibenzo(a,h)anthracene	NRC	0.0311	0.036 U	0.036 U	0.036 U	0.73 =
Fluoranthene	NRC	370	0.26 J	0.16 J	0.049 J	0.15 J
Fluorene	NRC	14,000	0.5 R	0.18 J	0.5 R	0.5 U
Indeno(1,2,3-cd)pyrene	NRC	0.0311	0.048 =	0.0311 U	0.0311 U	0.32 =
Naphthalene	NRC	NRC	1 U	1 U	1.5 =	1 U
Phenanthrene	NRC	NRC	0.024 J	0.14 J	0.078 J	0.048 J
Pyrene	NRC	11,000	0.21 J	0.075 J	0.5 U	0.13 J
<i>OTHER ANALYTES</i>						
Alkalinity as CaCO3						
Ethane						
Ethene						
Iron, Total				790 =	3500 =	
Iron, Ferrous +2				300 =	360 =	
Iron, Ferric +3				490 =	3100 =	
Methane						
Nitrate/Nitrite						
Oxygen, dissolved				7500 =	2600 =	
Oxidation Reduction Potential						
Sulfate as SO4				5000 U	5000 U	
Total Organic Carbon						

NOTES:

- ¹ U.S. Environmental Protection Agency maximum contaminant level
² GA EPD IWQS (Chapter 391-03-6.03)

Laboratory Qualifiers

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UJ Indicates the compound was not detected above an approximated sample quantitation limit.
J Indicates the value for the compound is an estimated value.
= Indicates the compound was detected at the concentration reported.
R Indicates the result was rejected during the data validation process.

**Table VIII-C. Summary of Former Pumphouse #1 CAP-Part B
Groundwater Analytical Results (1997) (continued)**

Station:	In-Stream	P1-MW21	P1-MW22	P1-MW23	P1-MW24
Sample ID:	Water	MW2101	MW2201	MW2301	MW2401
Screened Interval (ft BGS):	Quality	7.0-17.0	6.0-16.0	7.0-17.0	29.5-34.5
Sample Date:	Standard ²	05/29/1997	05/29/1997	05/30/1997	05/30/1997
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
<i>VOLATILE ORGANIC COMPOUNDS</i>					
Benzene	5	71.28	100 =	160 =	110 = 1 U
Toluene	1,000	200,000	380 =	80 J	62 = 1 U
Ethylbenzene	700	28,718	860 =	200 =	180 = 1 U
Xylene (total)	10,000	NRC	3400 =	6200 =	1100 = 2 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>					
1-Methylnaphthalene	NRC	NRC	5 U	0.36 J	1 U 1 U
2-Methylnaphthalene	NRC	NRC	2.1 J	0.79 J	0.94 J 1 U
Acenaphthene	NRC	NRC	2.4 J	0.92 J	0.36 J 1 J
Acenaphthylene	NRC	NRC	5 U	1 U	1 U 1 U
Anthracene	NRC	110,000	0.7 J	0.0092 J	0.08 J 0.2 U
Benzo(a)anthracene	NRC	0.0311	0.156 U	0.0311 U	0.022 J 0.0311 U
Benzo(a)pyrene	0.2	0.0311	0.156 U	0.0311 U	0.038 = 0.0311 U
Benzo(b)fluoranthene	NRC	NRC	1 U	0.0092 J	0.044 J 0.2 U
Benzo(ghi)perylene	NRC	NRC	2.5 U	0.5 U	0.062 J 0.5 U
Benzo(k)fluoranthene	NRC	0.0311	0.156 U	0.0311 U	0.026 J 0.0311 U
Chrysene	NRC	0.0311	0.156 U	0.015 J	0.045 = 0.0311 U
Dibenzo(a,h)anthracene	NRC	0.0311	0.18 U	0.036 U	0.036 U 0.036 U
Fluoranthene	NRC	370	1.4 J	0.056 J	0.39 J 0.5 U
Fluorene	NRC	14,000	2.7 J	0.15 J	0.43 J 0.5 U
Indeno(1,2,3-cd)pyrene	NRC	0.0311	0.156 U	0.0311 U	0.039 = 0.0311 U
Naphthalene	NRC	NRC	11 =	11 =	1 U 1 U
Phenanthrene	NRC	NRC	8.2 J	0.12 J	0.72 = 0.2 U
Pyrene	NRC	11,000	2.5 U	0.5 U	0.26 J 0.5 U
<i>OTHER ANALYTES</i>					
Alkalinity as CaCO ₃					
Ethane					
Ethene					
Iron, Total				11000 =	
Iron, Ferrous +2				2400 =	
Iron, Ferric +3				8600 =	
Methane					
Nitrate/Nitrite					
Oxygen, dissolved				5200 =	
Oxidation Reduction Potential					
Sulfate as SO ₄				12000 =	
Total Organic Carbon					

NOTES:

- ¹ U.S. Environmental Protection Agency maximum contaminant level
² GA EPD IWQS (Chapter 391-03-6.03)

Laboratory Qualifiers

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Insert 1997 Former Pumphouse #1 CAP-Part B Groundwater laboratory data sheets (VIII-41 to VIII-69)

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**FORMER PUMPHOUSE #1 CAP-PART B
SURFACE WATER ANALYTICAL RESULTS**

FEBRUARY 1999

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**Table VIII-D. Summary of Former Pumphouse #1 CAP-Part B
Surface Water Analytical Results (1999)**

Station:	In-Stream	P1-SW5	P1-SW6	P1-SW7	P1-SW8	P1-SW9
Sample ID:	Water Quality	PH1-SW1	PH1-SW2	PH1-SW3	PH1-SW4	PH1-SWE07
Sample Date:	Standards ¹	02/17/1999	02/17/1999	02/17/1999	02/17/1999	02/17/1999
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
<i>VOLATILE ORGANIC COMPOUNDS</i>						
Benzene	71.28	1 U	1 U	11.1 =	9 =	8.5 =
Toluene	200,000	1 U	1 U	96 =	144 =	185 =
Ethylbenzene	28,718	1 U	1 U	36.4 =	5.4 =	32 =
Xylenes	NRC	2 U	2 U	76.8 =	133.8 =	182.5 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>						
1-Methylnaphthalene	NRC	2 U	2 U	2 U	2 U	2 U
2-Methylnaphthalene	NRC	2 U	2 U	2 U	2 U	2 U
Acenaphthene	NRC	1 U	1 U	1 U	1 U	1 U
Acenaphthylene	NRC	2 U	2 U	2 U	2 U	2 U
Anthracene	110000	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Benzo(a)anthracene	0.0311	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	0.0311	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	NRC	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzo(g,h,i)perylene	NRC	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Benzo(k)fluoranthene	0.0311	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chrysene	0.0311	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibenzo(a,h)anthracene	0.0311	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Fluoranthene	370	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Fluorene	14000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Indeno(1,2,3-cd)pyrene	0.0311	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Naphthalene	NRC	1 U	1 U	1 U	1 U	1 U
Phenanthrene	NRC	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Pyrene	11000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

NOTES:

¹ GA EPD IWQS (Chapter 391-03-6.03)

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Insert 1999 Former Pumphouse #1 CAP-Part B surface water laboratory data sheets (VIII-75 to VIII-93)

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**FORMER PUMPHOUSE #1 CAP-PART B
GROUNDWATER ANALYTICAL RESULTS
NOVEMBER 1999 & FEBRUARY 2000**

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**Table VIII-E. Summary of Former Pumphouse #1 CAP-Part B
Groundwater Analytical Results (1999/2000)**

Station: Sample ID:	Federal	In-Stream Water	P1-MW01 PH1- MW0102	P1-MW02 PH1- MW0202	P1-MW03 PH1- MW0302	P1-MW18 PH1- MW1802	P1-MW19 PH1- MW1902
Screened Interval (ft BGS):	SDWA	Quality	6.8-16.8	7.0-17.0	6.0-16.0	9.5-19.5	9.0-19.0
Sample Date:	MCLs ¹	Standard ²	11/03/1999	11/03/1999	11/03/1999	11/03/1999	11/03/1999
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	5	71.28	17 J	1000 =	360 =	25 U	200 =
Toluene	1,000	200,000	6500 =	19000 =	6800 J	530 =	6400 =
Ethylbenzene	700	28,718	1800 =	1600 =	1400 =	370 =	1800 =
Xylene (total)	10,000	NR	10000 =	7700 =	6600 =	1650 =	7800 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NR	NR	*	*	*	*	*
2-Methylnaphthalene	NR	NR	*	*	*	*	*
Acenaphthene	NR	NR	*	*	*	*	*
Acenaphthylene	NR	NR	*	*	*	*	*
Anthracene	NR	110,000	*	*	*	*	*
Benzo(a)anthracene	NR	0.0311	*	*	*	*	*
Benzo(a)pyrene	0.2	0.0311	*	*	*	*	*
Benzo(b)fluoranthene	NR	NR	*	*	*	*	*
Benzo(ghi)perylene	NR	NR	*	*	*	*	*
Benzo(k)fluoranthene	NR	0.0311	*	*	*	*	*
Chrysene	NR	0.0311	*	*	*	*	*
Dibenzo(a,h)anthracene	NR	0.0311	*	*	*	*	*
Fluoranthene	NR	370	*	*	*	*	*
Fluorene	NR	14,000	*	*	*	*	*
Indeno(1,2,3-cd)pyrene	NR	0.0311	*	*	*	*	*
Naphthalene	NR	NR	*	*	*	*	*
Phenanthrene	NR	NR	*	*	*	*	*
Pyrene	NR	11,000	*	*	*	*	*
<i>OTHER ANALYTES</i>							
Alkalinity as CaCO ₃			22000 =	8500 =	28000 =	1500 =	6200 =
Ethane			5.5 =	14 =	2 =	1.1 =	6.4 =
Ethene			0.33 U	0.74 =	0.33 U	0.33 U	0.33 U
Iron, Total							
Iron, Ferrous +2							
Iron, Ferric +3							
Methane			4000 =	3200 =	2100 J	14 =	2900 =
Nitrate/Nitrite			50 U	50 U	50 U	50 U	50 U
Oxygen, dissolved							
Oxidation Reduction Potential			-53	+22	+31	+59	+55
Sulfate as SO ₄			16000 =	6700 =	7300 =	6800 =	9200 =
Total Organic Carbon			54000 =	24000 =	71000 =	22000 =	48000 =

NOTES:

¹ U.S. Environmental Protection Agency maximum contaminant level

² GA EPD IWQS (Chapter 391-03-6.03)

Laboratory Qualifiers

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**Table VIII-E. Summary of Former Pumphouse #1 CAP-Part B
Groundwater Analytical Results (1999/2000) (continued)**

Station: Sample ID:			P1-MW20 PH1- MW2002	P1-MW22 PH1- MW2202	P1-MW23 PH1- MW2302	P1-MW36 PH1- MW3601	P1-MW40 PH1- MW4001
Screened Interval (ft BGS):	Federal SDWA	In-Stream Water Quality	7.0-17.0	6.0-16.0	7.0-17.0	7.7-17.7	3.8 - 33.8
Sample Date:	MCLs ¹	Standard ²	11/03/1999	11/03/1999	11/03/1999	11/02/1999	11/03/1999
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	5	71.28	1 U	250 U	330 =	1 U	160 =
Toluene	1,000	200,000	1 U	250 U	110 =	1 U	200 =
Ethylbenzene	700	28,718	1 U	150 J	830 =	1 U	1200 =
Xylene (total)	10,000	NRC	2 U	8300 =	3720 =	1 U	5520 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	NRC	*	*	*	1 U	1 U
2-Methylnaphthalene	NRC	NRC	*	*	*	1 U	1 U
Acenaphthene	NRC	NRC	*	*	*	1 U	1 U
Acenaphthylene	NRC	NRC	*	*	*	1 U	1 U
Anthracene	NRC	110,000	*	*	*	0.2 U	0.2 U
Benzo(a)anthracene	NRC	0.0311	*	*	*	0.2 U	0.2 U
Benzo(a)pyrene	0.2	0.0311	*	*	*	0.2 U	0.2 U
Benzo(b)fluoranthene	NRC	NRC	*	*	*	0.2 U	0.2 U
Benzo(ghi)perylene	NRC	NRC	*	*	*	0.5 U	0.5 U
Benzo(k)fluoranthene	NRC	0.0311	*	*	*	0.2 U	0.2 U
Chrysene	NRC	0.0311	*	*	*	0.2 U	0.2 U
Dibenzo(a,h)anthracene	NRC	0.0311	*	*	*	0.2 U	0.2 U
Fluoranthene	NRC	370	*	*	*	0.5 U	0.5 U
Fluorene	NRC	14,000	*	*	*	0.5 U	0.5 U
Indeno(1,2,3-cd)pyrene	NRC	0.0311	*	*	*	0.2 U	0.2 U
Naphthalene	NRC	NRC	*	*	*	1 U	2.1 =
Phenanthrene	NRC	NRC	*	*	*	0.2 U	0.2 U
Pyrene	NRC	11,000	*	*	*	0.5 U	0.5 U
<i>OTHER ANALYTES</i>							
Alkalinity as CaCO ₃			1000 U	49000 =	48000 =		
Ethane			0.35 U	9.3 =	7.9 U		
Ethene			0.33 U	0.33 U	0.33 U		
Iron, Total							
Iron, Ferrous +2							
Iron, Ferric +3							
Methane			2.9 =	11000 =	3700 =		
Nitrate/Nitrite			50 U	75 =	50 U		
Oxygen, dissolved							
Oxidation Reduction Potential			+170	+450	+67		
Sulfate as SO ₄			5400 =	8700 =	6600 =		
Total Organic Carbon			8100 =	44000 =	28000 =		

NOTES:

- ¹ U.S. Environmental Protection Agency maximum contaminant level
² GA EPD IWQS (Chapter 391-03-6.03)

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**Table VIII-E. Summary of Former Pumphouse #1 CAP-Part B
Groundwater Analytical Results (1999/2000) (continued)**

Station: Sample ID:			P1-MW40 PH1- MW4002	P1-MW40 PH1- MW4003	P1-MW40 PH1- MW4004	P1-MW42 PH1- MW4201	D-MW05 H833- MW0502	D-MW16 H833- MW1602
Screened Interval (ft BGS):	Federal SDWA	In-Stream Water Quality	3.8 - 33.8	3.8 - 33.8	3.8 - 33.8	5.6-15.6	6.5 - 16.5	4.9 - 14.9
Sample Date:	MCLs ¹	Standard ²	11/04/1999	11/05/1999	11/05/1999	11/03/1999	11/03/1999	11/03/1999
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
<i>VOLATILE ORGANIC COMPOUNDS</i>								
Benzene	5	71.28	540 =	490 =	500 =	1 U	3400 =	1 U
Toluene	1,000	200,000	45 J	100 U	55 =	1 U	2000 =	1 U
Ethylbenzene	700	28,718	410 =	370 =	400 =	1 U	1200 =	1 U
Xylene (total)	10,000	NR	3030 =	3020 =	3230 =	2 U	5250 =	2 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>								
1-Methylnaphthalene	NR	NR	*	*	*	1 U	*	*
2-Methylnaphthalene	NR	NR	*	*	*	1 U	*	*
Acenaphthene	NR	NR	*	*	*	1 U	*	*
Acenaphthylene	NR	NR	*	*	*	1 U	*	*
Anthracene	NR	110,000	*	*	*	0.2 U	*	*
Benzo(a)anthracene	NR	0.0311	*	*	*	0.2 U	*	*
Benzo(a)pyrene	0.2	0.0311	*	*	*	0.2 U	*	*
Benzo(b)fluoranthene	NR	NR	*	*	*	0.2 U	*	*
Benzo(ghi)perylene	NR	NR	*	*	*	0.5 U	*	*
Benzo(k)fluoranthene	NR	0.0311	*	*	*	0.2 U	*	*
Chrysene	NR	0.0311	*	*	*	0.2 U	*	*
Dibenzo(a,h)anthracene	NR	0.0311	*	*	*	0.2 U	*	*
Fluoranthene	NR	370	*	*	*	0.5 U	*	*
Fluorene	NR	14,000	*	*	*	0.5 U	*	*
Indeno(1,2,3-cd)pyrene	NR	0.0311	*	*	*	0.2 U	*	*
Naphthalene	NR	NR	*	*	*	1 U	*	*
Phenanthrene	NR	NR	*	*	*	0.2 U	*	*
Pyrene	NR	11,000	*	*	*	0.5 U	*	*
<i>OTHER ANALYTES</i>								
Alkalinity as CaCO ₃							17000 =	13000 =
Ethane							8 =	0.35 U
Ethene							0.33 U	0.33 U
Iron, Total								
Iron, Ferrous +2								
Iron, Ferric +3								
Methane							2800 =	4.5 =
Nitrate/Nitrite							50 U	50 U
Oxygen, dissolved								
Oxidation Reduction Potential							+61	+27
Sulfate as SO ₄							7900 =	5700 =
Total Organic Carbon							59000 =	35000 =

NOTES:

- ¹ U.S. Environmental Protection Agency maximum contaminant level
² GA EPD IWQS (Chapter 391-03-6.03)

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**Table VIII-E. Summary of Former Pumphouse #1 CAP-Part B
Groundwater Analytical Results (1999/2000) (continued)**

Station:	In-Stream	D-MW01	D-MW05	D-MW08	D-MW11
Sample ID:	Federal Water	AK0112	AK0512	AK0812	AK1112
Screened Interval (ft BGS):	SDWA Quality	7.0 - 17.0	6.5 - 16.5	7.0 - 17.0	6.6 - 16.6
Collection Date:	MCLs ¹ Standard ²	02/22/00	02/23/00	02/22/00	02/22/00
Units:	(ug/L) (ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
BTEX COMPOUNDS					
Benzene	5 71.28	105 =	4580 =	418 =	398 =
Toluene	1,000 200,000	312 =	6860 =	31 =	16200 =
Ethylbenzene	700 28,718	215 =	1560 =	827 =	973 =
Xylenes, Total	10,000 NRC	1130 =	5800 =	3120 =	3880 =
OTHER VOLATILE ORGANIC COMPOUNDS					
1,1,1-Trichloroethane		10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane		10 U	10 U	10 U	10 U
1,1,2-Trichloroethane		10 U	10 U	10 U	10 U
1,1-Dichloroethane		10 U	10 U	10 U	10 U
1,1-Dichloroethene		10 U	10 U	10 U	10 U
1,2-Dichloroethane		10 U	10 U	10 U	10 U
1,2-Dichloroethene		20 U	20 U	20 U	20 U
1,2-Dichloropropane		10 U	10 U	10 U	10 U
1,3-cis-Dichloropropene		10 U	10 U	10 U	10 U
1,3-trans-Dichloropropene		10 U	10 U	10 U	10 U
2-Butanone		50 U	50 U	50 U	50 U
2-Hexanone		50 U	50 U	50 U	50 U
4-Methyl-2-pentanone		50 U	50 U	50 U	50 U
Acetone		50 U	50 U	50 U	50 U
Bromodichloromethane		10 U	10 U	10 U	10 U
Bromoform		10 U	10 U	10 U	10 U
Bromomethane		10 U	10 U	10 U	10 U
Carbon Disulfide		50 U	50 U	50 U	50 U
Carbon Tetrachloride		10 U	10 U	10 U	10 U
Chlorobenzene		10 U	10 U	10 U	10 U
Chloroethane		10 U	10 U	10 U	10 U
Chloroform		10 U	10 U	10 U	10 U
Chloromethane		10 UJ	10 U	10 UJ	10 UJ
Dibromochloromethane		10 U	10 U	10 U	10 U
Methylene Chloride		50 U	50 U	50 U	50 U
Styrene		10 U	10 U	10 U	10 U
Tetrachloroethene		10 U	10 U	10 U	10 U
Trichloroethene		10 U	10 U	10 U	10 U
Vinyl Acetate		50 U	50 U	50 U	50 U
Vinyl Chloride		10 U	10 U	10 U	10 U

NOTES:

- ¹ U.S. Environmental Protection Agency maximum contaminant level
² GA EPD IWQS (Chapter 391-03-6.03)

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**Table VIII-E. Summary of Former Pumphouse #1 CAP-Part B
Groundwater Analytical Results (1999/2000) (continued)**

Station:	In-Stream	D-MW13	D-MW17	P1-MW11	P1-MW13
Sample ID:	Federal Water	AK1312	AK1712	AN1112	AN1312
Screened Interval (ft BGS):	SDWA Quality	5.0 - 15.0	6.5 - 16.5	7.0-17.0	7.0-17.0
Collection Date:	MCLs ¹ Standard ²	02/22/00	02/22/00	02/23/00	02/23/00
Units:	(ug/L) (ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
BTEX COMPOUNDS					
Benzene	5 71.28	10 U	138 =	50.3 =	10 U
Toluene	1,000 200,000	113 =	1850 =	337 =	319 =
Ethylbenzene	700 28,718	1440 =	374 =	1210 =	100 =
Xylenes, Total	10,000 NRC	4940 =	2630 =	5110 =	404 =
OTHER VOLATILE ORGANIC COMPOUNDS					
1,1,1-Trichloroethane		10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane		10 U	10 U	10 U	10 U
1,1,2-Trichloroethane		10 U	10 U	10 U	10 U
1,1-Dichloroethane		10 U	10 U	10 U	10 U
1,1-Dichloroethene		10 U	10 U	10 U	10 U
1,2-Dichloroethane		10 U	10 U	10 U	10 U
1,2-Dichloroethene		20 U	20 U	20 U	20 U
1,2-Dichloropropane		10 U	10 U	10 U	10 U
1,3-cis-Dichloropropene		10 U	10 U	10 U	10 U
1,3-trans-Dichloropropene		10 U	10 U	10 U	10 U
2-Butanone		50 U	50 U	50 U	50 U
2-Hexanone		50 U	50 U	50 U	50 U
4-Methyl-2-pentanone		50 U	50 U	50 U	50 U
Acetone		50 U	50 U	50 U	50 U
Bromodichloromethane		10 U	10 U	10 U	10 U
Bromoform		10 U	10 U	10 U	10 U
Bromomethane		10 U	10 U	10 U	10 U
Carbon Disulfide		50 U	50 U	50 U	50 U
Carbon Tetrachloride		10 U	10 U	10 U	10 U
Chlorobenzene		10 U	10 U	10 U	10 U
Chloroethane		10 U	10 U	10 U	10 U
Chloroform		10 U	10 U	10 U	10 U
Chloromethane		10 UJ	10 UJ	10 U	10 U
Dibromochloromethane		10 U	10 U	10 U	10 U
Methylene Chloride		50 U	50 U	50.9 U	50 U
Styrene		10 U	10 U	10 U	10 U
Tetrachloroethene		10 U	10 U	10 U	10 U
Trichloroethene		10 U	10 U	10 U	10 U
Vinyl Acetate		50 U	50 U	50 U	50 U
Vinyl Chloride		10 U	10 U	10 U	10 U

NOTES:

- ¹ U.S. Environmental Protection Agency maximum contaminant level
² GA EPD IWQS (Chapter 391-03-6.03)

Laboratory Qualifiers

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Insert 1999/2000 CAP-Part B groundwater laboratory data sheets (VIII-103 to VIII-146)

**DAACG FACILITY CAP-PART B
GROUNDWATER ANALYTICAL RESULTS**

1996

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**Table VIII-F. Summary of DAACG Facility CAP-Part B
Groundwater Analytical Results (1996)**

Station: Sample ID:			D-MW01 H833- GW0101	D-MW02 H833- GW0201	D-MW03 H833- GW0301	D-MW04 H833- GW0401	D-MW05 H833- GW0501
Screened Interval (ft BGS):	Federal SDWA	In-Stream Water Quality	7.0 - 17.0	7.6 - 17.6	6.0 - 16.0	5.0 - 15.0	6.5 - 16.5
Collection Date:	MCLs ¹	Standard ²	05/21/1996	05/21/1996	05/23/1996	05/23/1996	05/23/1996
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	5	71	100 =	700 =	1 U	1 U	4100 =
Toluene	1000	200,000	25 U	12000 =	1 U	4.6 =	8900 =
Ethylbenzene	700	28,718	230 =	1100 =	1 U	1 U	1700 =
Xylene (total)	10000	NRC	860 =	4500 =	1 U	1 U	6400 =
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Acenaphthene	NRC	NRC	10 U	20 =	10 U	10 U	10 U
Acenaphthylene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Anthracene	NRC	110,000	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	0.0311	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Chrysene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Fluoranthene	NRC	370	10 U	10 U	10 U	10 U	10 U
Fluorene	NRC	14,000	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Naphthalene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Phenanthrene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Pyrene	NRC	11,000	10 U	10 U	10 U	10 U	10 U

NOTES:

- ¹ U.S. Environmental Protection Agency maximum contaminant level
² GA EPD IWQS (Chapter 391-03-6.03)

Laboratory Qualifiers

- U Indicates the compound was not detected at the concentration reported.
UJ Indicates the compound was not detected above an approximated sample quantitation limit.
J Indicates the value for the compound is an estimated value.
= Indicates the compound was detected at the concentration reported.
R Indicates the result was rejected during the data validation process.

**Table VIII-F. Summary of DAACG Facility CAP-Part B
Groundwater Analytical Results (1996) (continued)**

Station: Sample ID:	Federal SDWA MCLs ¹ Units:	In-Stream Water Quality Standard ² (ug/L)	D-MW06 H833- GW0601 6.0 - 16.0 05/23/1996 (ug/L)	D-MW07 H833- GW0701 5.8 - 15.8 05/23/1996 (ug/L)	D-MW08 H833- GW0801 7.0 - 17.0 05/21/1996 (ug/L)	D-MW09 H833- GW0901 6.0 - 16.0 05/23/1996 (ug/L)	D-MW10 H833- GW1001 6.0 - 16.0 05/23/1996 (ug/L)
VOLATILE ORGANIC COMPOUNDS							
Benzene	5	71	25 U	1 U	200 =	1 U	1 U
Toluene	1000	200,000	1400 =	1 U	920 =	1 U	1 U
Ethylbenzene	700	28,718	320 =	1 U	310 =	1 U	1 U
Xylene (total)	10000	NRC	1400 =	1 U	1200 =	1 U	1 U
POLYNUCLEAR AROMATIC HYDROCARBONS							
1-Methylnaphthalene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Acenaphthene	NRC	NRC	10 U	10 U	10 U	10 U	15 =
Acenaphthylene	NRC	NRC	10 U	10 U	10 U	10 =	10 U
Anthracene	NRC	110,000	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	0.0311	10 U	10 UJ	10 U	10 U	10 U
Benzo(b)fluoranthene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Chrysene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Fluoranthene	NRC	370	10 U	10 U	10 U	10 U	10 U
Fluorene	NRC	14,000	10 U	10 U	10 U	10 U	10 =
Indeno(1,2,3-cd)pyrene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Naphthalene	NRC	NRC	10 U	10 U	10 U	21 =	10 U
Phenanthrene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Pyrene	NRC	11,000	10 U	10 U	10 U	10 U	10 U

NOTES:

¹ U.S. Environmental Protection Agency maximum contaminant level

² GA EPD IWQS (Chapter 391-03-6.03)

Laboratory Qualifiers

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**Table VIII-F. Summary of DAACG Facility CAP-Part B
Groundwater Analytical Results (1996) (continued)**

Station: Sample ID:			D-MW11 H833- GW1101	D-MW12 H833- GW1201	D-MW13 H833- GW1301	D-MW14 H833- GW1401	D-MW15 H833- GW1501
Screened Interval (ft BGS):	Federal SDWA	In-Stream Water Quality	6.6 - 16.6	5.6 - 15.6	5.0 - 15.0	5.0 - 15.0	4.7 - 14.7
Collection Date:	MCLs ¹	Standard ²	05/23/1996	05/22/1996	05/23/1996	05/23/1996	05/22/1996
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	5	71	230 =	140 =	50 U	1 U	1 U
Toluene	1000	200,000	3600 =	540 =	600 =	1 U	1 U
Ethylbenzene	700	28,718	440 =	310 =	1500 =	1 U	1 U
Xylene (total)	10000	NRC	2100 =	2700 =	6200 =	1 U	1 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Acenaphthene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Anthracene	NRC	110,000	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	0.0311	10 U	10 U	10 U	10 U	10 UJ
Benzo(b)fluoranthene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Chrysene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Fluoranthene	NRC	370	10 U	10 U	10 U	10 U	10 U
Fluorene	NRC	14,000	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Naphthalene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Phenanthrene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Pyrene	NRC	11,000	10 U	10 U	10 U	10 U	10 U

NOTES:

- ¹ U.S. Environmental Protection Agency maximum contaminant level
² GA EPD IWQS (Chapter 391-03-6.03)

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**Table VIII-F. Summary of DAACG Facility CAP-Part B
Groundwater Analytical Results (1996) (continued)**

Station: Sample ID:			D-MW16 H833- GW1601	D-MW17 H833- GW1701	D-MW18 H833- GW1801	D-MW19 H833- GW1901	D-MW21 H833- GW2101
Screened Interval (ft BGS):	Federal SDWA	In-Stream Water Quality	4.9 - 14.9	6.5 - 16.5	6.6 - 16.6	6.0 - 16.0	6.0 - 16.0
Collection Date:	MCLs ¹	Standard ²	05/22/1996	05/22/1996	05/22/1996	05/22/1996	05/23/1996
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	5	71	1 U	500 U	20 =	390 =	1 U
Toluene	1000	200,000	1 U	16000 =	17 =	3300 =	1 U
Ethylbenzene	700	28,718	1 U	1200 =	110 =	350 =	1 U
Xylene (total)	10000	NRC	1 U	5200 =	450 =	1300 =	1 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	NRC	10 U	10 U	16 =	10 U	10 U
2-Methylnaphthalene	NRC	NRC	10 U	10 U	23 =	10 U	10 U
Acenaphthene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Anthracene	NRC	110,000	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	0.0311	10 UJ	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Chrysene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Fluoranthene	NRC	370	10 U	10 U	10 U	10 U	10 U
Fluorene	NRC	14,000	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Naphthalene	NRC	NRC	10 U	30 =	41 =	10 U	10 U
Phenanthrene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Pyrene	NRC	11,000	10 U	10 U	10 U	10 U	10 U

NOTES:

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² GA EPD IWQS (Chapter 391-03-6.03)

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**Table VIII-F. Summary of DAACG Facility CAP-Part B
Groundwater Analytical Results (1996) (continued)**

Station: Sample ID:			D-MW22 H833- GW2201	D-MW23 H833- GW2301	D-MW24 H833- GW2401	D-MW25 H833- GW2501	D-MW26 H833- GW2601
Screened Interval (ft BGS):	Federal SDWA	In-Stream Water Quality	6.0 - 16.0	5.0 - 15.0	5.0 - 15.0	4.8 - 14.8	4.7 - 14.7
Collection Date:	MCLs ¹	Standard ²	05/22/1996	05/22/1996	05/22/1996	05/22/1996	05/22/1996
Units:	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
<i>VOLATILE ORGANIC COMPOUNDS</i>							
Benzene	5	71	2 U	1 U	1 U	1 U	1 U
Toluene	1000	200,000	2 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	28,718	27 =	1 U	1 U	1 U	1 U
Xylene (total)	10000	NRC	29 =	1 U	1 U	1 U	1 U
<i>POLYNUCLEAR AROMATIC HYDROCARBONS</i>							
1-Methylnaphthalene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Acenaphthene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Anthracene	NRC	110,000	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	0.0311	10 U	10 UJ	10 UJ	10 UJ	10 UJ
Benzo(b)fluoranthene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Chrysene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Fluoranthene	NRC	370	10 U	10 U	10 U	10 U	10 U
Fluorene	NRC	14,000	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U
Naphthalene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Phenanthrene	NRC	NRC	10 U	10 U	10 U	10 U	10 U
Pyrene	NRC	11,000	10 U	10 U	10 U	10 U	10 U

NOTES:

- ¹ U.S. Environmental Protection Agency maximum contaminant level
² GA EPD IWQS (Chapter 391-03-6.03)

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**Table VIII-F. Summary of DAACG Facility CAP-Part B
Groundwater Analytical Results (1996) (continued)**

Station: Sample ID:	Federal SDWA MCLs ¹ (ug/L)	In-Stream Water Quality Standard ² (ug/L)	D-MW27 H833- GW2701 4.5 - 14.5 05/22/1996 (ug/L)	D-MW28 H833- GW2801 4.5 - 14.5 05/23/1996 (ug/L)	D-MW29 H833- GW2901 4.5 - 14.5 05/22/1996 (ug/L)	D-MW30 H833- GW3001 2.9 - 12.9 05/22/1996 (ug/L)	D-MW31 H833- GW3101 4.0 - 14.0 05/23/1996 (ug/L)	D-MW32 H833- GW3201 4.6 - 14.6 05/22/1996 (ug/L)
VOLATILE ORGANIC COMPOUNDS								
Benzene	5	71	1 U	1 U	1 U	1 U	14 =	50 J
Toluene	1,000	200,000	1 U	1 U	2.2 =	1 U	5 U	14 =
Ethylbenzene	700	28,718	1 U	1 U	1 U	1 U	5 U	17 =
Xylene (total)	10,000	NRC	1 U	1 U	1 U	1 U	300 =	400 =
POLYNUCLEAR AROMATIC HYDROCARBONS								
1-Methylnaphthalene	NRC	NRC	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	NRC	NRC	10 U	10 U	10 U	10 U	10 U	18 =
Acenaphthene	NRC	NRC	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	NRC	NRC	10 U	10 U	10 U	10 U	10 U	19 =
Anthracene	NRC	110,000	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	0.0311	10 UJ	10 U	10 UJ	10 UJ	10 U	10 UJ
Benzo(b)fluoranthene	NRC	NRC	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	NRC	NRC	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	NRC	370	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	NRC	14,000	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	NRC	0.0311	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	NRC	NRC	10 U	10 U	10 U	10 U	15 =	45 =
Phenanthrene	NRC	NRC	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	NRC	11,000	10 U	10 U	10 U	10 U	10 U	10 U

NOTES:

- ¹ U.S. Environmental Protection Agency maximum contaminant level
² GA EPD IWQS (Chapter 391-03-6.03)

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APPENDIX IX
CONTAMINATED SOIL DISPOSAL

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During UST removal and excavation activities in 1995, all contaminated soil removed during the closure was tested in accordance with disposal facility requirements and transported to Kedesh, Inc., Highway 84, Ludowici, GA 31316. Approximately 913 cubic yards of contaminated soil were excavated from the Former Pumphouse #1 site. All soil excavated during the tank removal activities in 1998 was returned to the tank pit.

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APPENDIX X

SITE RANKING FORMS

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**SITE RANKING FORM
FOR
FORMER FUEL PIT 1A/DAACG AREA (RELEASE #1)**

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**SITE RANKING FORM
FOR
FORMER PUMPHOUSE #1 TANK PIT AREA (RELEASE #2)**

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Insert Site Ranking Form page 1 of 2

Insert Site Ranking Form Page 2 of 2

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 HAAF, which supports HAAF's determination that the water withdrawal point(s) located at HAAF 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 4,200 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-foot-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 HAAF.

APPENDIX XI

COPIES OF PUBLIC NOTIFICATION LETTERS AND CERTIFIED RECEIPTS OF NEWSPAPER NOTICE

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Insert public notice affidavit.

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ATTACHMENT A
HYDROGEOLOGICAL DATA

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A.1 GEOTECHNICAL DATA

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A.2 SLUG TESTING DATA

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A.1 AQUIFER TEST DATA REDUCTION

A.1.1 Methodology

Aquifer testing was performed at the Former Pumphouse #1 on November 2–5, 1999. An 8-hr step test was performed in well MW40 to determine the optimum pumping rate for this well, which turned out to be 3 gal/min (gpm). Static water levels and barometric pressure was monitored for a 24-hr period (steady state) before the 24-hr aquifer test was conducted. The 24-hr aquifer test was conducted with MW40 as the pumping well and wells P1-MW02, P1-MW03, P1-MW22, P1-MW23, and D-MW05 as observation wells. Water levels were also recorded during the recovery period after pumping stopped. Water levels and barometric pressure were measured using data loggers.

A.1.2 Data Correction

The water level data from each of the observation wells was graphed (Figure 1 of this attachment) in order to determine which wells were influenced by pumping. Wells P1-MW03, P1-MW22, and P1-MW02 showed water level decreases, indicating influence from pumping but wells P1-MW23 and D-MW05 showed water level increases, indicating no influence from pumping. The water level response to changing barometric pressure was graphed for the wells that showed influence for the steady state period to correct for barometric changes in the water level during pumping. An average barometric change/head change ratio was determined for each well (Figures 2, 3, and 4) since each well would behave differently. This ratio was then applied to the average barometric change for each well during the pumping time and the observed water level data was corrected, i.e., the water level decrease due to barometric increase was subtracted from the observed data to yield the true response to pumping. The percent of the water level correction due to barometric pressure was determined at each well: 49% at P1-MW02, 8.02% at P1-MW03, and 16.8% at P1-MW22. Water level data from the pumping well, P1-MW40, was not corrected since the percent change would be negligible in light of the large drawdown.

A.1.3 Results

The corrected drawdown data and the pumping well recovery data was then modeled using AQTESOLVE v.4.5 groundwater modeling software for unconfined aquifers. Only P1-MW03 had enough meaningful data to model. P1-MW02 did not have enough drawdown to model and the results from P1-MW22 were unrealistic so both P1-MW02 and P1-MW22 were discounted.

Pumping Data

Well P1-MW03 was modeled using the corrected drawdown data and the Neuman curve matching analysis technique (Quick Neuman in Aqtesolve). The assumptions for this method follow:

- the aquifer has an infinite areal extent,
- the aquifer is homogenous and has uniform thickness,
- the aquifer potentiometric surface is originally horizontal, and
- the diameter of the pumping well is small so that well storage can be neglected.

Deviations from the assumptions will yield deviations in the calculated transmissivity. However, a general approximation can be made with relative confidence given the small area the test covers.

The computer generated match line (Figure 5) yields a transmissivity (T) of 0.4035 ft²/min assuming a saturated aquifer thickness of 60 feet.

Recovery Data

Well P1-MW40 was the only well with enough recovery data to model. The recovery method used was the Theis Straight line recovery, applicable to both confined and unconfined aquifers (Kruseman and deRidder 1991). The assumptions for this method follow:

- the aquifer has an infinite areal extent;
- the aquifer is homogenous, isotropic, and has uniform thickness;
- the aquifer potentiometric surface is originally horizontal;
- the pumping well is fully penetrating;
- flow to the pumping well is horizontal;
- flow is unsteady;
- water is released instantaneously from storage with decline of head;
- the diameter of the pumping well is small so that well storage can be neglected; and
- values of u are small [i.e., r is small (distance to observation wells) and t is large (pumping time)].

Deviations from the assumptions will yield deviations in the calculated transmissivity. However, a general approximation can be made with relative confidence given the small area the test covers.

A hand-picked visual straight line was picked to match the last portion of the recovery data, which would be representative of the aquifer and not the sand pack (Figure 6). This straight line solution produced a transmissivity of 0.089 ft²/min, assuming a saturated aquifer thickness of 60 feet.

A.2 SLUG TESTS

A.2.1. Methodology

Three slug tests were performed at the Former Pumphouse #1 site [P1-MW01, P1-MW02, P1-MW24 (deep well)]. A slug was put in the well and the water level allowed to equilibrate. The slug was withdrawn and water level measurements were collected as the water levels rose (slug out test). Water levels were recorded using a data logger.

A.2.2. Results

The slug test data was modeled using AQTESOLVE v.4.5 groundwater modeling software. The Bouwer and Rice Slug Test solution for unconfined aquifers was used as it is widely accepted. The assumptions for this method follow:

- the aquifer has an infinite areal extent,
- the aquifer is homogenous and has uniform thickness,
- the aquifer potentiometric surface is originally horizontal,
- the slug of water is instantaneously removed from the well, and
- the flow is steady.

Deviations from the assumptions will yield deviations in the calculated hydraulic conductivity (K). However, a general approximation can be made with relative confidence given the small area the test covers.

The modeling program allows for an interpreter to hand-pick a visual straight-line to match the portion of the recovery data that would be representative of the aquifer and not the sand pack. This straight line solution is generally marked by a change in slope on the graph. The model then calculates the hydraulic conductivity based on the slope of the straight-line pick. The figures and calculated conductivities are as follows:

Well	K (ft/min)	Figure
P1-MW01	0.0131	7
P1-MW02	0.0176	8
P1-MW24 (deep well)	0.0046	9

The average conductivity for all wells is 0.0118 ft/min (6.0×10^{-3} cm/s), which is well within the range of a silty sand (10^{-1} to 10^{-5} cm/s) as published in Groundwater (Freeze and Cherry 1979).

A.3 REFERENCES

Freeze, R.A. and Cherry, J.A., 1979, Groundwater, Prentice - Hall, Englewood Cliffs, New Jersey, pg. 29.

Kruseman, G.P. and de Ridder, N.A., 1990, Analysis and Evaluation of Pumping Test Data, Second Edition, International Institute for Land Reclamation and Improvement, Wageningen, The Netherlands.

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ATTACHMENT B

FATE AND TRANSPORT MODELING RESULTS

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**FATE AND TRANSPORT MODELING RESULTS
FOR
FORMER FUEL PIT 1A/DAACG AREA (RELEASE #1)**

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**Table B.1. Natural Attenuation Modeling Results (Concentration vs. Distance)
for the Former Fuel Pit 1A/DAACG Area**

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	12500	328.1	100.0	1090
82.0	25.0	12500	410.1	125.0	540
98.4	30.0	12500	492.1	150.0	280
114.8	35.0	12400	574.1	175.0	149
131.2	40.0	12200	656.2	200.0	79.9
147.6	45.0	11600	738.2	225.0	42.9
164.0	50.0	9970	820.2	250.0	23.4
180.4	55.0	7200	984.3	300.0	6.9
196.9	60.0	5130	1148.3	350.0	2.04
229.7	70.0	3100	1312.3	400.0	0.61
262.5	80.0	2100			

**Table B.2. Natural Attenuation Modeling Results (Concentration vs. Time)
for the Former Fuel Pit 1A/DAACG Area**

Time (year)	Predicted Maximum Benzene Concentration in Groundwater (µg/L)			
	D-MW17	D-MW11	D-MW18	P1-MW42
0.0	12500	5450	32.4	0
1.0	11200	6310	542	0.00053
2.0	8160	5490	1130	0.263
3.0	5470	4330	1410	4.57
4.0	3510	3250	1430	21.7
5.0	2180	2350	1290	54
6.0	1330	1650	1070	92.6
7.0	797	1120	842	126
8.0	472	742	631	145
9.0	277	481	454	149
10.0	162	306	316	140
11.0	93.7	192	214	123
12.0	54	118	141	102
13.0	31	72.1	91.5	80.8
14.0	17.7	43.5	58.2	61.5
15.0	10.1	26	36.5	45.3
16.0	5.75	15.4	22.6	32.5
17.0	3.27	9.1	13.8	22.7
18.0	1.9	5.34	8.4	15.5

Insert Figure B-1

Insert Figure B-2

HAAF Former Fuel Pit 1A/DAACG Area: Benzene - SESOIL

NO. OF POINTS IN X-DIRECTION	12
NO. OF POINTS IN Y-DIRECTION	5
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	241
NO. OF TIME INTERVALS FOR PRINTED OUT SOLUTION	12
INSTANTANEOUS SOURCE CONTROL = 0 FOR INSTANT SOURCE	1
SOURCE CONDITION CONTROL = 0 FOR STEADY SOURCE	360
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) ...	0.1220E+02
AQUIFER WIDTH, = 0.0 FOR INFINITE WIDE (METERS) ...	0.0000E+00
BEGIN POINT OF X-SOURCE LOCATION (METERS)	-0.5300E+02
END POINT OF X-SOURCE LOCATION (METERS)	0.5300E+02
BEGIN POINT OF Y-SOURCE LOCATION (METERS)	-0.9800E+02
END POINT OF Y-SOURCE LOCATION (METERS)	0.9800E+02
BEGIN POINT OF Z-SOURCE LOCATION (METERS)	0.0000E+00
END POINT OF Z-SOURCE LOCATION (METERS)	0.0000E+00
POROSITY	0.1800E+00
HYDRAULIC CONDUCTIVITY (METER/HOUR)	0.2160E+00
HYDRAULIC GRADIENT	0.6700E-02
LONGITUDINAL DISPERSIVITY (METER)	0.1000E+02
LATERAL DISPERSIVITY (METER)	0.3000E+01
VERTICAL DISPERSIVITY (METER)	0.1000E+01
DISTRIBUTION COEFFICIENT, KD (M**3/KG)	0.5670E-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)	0.4010E-04
BULK DENSITY OF THE SOIL (KG/M**3)	0.1480E+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)	0.2628E+06
WASTE RELEASE RATE (KCAL/HR), (KG/HR), OR (CI/HR) .	0.0000E+00

0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.177E+00	0.134E+00	0.122E+00	0.863E-01	0.101E+00
0.131E+00	0.181E+00	0.182E+00	0.154E+00	0.522E-01	0.366E-01	0.893E-01	0.977E-01	0.718E-01	0.658E-01
0.466E-01	0.545E-01	0.714E-01	0.988E-01	0.994E-01	0.843E-01	0.287E-01	0.201E-01	0.492E-01	0.539E-01
0.397E-01	0.364E-01	0.258E-01	0.302E-01	0.396E-01	0.549E-01	0.552E-01	0.468E-01	0.159E-01	0.112E-01
0.274E-01	0.300E-01	0.221E-01	0.203E-01	0.144E-01	0.168E-01	0.221E-01	0.306E-01	0.308E-01	0.261E-01
0.889E-02	0.624E-02	0.153E-01	0.167E-01	0.123E-01	0.113E-01	0.802E-02	0.940E-02	0.123E-01	0.171E-01
0.172E-01	0.146E-01	0.496E-02	0.348E-02	0.853E-02	0.934E-02	0.688E-02	0.631E-02	0.447E-02	0.525E-02
0.688E-02	0.952E-02	0.959E-02	0.813E-02	0.277E-02	0.194E-02	0.476E-02	0.521E-02	0.384E-02	0.352E-02
0.250E-02	0.293E-02	0.384E-02	0.531E-02	0.535E-02	0.454E-02	0.155E-02	0.108E-02	0.266E-02	0.291E-02
0.214E-02	0.197E-02	0.139E-02	0.163E-02	0.214E-02	0.297E-02	0.299E-02	0.253E-02	0.862E-03	0.606E-03
0.148E-02	0.162E-02	0.120E-02	0.110E-02	0.778E-03	0.912E-03	0.120E-02	0.166E-02	0.167E-02	0.141E-02
0.481E-03	0.338E-03	0.828E-03	0.907E-03	0.668E-03	0.612E-03	0.434E-03	0.509E-03	0.667E-03	0.924E-03
0.931E-03	0.789E-03	0.269E-03	0.189E-03	0.462E-03	0.506E-03	0.373E-03	0.342E-03	0.242E-03	0.284E-03
0.373E-03	0.516E-03	0.519E-03	0.441E-03	0.150E-03	0.105E-03	0.258E-03	0.282E-03	0.208E-03	0.191E-03
0.135E-03	0.159E-03	0.208E-03	0.288E-03	0.290E-03	0.246E-03	0.837E-04	0.588E-04	0.144E-03	0.158E-03
0.116E-03	0.106E-03	0.755E-04	0.885E-04	0.116E-03	0.161E-03	0.162E-03	0.137E-03	0.467E-04	0.328E-04
0.803E-04	0.880E-04	0.648E-04	0.594E-04	0.421E-04	0.494E-04	0.648E-04	0.897E-04	0.903E-04	0.766E-04
0.261E-04	0.183E-04	0.448E-04	0.491E-04	0.362E-04	0.332E-04	0.235E-04	0.276E-04	0.361E-04	0.501E-04
0.504E-04	0.428E-04	0.145E-04	0.102E-04	0.250E-04	0.274E-04	0.202E-04	0.185E-04	0.131E-04	0.154E-04
0.202E-04	0.279E-04	0.281E-04	0.239E-04	0.812E-05	0.570E-05	0.140E-04	0.153E-04	0.113E-04	0.103E-04
0.733E-05	0.859E-05	0.113E-04	0.156E-04	0.157E-04	0.133E-04	0.453E-05	0.318E-05	0.779E-05	0.854E-05
0.629E-05	0.576E-05	0.409E-05	0.480E-05	0.629E-05	0.870E-05	0.877E-05	0.744E-05	0.253E-05	0.178E-05
0.435E-05	0.477E-05	0.351E-05	0.322E-05	0.228E-05	0.268E-05	0.351E-05	0.486E-05	0.489E-05	0.415E-05
0.141E-05	0.992E-06	0.243E-05	0.266E-05	0.196E-05	0.180E-05	0.127E-05	0.149E-05	0.196E-05	0.271E-05
0.273E-05	0.232E-05	0.789E-06	0.554E-06	0.136E-05	0.148E-05	0.109E-05	0.100E-05	0.711E-06	0.834E-06
0.109E-05	0.151E-05	0.152E-05	0.129E-05	0.440E-06	0.309E-06	0.757E-06	0.829E-06	0.611E-06	0.560E-06
0.397E-06	0.465E-06	0.610E-06	0.845E-06	0.851E-06	0.722E-06	0.246E-06	0.172E-06	0.422E-06	0.463E-06
0.341E-06	0.312E-06	0.222E-06	0.260E-06	0.					

RETARDATION FACTOR	0.5662E+01
RETARDED DARCY VELOCITY (M/HR)	0.1420E-02
RETARDED LONGITUDINAL DISPERSION COEF. (M**2/HR) ..	0.1420E-01
RETARDED LATERAL DISPERSION COEFFICIENT (M**2/HR) ..	0.4263E-02
RETARDED VERTICAL DISPERSION COEFFICIENT (M**2/HR) ..	0.1423E-02

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.0000E+00 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

[illegible]

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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
-4.	0.000E+00	0.000E+00	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
X

Y	150.	175.
---	------	------

76.	0.000E+00	0.000E+00
36.	0.000E+00	0.000E+00
8.	0.000E+00	0.000E+00
0.	0.000E+00	0.000E+00
-4.	0.000E+00	0.000E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.8760E+04 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

					X					
Y	-53.	0.	25.	50.	55.	60.	70.	80.	100.	125.

76.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
36.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
8.	0.000E+00	0.000E+00	0.000E+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
-4.	0.000E+00	0.000E+00	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
X

Y	150.	175.
---	------	------

76.	0.000E+00	0.000E+00
36.	0.000E+00	0.000E+00
8.	0.000E+00	0.000E+00
0.	0.000E+00	0.000E+00
-4.	0.000E+00	0.000E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1752E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

					X					
Y	-53.	0.	25.	50.	55.	60.	70.	80.	100.	125.

76.	0.431E+01	0.125E+02	0.125E+02	0.997E+01	0.680E+01	0.374E+01	0.101E+01	0.231E+00	0.452E-02	0.277E-05
36.	0.431E+01	0.125E+02	0.125E+02	0.997E+01	0.680E+01	0.375E+01	0.101E+01	0.232E+00	0.453E-02	0.278E-05
8.	0.431E+01	0.125E+02	0.125E+02	0.997E+01	0.680E+01	0.375E+01	0.101E+01	0.232E+00	0.453E-02	0.278E-05
0.	0.431E+01	0.125E+02	0.125E+02	0.997E+01	0.680E+01	0.375E+01	0.101E+01	0.232E+00	0.453E-02	0.278E-05
-4.	0.431E+01	0.125E+02	0.125E+02	0.997E+01	0.680E+01	0.375E+01	0.101E+01	0.232E+00	0.453E-02	0.278E-05

CONTINUE
X

Y	150.	175.
---	------	------

76.	0.000E+00	0.000E+00
36.	0.000E+00	0.000E+00
8.	0.000E+00	0.000E+00
0.	0.000E+00	0.000E+00

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B-11

-4. 0.000E+00 0.000E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.2628E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)

Z = 0.00

					X						
Y	-53.	0.	25.	50.	55.	60.	70.	80.	100.	125.	
76.	0.317E+01	0.111E+02	0.112E+02	0.921E+01	0.715E+01	0.508E+01	0.264E+01	0.132E+01	0.220E+00	0.934E-02	
36.	0.318E+01	0.112E+02	0.112E+02	0.926E+01	0.720E+01	0.513E+01	0.267E+01	0.134E+01	0.225E+00	0.956E-02	
8.	0.318E+01	0.112E+02	0.112E+02	0.926E+01	0.720E+01	0.513E+01	0.267E+01	0.134E+01	0.225E+00	0.956E-02	
0.	0.318E+01	0.112E+02	0.112E+02	0.926E+01	0.720E+01	0.513E+01	0.267E+01	0.134E+01	0.225E+00	0.956E-02	
-4.	0.318E+01	0.112E+02	0.112E+02	0.926E+01	0.720E+01	0.513E+01	0.267E+01	0.134E+01	0.225E+00	0.956E-02	

CONTINUE

X

Y	150.	175.
76.	0.130E-03	0.515E-06
36.	0.134E-03	0.530E-06
8.	0.134E-03	0.530E-06
0.	0.134E-03	0.530E-06
-4.	0.134E-03	0.530E-06

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.3504E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)

Z = 0.00

					X						
Y	-53.	0.	25.	50.	55.	60.	70.	80.	100.	125.	
76.	0.201E+01	0.803E+01	0.836E+01	0.712E+01	0.590E+01	0.464E+01	0.300E+01	0.192E+01	0.629E+00	0.931E-01	
36.	0.203E+01	0.816E+01	0.850E+01	0.726E+01	0.603E+01	0.476E+01	0.310E+01	0.199E+01	0.659E+00	0.982E-01	
8.	0.203E+01	0.816E+01	0.850E+01	0.726E+01	0.603E+01	0.476E+01	0.310E+01	0.199E+01	0.659E+00	0.982E-01	
0.	0.203E+01	0.816E+01	0.850E+01	0.726E+01	0.603E+01	0.476E+01	0.310E+01	0.199E+01	0.659E+00	0.982E-01	
-4.	0.203E+01	0.816E+01	0.850E+01	0.726E+01	0.603E+01	0.476E+01	0.310E+01	0.199E+01	0.659E+00	0.982E-01	

CONTINUE

X

Y	150.	175.
76.	0.696E-02	0.247E-03
36.	0.738E-02	0.263E-03
8.	0.738E-02	0.263E-03
0.	0.738E-02	0.263E-03
-4.	0.738E-02	0.263E-03

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.4380E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)

Z = 0.00

					X						
Y	-53.	0.	25.	50.	55.	60.	70.	80.	100.	125.	
76.	0.122E+01	0.532E+01	0.581E+01	0.517E+01	0.447E+01	0.373E+01	0.271E+01	0.197E+01	0.906E+00	0.244E+00	

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36.	0.124E+01	0.547E+01	0.600E+01	0.536E+01	0.465E+01	0.390E+01	0.287E+01	0.210E+01	0.974E+00	0.265E+00
8.	0.124E+01	0.547E+01	0.600E+01	0.536E+01	0.465E+01	0.390E+01	0.287E+01	0.210E+01	0.974E+00	0.265E+00
0.	0.124E+01	0.547E+01	0.600E+01	0.536E+01	0.465E+01	0.390E+01	0.287E+01	0.210E+01	0.974E+00	0.265E+00
-4.	0.124E+01	0.547E+01	0.600E+01	0.536E+01	0.465E+01	0.390E+01	0.287E+01	0.210E+01	0.974E+00	0.265E+00

CONTINUE

X

Y	150.	175.
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76.	0.414E-01	0.417E-02
36.	0.452E-01	0.457E-02
8.	0.452E-01	0.457E-02
0.	0.452E-01	0.457E-02
-4.	0.452E-01	0.457E-02

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.5256E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

					X						
Y	-53.	0.	25.	50.	55.	60.	70.	80.	100.	125.	
76.	0.722E+00	0.337E+01	0.387E+01	0.362E+01	0.323E+01	0.282E+01	0.222E+01	0.175E+01	0.991E+00	0.380E+00	
36.	0.738E+00	0.351E+01	0.406E+01	0.382E+01	0.343E+01	0.301E+01	0.240E+01	0.191E+01	0.109E+01	0.423E+00	
8.	0.738E+00	0.351E+01	0.406E+01	0.382E+01	0.343E+01	0.301E+01	0.240E+01	0.191E+01	0.109E+01	0.423E+00	
0.	0.738E+00	0.351E+01	0.406E+01	0.382E+01	0.343E+01	0.301E+01	0.240E+01	0.191E+01	0.109E+01	0.423E+00	
-4.	0.738E+00	0.351E+01	0.406E+01	0.382E+01	0.343E+01	0.301E+01	0.240E+01	0.191E+01	0.109E+01	0.423E+00	

CONTINUE

X

Y	150.	175.
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76.	0.104E+00	0.192E-01
36.	0.117E+00	0.217E-01
8.	0.117E+00	0.217E-01
0.	0.117E+00	0.217E-01
-4.	0.117E+00	0.217E-01

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.6132E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

					X						
Y	-53.	0.	25.	50.	55.	60.	70.	80.	100.	125.	
76.	0.422E+00	0.208E+01	0.250E+01	0.247E+01	0.226E+01	0.204E+01	0.171E+01	0.143E+01	0.937E+00	0.455E+00	
36.	0.434E+00	0.218E+01	0.266E+01	0.265E+01	0.244E+01	0.222E+01	0.188E+01	0.159E+01	0.105E+01	0.518E+00	
8.	0.434E+00	0.218E+01	0.266E+01	0.265E+01	0.244E+01	0.222E+01	0.188E+01	0.159E+01	0.105E+01	0.518E+00	
0.	0.434E+00	0.218E+01	0.266E+01	0.265E+01	0.244E+01	0.222E+01	0.188E+01	0.159E+01	0.105E+01	0.518E+00	
-4.	0.434E+00	0.218E+01	0.266E+01	0.265E+01	0.244E+01	0.222E+01	0.188E+01	0.159E+01	0.105E+01	0.518E+00	

CONTINUE

X

Y	150.	175.
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76.	0.170E+00	0.468E-01
36.	0.195E+00	0.539E-01

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8. 0.195E+00 0.540E-01
0. 0.195E+00 0.540E-01
-4. 0.195E+00 0.540E-01

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.7008E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

	Y	-53.	0.	25.	50.	X 55.	60.	70.	80.	100.	125.
76.	0.244E+00	0.126E+01	0.158E+01	0.164E+01	0.154E+01	0.142E+01	0.125E+01	0.111E+01	0.806E+00	0.465E+00	
36.	0.252E+00	0.133E+01	0.170E+01	0.179E+01	0.169E+01	0.158E+01	0.141E+01	0.125E+01	0.924E+00	0.539E+00	
8.	0.252E+00	0.133E+01	0.170E+01	0.179E+01	0.169E+01	0.158E+01	0.141E+01	0.125E+01	0.925E+00	0.540E+00	
0.	0.252E+00	0.133E+01	0.170E+01	0.179E+01	0.169E+01	0.158E+01	0.141E+01	0.125E+01	0.925E+00	0.540E+00	
-4.	0.252E+00	0.133E+01	0.170E+01	0.179E+01	0.169E+01	0.158E+01	0.141E+01	0.125E+01	0.925E+00	0.540E+00	

CONTINUE

	Y	150.	175.
76.	0.216E+00	0.787E-01	
36.	0.253E+00	0.925E-01	
8.	0.253E+00	0.926E-01	
0.	0.253E+00	0.926E-01	
-4.	0.253E+00	0.926E-01	

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.7884E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

	Y	-53.	0.	25.	50.	X 55.	60.	70.	80.	100.	125.
76.	0.140E+00	0.748E+00	0.976E+00	0.107E+01	0.102E+01	0.966E+00	0.887E+00	0.813E+00	0.648E+00	0.427E+00	
36.	0.146E+00	0.800E+00	0.106E+01	0.118E+01	0.114E+01	0.109E+01	0.101E+01	0.935E+00	0.755E+00	0.503E+00	
8.	0.146E+00	0.801E+00	0.107E+01	0.119E+01	0.114E+01	0.109E+01	0.101E+01	0.937E+00	0.757E+00	0.504E+00	
0.	0.146E+00	0.801E+00	0.107E+01	0.119E+01	0.114E+01	0.109E+01	0.101E+01	0.937E+00	0.757E+00	0.504E+00	
-4.	0.146E+00	0.801E+00	0.107E+01	0.119E+01	0.114E+01	0.109E+01	0.101E+01	0.937E+00	0.757E+00	0.504E+00	

CONTINUE

	Y	150.	175.
76.	0.235E+00	0.105E+00	
36.	0.279E+00	0.125E+00	
8.	0.280E+00	0.126E+00	
0.	0.280E+00	0.126E+00	
-4.	0.280E+00	0.126E+00	

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.8760E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

	Y	-53.	0.	25.	50.	X 55.	60.	70.	80.	100.	125.

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76.	0.803E-01	0.440E+00	0.595E+00	0.681E+00	0.662E+00	0.638E+00	0.607E+00	0.576E+00	0.495E+00	0.363E+00
36.	0.839E-01	0.475E+00	0.655E+00	0.765E+00	0.749E+00	0.729E+00	0.701E+00	0.672E+00	0.585E+00	0.434E+00
8.	0.839E-01	0.476E+00	0.656E+00	0.767E+00	0.751E+00	0.730E+00	0.703E+00	0.674E+00	0.587E+00	0.435E+00
0.	0.839E-01	0.476E+00	0.656E+00	0.767E+00	0.751E+00	0.730E+00	0.703E+00	0.674E+00	0.587E+00	0.435E+00
-4.	0.839E-01	0.476E+00	0.656E+00	0.767E+00	0.751E+00	0.730E+00	0.703E+00	0.674E+00	0.587E+00	0.435E+00

CONTINUE

X

Y	150.	175.
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76.	0.227E+00	0.119E+00
36.	0.274E+00	0.144E+00
8.	0.275E+00	0.145E+00
0.	0.275E+00	0.145E+00
-4.	0.275E+00	0.145E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.9636E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

	Y	-53.	0.	25.	50.	X 55.	60.	70.	80.	100.	125.
76.	0.458E-01	0.257E+00	0.358E+00	0.427E+00	0.421E+00	0.412E+00	0.404E+00	0.395E+00	0.361E+00	0.290E+00	
36.	0.480E-01	0.280E+00	0.398E+00	0.485E+00	0.482E+00	0.477E+00	0.473E+00	0.466E+00	0.433E+00	0.351E+00	
8.	0.481E-01	0.280E+00	0.399E+00	0.487E+00	0.484E+00	0.478E+00	0.474E+00	0.468E+00	0.435E+00	0.353E+00	
0.	0.481E-01	0.280E+00	0.399E+00	0.487E+00	0.484E+00	0.478E+00	0.474E+00	0.468E+00	0.435E+00	0.353E+00	
-4.	0.481E-01	0.280E+00	0.399E+00	0.487E+00	0.484E+00	0.478E+00	0.474E+00	0.468E+00	0.435E+00	0.353E+00	

CONTINUE

X

Y	150.	175.
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76.	0.202E+00	0.120E+00
36.	0.247E+00	0.148E+00
8.	0.248E+00	0.149E+00
0.	0.248E+00	0.149E+00
-4.	0.248E+00	0.149E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1051E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

	Y	-53.	0.	25.	50.	X 55.	60.	70.	80.	100.	125.
76.	0.260E-01	0.149E+00	0.213E+00	0.264E+00	0.263E+00	0.261E+00	0.263E+00	0.264E+00	0.255E+00	0.221E+00	
36.	0.274E-01	0.163E+00	0.239E+00	0.303E+00	0.305E+00	0.305E+00	0.311E+00	0.315E+00	0.308E+00	0.271E+00	
8.	0.274E-01	0.164E+00	0.239E+00	0.304E+00	0.306E+00	0.307E+00	0.312E+00	0.316E+00	0.310E+00	0.273E+00	
0.	0.274E-01	0.164E+00	0.239E+00	0.304E+00	0.306E+00	0.307E+00	0.312E+00	0.316E+00	0.311E+00	0.273E+00	
-4.	0.274E-01	0.164E+00	0.239E+00	0.304E+00	0.306E+00	0.307E+00	0.312E+00	0.316E+00	0.311E+00	0.273E+00	

CONTINUE

X

Y	150.	175.
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76.	0.169E+00	0.112E+00
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36. 0.208E+00 0.139E+00
8. 0.210E+00 0.140E+00
0. 0.210E+00 0.140E+00
-4. 0.210E+00 0.140E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1139E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

	X									
Y	-53.	0.	25.	50.	55.	60.	70.	80.	100.	125.
76.	0.148E-01	0.862E-01	0.126E+00	0.161E+00	0.162E+00	0.163E+00	0.167E+00	0.172E+00	0.174E+00	0.162E+00
36.	0.156E-01	0.947E-01	0.142E+00	0.186E+00	0.190E+00	0.192E+00	0.200E+00	0.207E+00	0.213E+00	0.200E+00
8.	0.156E-01	0.949E-01	0.142E+00	0.187E+00	0.191E+00	0.193E+00	0.201E+00	0.209E+00	0.215E+00	0.202E+00
0.	0.156E-01	0.949E-01	0.142E+00	0.187E+00	0.191E+00	0.193E+00	0.201E+00	0.209E+00	0.215E+00	0.202E+00
-4.	0.156E-01	0.949E-01	0.142E+00	0.187E+00	0.191E+00	0.193E+00	0.201E+00	0.209E+00	0.215E+00	0.202E+00

CONTINUE

	X	
Y	150.	175.
76.	0.134E+00	0.970E-01
36.	0.167E+00	0.121E+00
8.	0.168E+00	0.123E+00
0.	0.168E+00	0.123E+00
-4.	0.168E+00	0.123E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1226E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

	X									
Y	-53.	0.	25.	50.	55.	60.	70.	80.	100.	125.
76.	0.836E-02	0.495E-01	0.736E-01	0.970E-01	0.988E-01	0.100E+00	0.105E+00	0.110E+00	0.116E+00	0.115E+00
36.	0.885E-02	0.547E-01	0.837E-01	0.113E+00	0.116E+00	0.119E+00	0.126E+00	0.134E+00	0.143E+00	0.143E+00
8.	0.886E-02	0.548E-01	0.841E-01	0.114E+00	0.117E+00	0.120E+00	0.127E+00	0.135E+00	0.145E+00	0.145E+00
0.	0.886E-02	0.548E-01	0.841E-01	0.114E+00	0.117E+00	0.120E+00	0.127E+00	0.135E+00	0.145E+00	0.145E+00
-4.	0.886E-02	0.548E-01	0.841E-01	0.114E+00	0.117E+00	0.120E+00	0.127E+00	0.135E+00	0.145E+00	0.145E+00

CONTINUE

	X	
Y	150.	175.
76.	0.102E+00	0.797E-01
36.	0.127E+00	0.101E+00
8.	0.129E+00	0.102E+00
0.	0.129E+00	0.102E+00
-4.	0.129E+00	0.102E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1314E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

X

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Y	-53.	0.	25.	50.	55.	60.	70.	80.	100.	125.
76.	0.472E-02	0.283E-01	0.429E-01	0.580E-01	0.595E-01	0.609E-01	0.649E-01	0.691E-01	0.761E-01	0.792E-01
36.	0.501E-02	0.314E-01	0.490E-01	0.682E-01	0.706E-01	0.729E-01	0.787E-01	0.846E-01	0.943E-01	0.993E-01
8.	0.502E-02	0.315E-01	0.493E-01	0.687E-01	0.712E-01	0.736E-01	0.794E-01	0.855E-01	0.955E-01	0.101E+00
0.	0.502E-02	0.315E-01	0.493E-01	0.687E-01	0.712E-01	0.736E-01	0.794E-01	0.855E-01	0.955E-01	0.101E+00
-4.	0.502E-02	0.315E-01	0.493E-01	0.687E-01	0.712E-01	0.736E-01	0.794E-01	0.855E-01	0.955E-01	0.101E+00

CONTINUE

X

Y	150.	175.
76.	0.744E-01	0.625E-01
36.	0.940E-01	0.794E-01
8.	0.954E-01	0.808E-01
0.	0.955E-01	0.808E-01
-4.	0.955E-01	0.808E-01

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1402E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	-53.	0.	25.	50.	55.	60.	70.	80.	100.	125.
76.	0.266E-02	0.162E-01	0.248E-01	0.344E-01	0.355E-01	0.367E-01	0.396E-01	0.429E-01	0.488E-01	0.533E-01
36.	0.283E-02	0.180E-01	0.285E-01	0.407E-01	0.424E-01	0.441E-01	0.483E-01	0.528E-01	0.609E-01	0.672E-01
8.	0.284E-02	0.181E-01	0.287E-01	0.410E-01	0.428E-01	0.446E-01	0.489E-01	0.534E-01	0.617E-01	0.683E-01
0.	0.284E-02	0.181E-01	0.287E-01	0.410E-01	0.428E-01	0.446E-01	0.489E-01	0.535E-01	0.618E-01	0.683E-01
-4.	0.284E-02	0.181E-01	0.287E-01	0.410E-01	0.428E-01	0.446E-01	0.489E-01	0.535E-01	0.618E-01	0.683E-01

CONTINUE

X

Y	150.	175.
76.	0.528E-01	0.472E-01
36.	0.671E-01	0.603E-01
8.	0.684E-01	0.615E-01
0.	0.684E-01	0.615E-01
-4.	0.684E-01	0.615E-01

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1489E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	-53.	0.	25.	50.	55.	60.	70.	80.	100.	125.
76.	0.150E-02	0.920E-02	0.143E-01	0.202E-01	0.210E-01	0.219E-01	0.240E-01	0.263E-01	0.308E-01	0.351E-01
36.	0.160E-02	0.103E-01	0.165E-01	0.241E-01	0.253E-01	0.265E-01	0.294E-01	0.325E-01	0.386E-01	0.445E-01
8.	0.160E-02	0.103E-01	0.166E-01	0.243E-01	0.255E-01	0.268E-01	0.298E-01	0.330E-01	0.393E-01	0.453E-01
0.	0.160E-02	0.103E-01	0.167E-01	0.243E-01	0.255E-01	0.268E-01	0.298E-01	0.330E-01	0.393E-01	0.454E-01
-4.	0.160E-02	0.103E-01	0.167E-01	0.243E-01	0.255E-01	0.268E-01	0.298E-01	0.330E-01	0.393E-01	0.453E-01

CONTINUE

X

Y	150.	175.
76.	0.150E-02	0.920E-02
36.	0.160E-02	0.103E-01
8.	0.160E-02	0.103E-01
0.	0.160E-02	0.103E-01
-4.	0.160E-02	0.103E-01

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76. 0.365E-01 0.345E-01
36. 0.467E-01 0.443E-01
8. 0.476E-01 0.453E-01
0. 0.477E-01 0.453E-01
-4. 0.477E-01 0.453E-01

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1577E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

	X										
Y	-53.	0.	25.	50.	55.	60.	70.	80.	100.	125.	
76.	0.844E-03	0.522E-02	0.823E-02	0.118E-01	0.124E-01	0.129E-01	0.144E-01	0.159E-01	0.192E-01	0.227E-01	
36.	0.901E-03	0.585E-02	0.953E-02	0.142E-01	0.149E-01	0.157E-01	0.177E-01	0.198E-01	0.242E-01	0.289E-01	
8.	0.904E-03	0.588E-02	0.961E-02	0.143E-01	0.151E-01	0.159E-01	0.179E-01	0.201E-01	0.246E-01	0.295E-01	
0.	0.904E-03	0.588E-02	0.961E-02	0.143E-01	0.151E-01	0.160E-01	0.179E-01	0.201E-01	0.246E-01	0.296E-01	
-4.	0.904E-03	0.588E-02	0.961E-02	0.143E-01	0.151E-01	0.160E-01	0.179E-01	0.201E-01	0.246E-01	0.295E-01	

CONTINUE

	X	
Y	150.	175.
76.	0.247E-01	0.245E-01
36.	0.317E-01	0.317E-01
8.	0.324E-01	0.324E-01
0.	0.325E-01	0.325E-01
-4.	0.325E-01	0.325E-01

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1664E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

	X										
Y	-53.	0.	25.	50.	55.	60.	70.	80.	100.	125.	
76.	0.474E-03	0.296E-02	0.471E-02	0.690E-02	0.725E-02	0.761E-02	0.853E-02	0.957E-02	0.118E-01	0.145E-01	
36.	0.508E-03	0.332E-02	0.548E-02	0.828E-02	0.878E-02	0.930E-02	0.106E-01	0.120E-01	0.149E-01	0.185E-01	
8.	0.509E-03	0.334E-02	0.553E-02	0.838E-02	0.889E-02	0.943E-02	0.107E-01	0.122E-01	0.152E-01	0.189E-01	
0.	0.509E-03	0.334E-02	0.553E-02	0.838E-02	0.890E-02	0.944E-02	0.107E-01	0.122E-01	0.152E-01	0.189E-01	
-4.	0.509E-03	0.334E-02	0.553E-02	0.838E-02	0.890E-02	0.943E-02	0.107E-01	0.122E-01	0.152E-01	0.189E-01	

CONTINUE

	X	
Y	150.	175.
76.	0.164E-01	0.170E-01
36.	0.211E-01	0.220E-01
8.	0.216E-01	0.226E-01
0.	0.217E-01	0.227E-01
-4.	0.217E-01	0.227E-01

STEADY STATE SOLUTION HAS NOT BEEN REACHED BEFORE FINAL SIMULATING TIME

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1752E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

	Y	175200.	0.	25.	50.	X 55.	60.	70.	80.	100.	125.
76.	0.267E-03	0.167E-02	0.269E-02	0.400E-02	0.422E-02	0.445E-02	0.504E-02	0.571E-02	0.719E-02	0.910E-02	
36.	0.286E-03	0.188E-02	0.314E-02	0.481E-02	0.513E-02	0.546E-02	0.625E-02	0.715E-02	0.914E-02	0.117E-01	
8.	0.287E-03	0.190E-02	0.317E-02	0.488E-02	0.520E-02	0.554E-02	0.636E-02	0.729E-02	0.933E-02	0.120E-01	
0.	0.287E-03	0.190E-02	0.317E-02	0.488E-02	0.520E-02	0.555E-02	0.636E-02	0.729E-02	0.934E-02	0.120E-01	
-4.	0.287E-03	0.190E-02	0.317E-02	0.488E-02	0.520E-02	0.555E-02	0.636E-02	0.729E-02	0.934E-02	0.120E-01	

CONTINUE

	Y	150.	175.	X
76.	0.107E-01	0.116E-01		
36.	0.138E-01	0.150E-01		
8.	0.142E-01	0.155E-01		
0.	0.142E-01	0.155E-01		
-4.	0.142E-01	0.155E-01		

**FATE AND TRANSPORT MODELING RESULTS
FOR
FORMER PUMPHOUSE #1 TANK PIT AREA (RELEASE #2)**

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**Table B.3. Natural Attenuation Modeling Results (Concentration vs. Distance)
for the Former Pumphouse #1 Tank Pit Area**

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	5990	393.7	120.0	951
65.6	20.0	5990	426.5	130.0	703
164.0	50.0	5990	492.1	150.0	413
196.9	60.0	5980	574.1	175.0	220
229.7	70.0	5930	656.2	200.0	122
262.5	80.0	5510	738.2	225.0	67.7
287.1	87.5	3970	820.2	250.0	37.6
295.3	90.0	3460	902.2	275.0	21
311.7	95.0	2520	984.3	300.0	11.8
328.1	100.0	1920	1148.3	350.0	3.73
360.9	110.0	1300	1312.3	400.0	1.2
374.0	114.0	1140			

**Table B.4. Natural Attenuation Modeling Results (Concentration vs. Time)
for the Former Pumphouse #1 Tank Pit Area**

Time (year)	Predicted Maximum Benzene Concentration in Groundwater (µg/L)			
	D-MW05	P1-MW19	Drainage Ditch	P1-MW36
0.0	5990	276	158	2.49
1.0	5460	1010	784	121
2.0	4160	1300	1110	351
3.0	2950	1280	1140	519
4.0	2000	1120	1030	580
5.0	1310	914	858	559
6.0	839	716	682	492
7.0	523	543	523	408
8.0	320	401	390	322
9.0	193	288	283	246
10.0	115	203	200	182
11.0	67.5	139	139	132
12.0	39.4	93.9	94.1	92.7
13.0	22.9	62	62.5	63.8
14.0	13.2	40.2	40.8	43.1
15.0	7.57	25.7	26.2	28.6
16.0	4.33	16.2	16.6	18.6
17.0	2.47	10	10.3	11.9
18.0	1.4	6.16	6.37	7.55
19.0	0.794	3.74	3.89	4.71
20.0	0.449	2.25	2.35	2.91

Insert Figure B-3.

Insert Figure B-4.

HAAF Former Pumphouse #1 Tank Pit Area: Benzene - SESOIL

NO. OF POINTS IN X-DIRECTION	12
NO. OF POINTS IN Y-DIRECTION	5
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	241
NO. OF TIME INTERVALS FOR PRINTED OUT SOLUTION	12
INSTANTANEOUS SOURCE CONTROL = 0 FOR INSTANT SOURCE	1
SOURCE CONDITION CONTROL = 0 FOR STEADY SOURCE	360
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) ...	0.1220E+02
AQUIFER WIDTH, = 0.0 FOR INFINITE WIDE (METERS) ...	0.0000E+00
BEGIN POINT OF X-SOURCE LOCATION (METERS)	-0.8750E+02
END POINT OF X-SOURCE LOCATION (METERS)	0.8750E+02
BEGIN POINT OF Y-SOURCE LOCATION (METERS)	-0.4950E+02
END POINT OF Y-SOURCE LOCATION (METERS)	0.4950E+02
BEGIN POINT OF Z-SOURCE LOCATION (METERS)	0.0000E+00
END POINT OF Z-SOURCE LOCATION (METERS)	0.0000E+00
POROSITY	0.1800E+00
HYDRAULIC CONDUCTIVITY (METER/HOUR)	0.2410E+00
HYDRAULIC GRADIENT	0.6700E-02
LONGITUDINAL DISPERSIVITY (METER)	0.1000E+02
LATERAL DISPERSIVITY (METER)	0.3000E+01
VERTICAL DISPERSIVITY (METER)	0.1000E+01
DISTRIBUTION COEFFICIENT, KD (M**3/KG)	0.5670E-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)	0.4010E-04
BULK DENSITY OF THE SOIL (KG/M**3)	0.1480E+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)	0.2628E+06
WASTE RELEASE RATE (KCAL/HR), (KG/HR), OR (CI/HR) .	0.0000E+00

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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
-4.	0.000E+00	0.000E+00	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
X

Y	200.	250.
---	------	------

76.	0.000E+00	0.000E+00
36.	0.000E+00	0.000E+00
8.	0.000E+00	0.000E+00
0.	0.000E+00	0.000E+00
-4.	0.000E+00	0.000E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.8760E+04 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

					X					
Y	0.	50.	60.	70.	80.	90.	95.	100.	120.	150.

76.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
36.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
8.	0.000E+00	0.000E+00	0.000E+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
-4.	0.000E+00	0.000E+00	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
X

Y	200.	250.
---	------	------

76.	0.000E+00	0.000E+00
36.	0.000E+00	0.000E+00
8.	0.000E+00	0.000E+00
0.	0.000E+00	0.000E+00
-4.	0.000E+00	0.000E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1752E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

					X					
Y	0.	50.	60.	70.	80.	90.	95.	100.	120.	150.

76.	0.272E-03	0.272E-03	0.271E-03	0.265E-03	0.243E-03	0.190E-03	0.154E-03	0.116E-03	0.151E-04	0.326E-07
36.	0.593E+01	0.593E+01	0.592E+01	0.588E+01	0.546E+01	0.315E+01	0.178E+01	0.963E+00	0.611E-01	0.940E-04
8.	0.599E+01	0.599E+01	0.598E+01	0.593E+01	0.551E+01	0.319E+01	0.181E+01	0.986E+00	0.635E-01	0.983E-04
0.	0.599E+01	0.599E+01	0.598E+01	0.593E+01	0.551E+01	0.319E+01	0.181E+01	0.986E+00	0.635E-01	0.983E-04
-4.	0.599E+01	0.599E+01	0.598E+01	0.593E+01	0.551E+01	0.319E+01	0.181E+01	0.986E+00	0.635E-01	0.983E-04

CONTINUE
X

Y	200.	250.
---	------	------

76.	0.000E+00	0.000E+00
36.	0.000E+00	0.000E+00
8.	0.000E+00	0.000E+00
0.	0.000E+00	0.000E+00

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-4. 0.000E+00 0.000E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.2628E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	0.	50.	60.	70.	X 80.	90.	95.	100.	120.	150.
76.	0.128E-01	0.128E-01	0.127E-01	0.124E-01	0.117E-01	0.104E-01	0.942E-02	0.830E-02	0.352E-02	0.293E-03
36.	0.521E+01	0.521E+01	0.519E+01	0.513E+01	0.478E+01	0.327E+01	0.235E+01	0.171E+01	0.462E+00	0.264E-01
8.	0.546E+01	0.546E+01	0.544E+01	0.537E+01	0.501E+01	0.346E+01	0.252E+01	0.185E+01	0.515E+00	0.300E-01
0.	0.546E+01	0.546E+01	0.544E+01	0.537E+01	0.501E+01	0.346E+01	0.252E+01	0.185E+01	0.515E+00	0.300E-01
-4.	0.546E+01	0.546E+01	0.544E+01	0.537E+01	0.501E+01	0.346E+01	0.252E+01	0.185E+01	0.515E+00	0.300E-01

CONTINUE

Y	200.	250.
76.	0.146E-06	0.000E+00
36.	0.102E-04	0.000E+00
8.	0.117E-04	0.000E+00
0.	0.117E-04	0.000E+00
-4.	0.117E-04	0.000E+00

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.3504E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	0.	50.	60.	70.	X 80.	90.	95.	100.	120.	150.
76.	0.381E-01	0.387E-01	0.384E-01	0.378E-01	0.363E-01	0.337E-01	0.318E-01	0.295E-01	0.180E-01	0.425E-02
36.	0.384E+01	0.385E+01	0.383E+01	0.378E+01	0.356E+01	0.265E+01	0.210E+01	0.169E+01	0.725E+00	0.127E+00
8.	0.416E+01	0.418E+01	0.416E+01	0.410E+01	0.386E+01	0.293E+01	0.235E+01	0.192E+01	0.850E+00	0.153E+00
0.	0.416E+01	0.418E+01	0.416E+01	0.410E+01	0.386E+01	0.293E+01	0.235E+01	0.192E+01	0.851E+00	0.153E+00
-4.	0.416E+01	0.418E+01	0.416E+01	0.410E+01	0.386E+01	0.293E+01	0.235E+01	0.192E+01	0.851E+00	0.153E+00

CONTINUE

Y	200.	250.
76.	0.465E-04	0.301E-07
36.	0.112E-02	0.662E-06
8.	0.137E-02	0.812E-06
0.	0.137E-02	0.813E-06
-4.	0.137E-02	0.813E-06

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.4380E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	0.	50.	60.	70.	X 80.	90.	95.	100.	120.	150.
76.	0.564E-01	0.601E-01	0.598E-01	0.591E-01	0.575E-01	0.546E-01	0.525E-01	0.500E-01	0.362E-01	0.141E-01

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36.	0.265E+01	0.270E+01	0.269E+01	0.266E+01	0.252E+01	0.200E+01	0.167E+01	0.143E+01	0.781E+00	0.237E+00
8.	0.296E+01	0.303E+01	0.302E+01	0.298E+01	0.283E+01	0.229E+01	0.195E+01	0.168E+01	0.949E+00	0.294E+00
0.	0.297E+01	0.303E+01	0.302E+01	0.298E+01	0.283E+01	0.229E+01	0.195E+01	0.168E+01	0.951E+00	0.295E+00
-4.	0.297E+01	0.303E+01	0.302E+01	0.298E+01	0.283E+01	0.229E+01	0.195E+01	0.168E+01	0.950E+00	0.295E+00

CONTINUE

X

Y	200.	250.
---	------	------

76.	0.684E-03	0.447E-05
36.	0.953E-02	0.575E-04
8.	0.120E-01	0.731E-04
0.	0.121E-01	0.734E-04
-4.	0.121E-01	0.733E-04

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.5256E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

					X					
Y	0.	50.	60.	70.	80.	90.	95.	100.	120.	150.
76.	0.610E-01	0.708E-01	0.708E-01	0.703E-01	0.689E-01	0.665E-01	0.647E-01	0.626E-01	0.501E-01	0.259E-01
36.	0.176E+01	0.186E+01	0.186E+01	0.184E+01	0.176E+01	0.146E+01	0.127E+01	0.112E+01	0.718E+00	0.302E+00
8.	0.202E+01	0.215E+01	0.214E+01	0.212E+01	0.203E+01	0.172E+01	0.152E+01	0.136E+01	0.896E+00	0.384E+00
0.	0.202E+01	0.215E+01	0.215E+01	0.213E+01	0.204E+01	0.172E+01	0.153E+01	0.137E+01	0.899E+00	0.386E+00
-4.	0.202E+01	0.215E+01	0.215E+01	0.212E+01	0.204E+01	0.172E+01	0.152E+01	0.137E+01	0.898E+00	0.386E+00

CONTINUE

X

Y	200.	250.
---	------	------

76.	0.298E-02	0.755E-04
36.	0.294E-01	0.690E-03
8.	0.380E-01	0.898E-03
0.	0.382E-01	0.904E-03
-4.	0.382E-01	0.903E-03

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.6132E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

					X					
Y	0.	50.	60.	70.	80.	90.	95.	100.	120.	150.
76.	0.553E-01	0.712E-01	0.718E-01	0.718E-01	0.711E-01	0.694E-01	0.681E-01	0.665E-01	0.567E-01	0.351E-01
36.	0.113E+01	0.127E+01	0.127E+01	0.126E+01	0.121E+01	0.104E+01	0.937E+00	0.853E+00	0.606E+00	0.316E+00
8.	0.133E+01	0.150E+01	0.150E+01	0.149E+01	0.144E+01	0.126E+01	0.115E+01	0.106E+01	0.772E+00	0.410E+00
0.	0.133E+01	0.150E+01	0.151E+01	0.150E+01	0.145E+01	0.127E+01	0.116E+01	0.106E+01	0.776E+00	0.413E+00
-4.	0.133E+01	0.150E+01	0.151E+01	0.150E+01	0.145E+01	0.127E+01	0.116E+01	0.106E+01	0.775E+00	0.412E+00

CONTINUE

X

Y	200.	250.
---	------	------

76.	0.707E-02	0.432E-03
36.	0.547E-01	0.311E-02

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8. 0.719E-01 0.411E-02
0. 0.725E-01 0.415E-02
-4. 0.723E-01 0.414E-02

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.7008E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

	Y	0.	50.	60.	70.	X 80.	90.	95.	100.	120.	150.
76.	0.446E-01	0.642E-01	0.656E-01	0.664E-01	0.664E-01	0.655E-01	0.647E-01	0.637E-01	0.568E-01	0.399E-01	
36.	0.714E+00	0.850E+00	0.857E+00	0.856E+00	0.834E+00	0.739E+00	0.679E+00	0.632E+00	0.486E+00	0.295E+00	
8.	0.849E+00	0.103E+01	0.104E+01	0.104E+01	0.101E+01	0.915E+00	0.852E+00	0.800E+00	0.628E+00	0.387E+00	
0.	0.852E+00	0.103E+01	0.104E+01	0.104E+01	0.102E+01	0.920E+00	0.856E+00	0.804E+00	0.632E+00	0.390E+00	
-4.	0.852E+00	0.103E+01	0.104E+01	0.104E+01	0.102E+01	0.919E+00	0.855E+00	0.803E+00	0.631E+00	0.390E+00	

CONTINUE

	Y	200.	250.
76.	0.118E-01	0.133E-02	
36.	0.762E-01	0.804E-02	
8.	0.101E+00	0.107E-01	
0.	0.102E+00	0.108E-01	
-4.	0.102E+00	0.108E-01	

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.7884E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

	Y	0.	50.	60.	70.	X 80.	90.	95.	100.	120.	150.
76.	0.333E-01	0.533E-01	0.554E-01	0.568E-01	0.575E-01	0.575E-01	0.572E-01	0.567E-01	0.524E-01	0.403E-01	
36.	0.441E+00	0.562E+00	0.573E+00	0.577E+00	0.568E+00	0.518E+00	0.485E+00	0.459E+00	0.375E+00	0.255E+00	
8.	0.530E+00	0.692E+00	0.706E+00	0.713E+00	0.704E+00	0.652E+00	0.617E+00	0.589E+00	0.490E+00	0.337E+00	
0.	0.533E+00	0.696E+00	0.710E+00	0.717E+00	0.709E+00	0.656E+00	0.622E+00	0.593E+00	0.494E+00	0.340E+00	
-4.	0.532E+00	0.695E+00	0.709E+00	0.716E+00	0.708E+00	0.655E+00	0.621E+00	0.592E+00	0.493E+00	0.340E+00	

CONTINUE

	Y	200.	250.
76.	0.157E-01	0.277E-02	
36.	0.881E-01	0.146E-01	
8.	0.118E+00	0.196E-01	
0.	0.119E+00	0.198E-01	
-4.	0.118E+00	0.197E-01	

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.8760E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

	Y	0.	50.	60.	70.	X 80.	90.	95.	100.	120.	150.
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76.	0.234E-01	0.415E-01	0.439E-01	0.457E-01	0.470E-01	0.476E-01	0.477E-01	0.476E-01	0.454E-01	0.374E-01
36.	0.268E+00	0.366E+00	0.377E+00	0.385E+00	0.383E+00	0.358E+00	0.341E+00	0.327E+00	0.281E+00	0.209E+00
8.	0.325E+00	0.456E+00	0.472E+00	0.482E+00	0.482E+00	0.456E+00	0.439E+00	0.424E+00	0.370E+00	0.278E+00
0.	0.327E+00	0.459E+00	0.475E+00	0.485E+00	0.485E+00	0.460E+00	0.442E+00	0.427E+00	0.373E+00	0.280E+00
-4.	0.326E+00	0.458E+00	0.474E+00	0.484E+00	0.484E+00	0.459E+00	0.441E+00	0.426E+00	0.373E+00	0.280E+00

CONTINUE

X

Y 200. 250.

76.	0.179E-01	0.445E-02
36.	0.900E-01	0.210E-01
8.	0.120E+00	0.282E-01
0.	0.122E+00	0.285E-01
-4.	0.121E+00	0.284E-01

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.9636E+05 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	0.	50.	60.	70.	80.	90.	95.	100.	120.	150.
76.	0.158E-01	0.306E-01	0.329E-01	0.349E-01	0.364E-01	0.375E-01	0.378E-01	0.380E-01	0.375E-01	0.327E-01
36.	0.160E+00	0.234E+00	0.245E+00	0.253E+00	0.255E+00	0.244E+00	0.235E+00	0.229E+00	0.206E+00	0.164E+00
8.	0.196E+00	0.295E+00	0.309E+00	0.320E+00	0.324E+00	0.314E+00	0.305E+00	0.298E+00	0.272E+00	0.219E+00
0.	0.197E+00	0.297E+00	0.311E+00	0.322E+00	0.327E+00	0.316E+00	0.308E+00	0.301E+00	0.274E+00	0.221E+00
-4.	0.197E+00	0.297E+00	0.311E+00	0.321E+00	0.326E+00	0.316E+00	0.307E+00	0.300E+00	0.274E+00	0.221E+00

CONTINUE

X

Y 200. 250.

76.	0.184E-01	0.595E-02
36.	0.841E-01	0.257E-01
8.	0.112E+00	0.344E-01
0.	0.114E+00	0.348E-01
-4.	0.113E+00	0.347E-01

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1051E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	0.	50.	60.	70.	80.	90.	95.	100.	120.	150.
76.	0.103E-01	0.217E-01	0.237E-01	0.255E-01	0.271E-01	0.283E-01	0.287E-01	0.291E-01	0.296E-01	0.273E-01
36.	0.950E-01	0.148E+00	0.156E+00	0.163E+00	0.167E+00	0.163E+00	0.160E+00	0.157E+00	0.147E+00	0.125E+00
8.	0.117E+00	0.187E+00	0.199E+00	0.208E+00	0.214E+00	0.211E+00	0.208E+00	0.206E+00	0.195E+00	0.167E+00
0.	0.118E+00	0.189E+00	0.200E+00	0.210E+00	0.216E+00	0.213E+00	0.210E+00	0.208E+00	0.197E+00	0.168E+00
-4.	0.117E+00	0.188E+00	0.200E+00	0.210E+00	0.216E+00	0.213E+00	0.210E+00	0.207E+00	0.196E+00	0.168E+00

CONTINUE

X

Y 200. 250.

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76. 0.175E-01 0.696E-02
36. 0.736E-01 0.278E-01
8. 0.983E-01 0.372E-01
0. 0.994E-01 0.376E-01
-4. 0.991E-01 0.375E-01

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1139E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	0.	50.	60.	70.	X 80.	90.	95.	100.	120.	150.
76.	0.655E-02	0.148E-01	0.165E-01	0.180E-01	0.194E-01	0.206E-01	0.211E-01	0.215E-01	0.225E-01	0.218E-01
36.	0.558E-01	0.918E-01	0.984E-01	0.104E+00	0.108E+00	0.108E+00	0.106E+00	0.106E+00	0.103E+00	0.926E-01
8.	0.689E-01	0.117E+00	0.126E+00	0.133E+00	0.139E+00	0.140E+00	0.139E+00	0.139E+00	0.136E+00	0.123E+00
0.	0.693E-01	0.118E+00	0.127E+00	0.135E+00	0.140E+00	0.141E+00	0.141E+00	0.140E+00	0.138E+00	0.125E+00
-4.	0.692E-01	0.118E+00	0.126E+00	0.134E+00	0.140E+00	0.141E+00	0.140E+00	0.140E+00	0.137E+00	0.124E+00

CONTINUE

Y	200.	250.
76.	0.156E-01	0.736E-02
36.	0.612E-01	0.275E-01
8.	0.816E-01	0.367E-01
0.	0.825E-01	0.371E-01
-4.	0.823E-01	0.370E-01

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1226E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	0.	50.	60.	70.	X 80.	90.	95.	100.	120.	150.
76.	0.408E-02	0.982E-02	0.111E-01	0.123E-01	0.134E-01	0.145E-01	0.149E-01	0.154E-01	0.166E-01	0.168E-01
36.	0.325E-01	0.564E-01	0.611E-01	0.655E-01	0.689E-01	0.699E-01	0.698E-01	0.699E-01	0.704E-01	0.668E-01
8.	0.403E-01	0.720E-01	0.783E-01	0.841E-01	0.889E-01	0.910E-01	0.913E-01	0.919E-01	0.932E-01	0.887E-01
0.	0.405E-01	0.726E-01	0.790E-01	0.849E-01	0.898E-01	0.918E-01	0.922E-01	0.928E-01	0.942E-01	0.897E-01
-4.	0.405E-01	0.724E-01	0.788E-01	0.847E-01	0.895E-01	0.916E-01	0.920E-01	0.926E-01	0.939E-01	0.894E-01

CONTINUE

Y	200.	250.
76.	0.132E-01	0.720E-02
36.	0.489E-01	0.254E-01
8.	0.650E-01	0.337E-01
0.	0.658E-01	0.341E-01
-4.	0.656E-01	0.340E-01

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1314E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

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Y	X									
	0.	50.	60.	70.	80.	90.	95.	100.	120.	150.
76.	0.250E-02	0.637E-02	0.728E-02	0.819E-02	0.908E-02	0.991E-02	0.103E-01	0.107E-01	0.119E-01	0.126E-01
36.	0.188E-01	0.342E-01	0.375E-01	0.406E-01	0.433E-01	0.446E-01	0.450E-01	0.455E-01	0.473E-01	0.471E-01
8.	0.234E-01	0.437E-01	0.481E-01	0.523E-01	0.560E-01	0.582E-01	0.589E-01	0.597E-01	0.625E-01	0.624E-01
0.	0.235E-01	0.441E-01	0.486E-01	0.528E-01	0.565E-01	0.587E-01	0.595E-01	0.604E-01	0.632E-01	0.631E-01
-4.	0.235E-01	0.440E-01	0.484E-01	0.527E-01	0.564E-01	0.586E-01	0.593E-01	0.602E-01	0.630E-01	0.629E-01

CONTINUE

Y	X									
	200.	250.								
76.	0.108E-01	0.663E-02								
36.	0.378E-01	0.222E-01								
8.	0.500E-01	0.293E-01								
0.	0.506E-01	0.297E-01								
-4.	0.505E-01	0.296E-01								

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1402E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	X									
	0.	50.	60.	70.	80.	90.	95.	100.	120.	150.
76.	0.151E-02	0.405E-02	0.468E-02	0.533E-02	0.599E-02	0.662E-02	0.693E-02	0.723E-02	0.826E-02	0.916E-02
36.	0.108E-01	0.205E-01	0.227E-01	0.249E-01	0.269E-01	0.281E-01	0.286E-01	0.291E-01	0.312E-01	0.325E-01
8.	0.135E-01	0.263E-01	0.292E-01	0.321E-01	0.348E-01	0.366E-01	0.374E-01	0.382E-01	0.411E-01	0.429E-01
0.	0.136E-01	0.265E-01	0.295E-01	0.324E-01	0.351E-01	0.370E-01	0.378E-01	0.386E-01	0.416E-01	0.434E-01
-4.	0.136E-01	0.265E-01	0.294E-01	0.323E-01	0.350E-01	0.369E-01	0.377E-01	0.385E-01	0.415E-01	0.433E-01

CONTINUE

Y	X									
	200.	250.								
76.	0.852E-02	0.580E-02								
36.	0.284E-01	0.185E-01								
8.	0.374E-01	0.244E-01								
0.	0.379E-01	0.247E-01								
-4.	0.378E-01	0.246E-01								

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1489E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

Y	X									
	0.	50.	60.	70.	80.	90.	95.	100.	120.	150.
76.	0.903E-03	0.253E-02	0.296E-02	0.341E-02	0.387E-02	0.433E-02	0.456E-02	0.479E-02	0.562E-02	0.649E-02
36.	0.622E-02	0.122E-01	0.136E-01	0.151E-01	0.165E-01	0.175E-01	0.179E-01	0.184E-01	0.202E-01	0.220E-01
8.	0.774E-02	0.157E-01	0.176E-01	0.195E-01	0.213E-01	0.228E-01	0.234E-01	0.241E-01	0.266E-01	0.290E-01
0.	0.780E-02	0.158E-01	0.177E-01	0.197E-01	0.215E-01	0.230E-01	0.236E-01	0.243E-01	0.269E-01	0.293E-01
-4.	0.778E-02	0.158E-01	0.177E-01	0.196E-01	0.215E-01	0.229E-01	0.236E-01	0.242E-01	0.268E-01	0.292E-01

CONTINUE

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Y	200.	250.
76.	0.652E-02	0.487E-02
36.	0.208E-01	0.149E-01
8.	0.273E-01	0.195E-01
0.	0.276E-01	0.198E-01
-4.	0.275E-01	0.197E-01

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1577E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

					X						
Y	0.	50.	60.	70.	80.	90.	95.	100.	120.	150.	
76.	0.534E-03	0.156E-02	0.184E-02	0.214E-02	0.246E-02	0.278E-02	0.295E-02	0.311E-02	0.374E-02	0.450E-02	
36.	0.355E-02	0.721E-02	0.812E-02	0.907E-02	0.100E-01	0.107E-01	0.111E-01	0.114E-01	0.129E-01	0.147E-01	
8.	0.443E-02	0.924E-02	0.104E-01	0.117E-01	0.129E-01	0.140E-01	0.144E-01	0.150E-01	0.170E-01	0.192E-01	
0.	0.446E-02	0.933E-02	0.106E-01	0.118E-01	0.131E-01	0.141E-01	0.146E-01	0.151E-01	0.172E-01	0.194E-01	
-4.	0.445E-02	0.931E-02	0.105E-01	0.118E-01	0.130E-01	0.141E-01	0.146E-01	0.151E-01	0.171E-01	0.194E-01	

CONTINUE

X

Y	200.	250.
76.	0.485E-02	0.395E-02
36.	0.149E-01	0.116E-01
8.	0.194E-01	0.152E-01
0.	0.197E-01	0.153E-01
-4.	0.196E-01	0.153E-01

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1664E+06 HRS
(ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
Z = 0.00

					X						
Y	0.	50.	60.	70.	80.	90.	95.	100.	120.	150.	
76.	0.314E-03	0.947E-03	0.113E-02	0.133E-02	0.154E-02	0.176E-02	0.187E-02	0.199E-02	0.245E-02	0.306E-02	
36.	0.202E-02	0.422E-02	0.480E-02	0.541E-02	0.601E-02	0.653E-02	0.677E-02	0.704E-02	0.815E-02	0.959E-02	
8.	0.252E-02	0.542E-02	0.617E-02	0.697E-02	0.777E-02	0.848E-02	0.882E-02	0.918E-02	0.107E-01	0.125E-01	
0.	0.254E-02	0.547E-02	0.623E-02	0.704E-02	0.785E-02	0.857E-02	0.891E-02	0.928E-02	0.108E-01	0.127E-01	
-4.	0.254E-02	0.546E-02	0.622E-02	0.702E-02	0.783E-02	0.855E-02	0.889E-02	0.926E-02	0.107E-01	0.126E-01	

CONTINUE

X

Y	200.	250.
76.	0.353E-02	0.310E-02
36.	0.104E-01	0.883E-02
8.	0.136E-01	0.114E-01
0.	0.137E-01	0.116E-01
-4.	0.137E-01	0.115E-01

STEADY STATE SOLUTION HAS NOT BEEN REACHED BEFORE FINAL SIMULATING TIME

DISTRIBUTION OF DISSOLVED CHEMICALS IN PPM AT 0.1752E+06 HRS
 (ADSORBED CHEMICAL CONC. = 0.5670E+00 * DISSOLVED CHEMICAL CONC.)
 Z = 0.00

Y	175200.	50.	60.	70.	X 80.	90.	95.	100.	120.	150.
76.	0.183E-03	0.570E-03	0.685E-03	0.812E-03	0.950E-03	0.110E-02	0.117E-02	0.125E-02	0.158E-02	0.204E-02
36.	0.115E-02	0.246E-02	0.282E-02	0.320E-02	0.359E-02	0.393E-02	0.410E-02	0.429E-02	0.507E-02	0.618E-02
8.	0.143E-02	0.316E-02	0.362E-02	0.412E-02	0.463E-02	0.510E-02	0.533E-02	0.558E-02	0.661E-02	0.804E-02
0.	0.144E-02	0.319E-02	0.366E-02	0.416E-02	0.467E-02	0.515E-02	0.539E-02	0.564E-02	0.669E-02	0.814E-02
-4.	0.144E-02	0.318E-02	0.365E-02	0.415E-02	0.466E-02	0.514E-02	0.538E-02	0.562E-02	0.667E-02	0.811E-02

CONTINUE

Y	200.	250.	X
76.	0.251E-02	0.237E-02	
36.	0.717E-02	0.653E-02	
8.	0.928E-02	0.842E-02	
0.	0.939E-02	0.852E-02	
-4.	0.936E-02	0.850E-02	

**SESOIL MODELING RESULTS
FOR
FORMER FUEL PIT 1A/DAACG AREA (RELEASE #1)
AND
FORMER PUMPHOUSE #1 TANK PIT AREA (RELEASE #2)**

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ATTACHMENT C

NATURAL ATTENUATION EVALUATION

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C.0 Evaluation of Natural Attenuation at the Former Pumphouse #1 Site

Natural biodegradation of hydrocarbons in groundwater refers to the use of natural microbiological processes occurring in the subsurface environment to breakdown complex compounds into simpler, nontoxic compounds without removal of aquifer material. For natural biodegradation (also referred to as in-situ biodegradation) to occur in the subsurface environment, the following basic requirements must be met (Bedient et al. 1994):

- Presence of appropriate microbial population—generally, microorganisms that are able to degrade petroleum products are ubiquitous in the subsurface environment.
- Energy source and a carbon source—organic carbon is used both as an energy source by releasing electrons during transformation and it is also used by the cell for maintenance and growth.
- Electron acceptor—the electrons released by the carbon transformation must be taken up by some other chemical.
- Nutrients—for bacterial growth to occur, certain nutrients are needed (e.g., nitrogen, phosphorous, calcium, potassium, magnesium, iron, etc.).
- Appropriate environmental conditions—microbial activity is dependent upon many environmental conditions, i.e., temperature, pH, salinity, pressure, concentration of pollutants, and presence of inhibitors.

The mechanisms that degrade petroleum products in soil and groundwater may be classified as either destructive (i.e., result in a net decrease in contaminant mass) or nondestructive (i.e., result in decrease in equilibrium concentrations but no net decrease in mass). Destructive mechanisms are primarily biological. Biological processes include aerobic (requires oxygen), anaerobic (must occur in the absence of oxygen), and hypoxic (can occur under conditions of low oxygen content). The primary nondestructive mechanisms are abiotic, physical phenomena. Physical phenomena include volatilization, dispersion (mechanical mixing and molecular diffusion), and sorption. These physical processes often have a significant effect on natural attenuation.

Research into in situ bioremediation indicates that petroleum hydrocarbons observed in groundwater at former Pumphouse #1, i.e., benzene, toluene, ethylbenzene, and xylenes (the BTEX compounds), are some of the most aerobically biodegradable found in the subsurface environment. Naturally occurring bioremediation occurs when sufficient energy source, carbon source, electron acceptor concentration, and nutrient concentration are available to native biological populations. The rate of naturally occurring bioremediation of BTEX compounds is often limited by either the concentration of an appropriate electron acceptor or a nutrient needed during the transformation of the BTEX into a nontoxic compound. Typical electron acceptors used by microorganisms are, in order of preference, oxygen, nitrate, iron (III), sulfate, and carbon dioxide. This order is often termed the electron acceptor hierarchy.

M&E collected groundwater samples at nine wells near the Former Pumphouse #1 site (P1-MW01, P1-MW02, P1-MW03, P1-MW19, P1-MW21, P1-MW22, P1-MW23, D-MW5, and D-MW16) to determine if natural attenuation of hydrocarbons was occurring. Groundwater samples were analyzed for BTEX and natural attenuation parameter analyses. The natural attenuation parameters included oxygen reduction potential (ORP, also referred to as redox potential), total organic carbon (TOC), sulfate, nitrate, ferrous iron, methane/ethane/ethene, alkalinity, dissolved oxygen (DO), temperature, and pH. Their importance in assessing the potential for naturally occurring biodegradation of hydrocarbon compounds is discussed in Table C-1.

The nine groundwater samples were collected from within four “zones” across the hydrocarbon plume near the Former Pumphouse #1 site. Zone “A,” located near the suspected hydrocarbon source (near DAACG well D-MW05), was an area where anaerobic biologic processes were anticipated as a result of depleted oxygen. Zone “B” was an area further from the source where anaerobic or perhaps hypoxic activity might be confirmed by evidence of reduced oxidation-reduction (redox) potential, reduced DO, and increased ferrous iron, etc.

Zone “C” was located near the fringe of the plume in an area where increasing DO, increasing sulfate, and other geochemical indications of an aerobic fringe surrounding the anaerobic zone would be anticipated. Zone “D” was located outside the area of hydrocarbon impact, thereby representing background conditions. An illustration of the geochemical evaluation area is provided in **Figure C-1**.

C.1 DO Indicators of Natural Attenuation

Sufficient DO concentrations are present in the groundwater to support aerobic biodegradation. It is noteworthy that DO measurements were made during well purging activities where groundwater aeration was likely. Although depleted in some areas, particularly P1-MW22 and P1-MW01 (see **Figure C-2**), concentrations of DO are well above the 1.0 to 2.0 mg/L threshold commonly accepted as favorable for aerobic hydrocarbon degradation. Background DO levels (upgradient of the contaminant source) exceed levels in affected areas. The natural flow of groundwater will, therefore, supply DO to the contaminated area where aerobic degradation is probable. Wells D-MW16 and P1-MW23 contain no hydrocarbon contaminants and serve as indicators of background conditions. It is noteworthy that D-MW16 is located within the airfield tarmac (pavement) and P1-MW23 is situated in a grassed area.

Where aerobic biodegradation is occurring, an inverse relationship between DO concentration and constituent concentrations can be expected (i.e., DO levels increase as constituent levels decrease). However, this is not observed in the most contaminated area of Pumphouse #1 (P1-MW22). In addition, benzene concentrations decrease in the most downgradient well, P1-MW01, along with DO concentrations. The decreased DO levels near the source (P1-MW22) and downgradient reaches (P1-MW01) of the benzene plume suggest that anaerobic biodegradation processes may be at work. Increased DO concentrations in P1-MW20 and P1-MW23 may indicate recharge to the shallow aquifer is occurring from the east and northeast.

C.2 Geotechnical Indicators of Natural Attenuation

Certain geochemical characteristics can also serve as indicators that natural attenuation, particularly aerobic biodegradation, is occurring. Aerobic biodegradation of petroleum products produces carbon dioxide and organic acids, both of which tend to cause a region of lower pH and increased alkalinity within the constituent plume. Concentrations of carbon dioxide in groundwater (**Figure C-3**) are clearly elevated with respect to background near the contaminant source (P1-MW22) and at the downgradient fringe (P1-MW01 and P1-MW19) of the plume but not in the area of highest benzene contamination (P1-MW02). Similarly, alkalinity (**Figure C-4**) is elevated at P1-MW22 and P1-MW01 but less so near P1-MW02. While pH is reduced with respect to background in the downgradient reaches of the benzene plume, the pH of groundwater near the source is elevated (see **Figure C-5**).

C.3 Anaerobic Indicators of Natural Attenuation

Recent research has recognized the importance of anaerobic degradation of aromatic hydrocarbons. Research has shown degradation of aromatic hydrocarbons using nitrate, iron (III), and sulfate as electron acceptors (Baker 1994). For the BTEX compounds in particular, research has shown toluene, ethylbenzene, and some of the xylenes to degrade anaerobically, with toluene being the most anaerobically degradable. Anaerobic degradation of ethylbenzene and xylene appear to be most significant when they are cometabolized with toluene. Evidence of anaerobic degradation of benzene, though, has been inconclusive. Iron (III) is preferentially used over sulfate (Chapelle and Lovley 1992), but research indicates that iron (III) utilization is inhibited by the presence of oxygen and nitrate.

Iron (III) reduction is evident by reduced benzene concentrations and increased levels of aqueous phase iron (II) at MW22 and downgradient well P1-MW01 (see **Figure C-6**). Concentrations of DO (**Figure C-2**) are

also reduced with respect to background in these areas, further suggesting that anaerobic degradation may be ongoing. Methanogenic contaminant reduction (i.e., using carbon dioxide as an electron acceptor to form methane gas) may also be occurring near the source area as indicated in **Figure C-7**. This anaerobic process proceeds at significantly slower rates than the other degradation processes (Vogel and Grbic-Galic 1986). The oxidation/reduction (redox) potential in groundwater (**Figure C-8**) indicates conditions are less favorable for anaerobic degradation near P1-MW22 as compared with downgradient locations (MW01). The redox potential of groundwater is a measure of electron activity and is an indicator of the relative tendency of a solution to accept or transfer electrons. The redox potential of groundwater generally ranges from 800 mV to about -400 mV. The lower the redox potential, the more reducing and anaerobic the environment.

Anaerobic biodegradation rates for aromatic hydrocarbons are typically an order of magnitude or more less than aerobic rates. However, anaerobic biodegradation may still significantly influence substrate reduction due to longer reaction times (Wilson et al. 1986; Hutchins 1991). These longer reaction rates can be attributed to the inefficiency of anaerobes relative to aerobes (Zehnder and Stumm 1988) and the inhibitory effects of alternate electron acceptors present in the subsurface, especially oxygen (Hutchins 1991; Chang et al. 1993).

C.4 Chemical Indicators of Natural Attenuation

The trend of BTEX compounds over time provides perhaps the best evidence for demonstrating the appropriateness and effectiveness of natural attenuation at the Former Pumphouse #1 site. **Figure C-9** is an illustration of May 1997 and November 1999 benzene concentrations from the Former Pumphouse #1 area wells. The figure suggests that concentrations near the core of the plume remain stable and significant reduction of contaminant mass is occurring near the plume fringes. Benzene concentrations in the most downgradient well, P1-MW19, decreased 68% (from 630 µg/L to 200 µg/L). Three wells that contained more than 100 µg/L benzene in May 1997, contained no detectable concentrations of benzene in November 1999. Benzene concentrations decreased in all wells from May 1997 to November 199 by more than 50%, with the exception of P1-MW02, where concentrations decreased by 9%.

C.5 Natural Attenuation Evaluation Summary

Ranges of geochemical, chemical, and physical parameters monitored during preliminary screening for aerobic and anaerobic biodegradation processes suggest conditions are favorable for natural attenuation of aromatic hydrocarbons. Available groundwater data suggests that the Former Pumphouse #1 site exhibits primarily anaerobic behavior with respect to hydrocarbon biodegradation. This is exemplified by reviewing **Figure C-2** against **Figure C-9** (DO concentrations and benzene concentrations in groundwater). The greatest reductions of benzene occur in areas where DO is reduced. Soluble iron (iron II) concentrations in the groundwater tend to increase immediately downgradient of the source area as the DO is depleted, and conditions change to become anaerobic (i.e., reduced). The concentration of methane increased sharply in P1-MW22 (**Figure C-7**), another indication that anaerobic biodegradation is occurring. Iron (II) concentrations are most elevated in low DO areas indicating that iron (III) is being used as a primary electron acceptor. The increased DO observed near P1-MW02 and P1-MW23 may be a result of either natural or artificial recharge of oxygenated water to the shallow aquifer. Increased DO inhibits iron (III) reduction and may explain why the benzene concentration near P1-MW02 has decreased only slightly in comparison to other areas within the plume.

Elevated concentrations of ferrous iron and methane and decreased dissolved concentrations are indications that anaerobic biodegradation processes may be ongoing. However, the redox potential, elevated pH, and carbon dioxide concentrations near P1-MW22 are more indicative of aerobic conditions. A number of scenarios may be responsible for the distribution of natural attenuation indicators and contaminants at the Former Pumphouse #1 site. Determining a precise geochemical environment at this site is complicated by the

uncertainty associated with the fuel release date, its quantity and duration, and varying subsurface hydrogeologic conditions (primarily groundwater recharge). The most compelling evidence that natural biodegradation is ongoing is in the reduction of benzene concentrations in groundwater between May 1997 and November 1999 (a 30-month time period) illustrated in **Figure C-9**. Benzene concentrations in P1-MW19 have decreased 68% or an average of 14 µg/L per month.

C.6 References

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Table C.1. Geochemical and Physical Indicators of Natural Biodegradation

Parameter	Description
Alkalinity	Provides an indication of the buffering capacity of the water and the amount of carbon dioxide dissolved in the water. Increases due to biodegradation of organic compounds.
pH	Microbial activity tend to be reduced outside of a pH range of 5 to 9, and many anaerobic bacteria are particularly sensitive to pH extremes.
Temperature	Affects rates of microbial metabolism. Slower biodegradation occurs at lower temperatures.
Dissolved Oxygen	Highest energy-yielding electron acceptor for biodegradation of organic constituents. Aerobic conditions typically exist at <1.0 to 2.0 mg/L.
ORP/Redox Potential	A measure of the oxidation-reduction potential of the environment. Ranges from +500 millivolts (mV) for aerobic conditions to -300 mV for methanogenic conditions.
Sulfate	Used as an electron acceptor in the biodegradation of organic constituents reduced to form sulfide.
Methane	Indicator of anaerobic conditions and methanogenic bacteria. Produced by the microbial reduction of carbon dioxide. Solubility limit 25 to 40 ppm.
Ethane/Ethene	Metabolic end product of reductive dehalogenation of halogenated ethenes and ethanes.
Total Organic Carbon	A measure of the total concentration of organic material in water that may be available for biological degradation.
Nitrate	Used as an electron acceptor. Consumed next after oxygen.
Iron (total, dissolved)	A product of bacterial iron reduction. Only the reduced form (ferrous) is soluble. The oxidized form (ferric) is used as an electron receptor.

Figure C-1. Geochemical Evaluation Area

Figure C-2. Dissolved Oxygen in Groundwater (mg/L)

Figure C-3. Carbon Dioxide in Groundwater (mg/L)

Figure C-4. Alkalinity in Groundwater (mg/L)

Figure C-5. pH in Groundwater (mg/L)

Figure C-6. Ferrous Iron in Groundwater (mg/L)

Figure C-7. Methane in Groundwater (mg/L)

Figure C-8. REDOX Potential in Groundwater (mV)

Figure C-9. Benzene in Groundwater Over Time

SITE RANKING FORM

Facility Name: Former Pumphouse #1 Tank Pit Area (Release #2) Ranked by: S. Stoller

County: Chatham Facility ID #: 9-025085

Date Ranked: 7/3/2000

SOIL CONTAMINATION

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

* 1996 CAP-Part A sample SB0801 at 4' – 6'

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

* 1996 DAACG CAP-Part B sample H833-SB2202
at 7.3' – 9.3'

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. 25) + (B. 50) = (75) x (C. 10) = (D. 750)

GROUNDWATER CONTAMINATION

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 + 12,000

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 = 500

☐ >10,000 µg/L = 1500

* 2000 CAP-Part B sample AK0512 (D-MW05)

Fill in the blanks: (E. 0) + (F. 500) = (G. 500)

Facility Name: Former Pumphouse #1 Tank Pit Area

Facility ID #: 9-025085

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 attached text.

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' = 2

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. 500) x (L. 50) = M. 25,000

(M. 25,000) + (D. 750) = N. 25,750

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. 25,750) x (P. 1) = (25,750) + (Q. 0)

= 25,750 (for Former Pumphouse #1 Tank Pit Area based on 2000 groundwater concentration in D-MW5)

ENVIRONMENTAL SENSITIVITY SCORE

SITE RANKING FORM

Facility Name: Former Fuel Pit 1A/DAACG Area

Ranked by: S. Stoller

County: Chatham Facility ID #: 9-025085

Date Ranked: 7/3/2000

SOIL CONTAMINATION

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
* 1996 DAACG CAP-Part B sample H833-WB1302
at 3.5' – 5.5'

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
* 1996 DAACG CAP-Part B sample H833-WB1702
at 8' – 10'

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. 50) = (100) x (C. 10) = (D. 1000)

GROUNDWATER CONTAMINATION

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 + 12,000

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 = 500

☐ >10,000 µg/L = 1500

* 1996 DAACG CAP-Part B sample H833-GW0201
(D-MW02)

Fill in the blanks: (E. 1000) + (F. 50) = (G. 1050)

Facility Name: Former Fuel Pit 1A/DAACG Area

Facility ID #: 9-025085

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 attached text (p. X-11, X-12).

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' = 2

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. 1050) x (L. 50) = M. 52,500

(M. 52,500) + (D. 1000) = N. 53,500

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. 53,500) x (P. 1) = (53,500) + (Q. 0)

= 53,500 (for Former Fuel Pit 1A/DAACG Area based on 1996 groundwater concentration in D-MW2)

ENVIRONMENTAL SENSITIVITY SCORE

