FINAL

FORSCOM

CORRECTIVE ACTION PLAN

Part A

3d Inf Div (Mech)

Underground Storage Tanks 27 & 28
Building 8059
Facility Identification Number: 9-025083
Hunter Army Airfield, Georgia

Prepared for

U.S. ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT

Contract No. DACA21-95-D-0022
Delivery Order 0019

March 1999

98-186P(PPT-8Fiery)/030299

DOCUMENT 4.1

FINAL

CORRECTIVE ACTION PLAN - PART A REPORT FOR UNDERGROUND STORAGE TANKS 27 & 28 BUILDING 8059 FACILITY IDENTIFICATION NUMBER: 9-025083 HUNTER ARMY AIRFIELD, GEORGIA

Prepared for:

U.S. Army Corps of Engineers - Savannah District
and
Fort Stewart Directorate of Public Works
Under Contract Number DACA21-95-D-0022
Delivery Order 0019

Prepared by:

Science Applications International Corporation
800 Oak Ridge Turnpike
Oak Ridge, Tennessee 37831

March 1999

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List of Abbreviations and Acronyms

ACE	Anderson Columbia Environmental, Inc.
ASTM	American Society for Testing and Materials
ATL	alternate threshold level
BDL	below detection limit
BGS	below ground surface
BLS	below land surface
BTEX	benzene, toluene, ethylbenzene, and xylene
BTL	below threshold level
CAP	Corrective Action Plan
CL	clay
COE	(U.S. Army) Corps of Engineers
CX	Center of Excellence
DOT	U.S. Department of Transportation
DPW	Directorate of Public Works
DQA	data quality assessment
DQCR	Daily Quality Control Report
DQO	date quality objective
DRO	diesel-range organics

EPA	U.S. Environmental Protection Agency
EPD	Environmental Protection Division
FS	Fort Stewart
GA DNR	Georgia Department of Natural Resources
GEL	General Engineering Laboratories
gpm	gallons per minute
GRO	gasoline-range organics
GUST	Georgia Underground Storage Tank
HAAF	Hunter Army Airfield
ID	inside diameter
IDW	investigation-derived waste
IWTP	Industrial Waste Treatment Plant
LCS	laboratory control sample
MCL	maximum contaminant level
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
mg/kg	milligrams per kilogram
MPR	Monthly Progress Report
MS	matrix spike
N/A	not applicable
NCO	noncommissioned officer
NRC	no regulatory criteria
OVM	organic vapor meter
PAHs	polynuclear aromatic hydrocarbons
PID	photoionization detector
ppm	parts per million
PVC	polyvinyl chloride
QA	quality assurance
QA/QC	quality assessment/quality control
QAPjP	Quality Assurance Project Plan
QC	quality control
QCSR	Quality Control Summary Report
RCRA	Resource Conservation and Recovery Act
RPD	relative percent difference
SAIC	Science Applications International Corporation
SAS	South Atlantic Savannah (Division)
SC	clayey sand
SC-SM	clayey, silty sand
SM	silty sand
SP-SC	poorly graded, clayey sand
SW	sand
TBD	to be determined
TCLP	Toxicity Characteristic Leaching Procedure
TOC	total organic carbon
TPH	total petroleum hydrocarbon
UNK	unknown
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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CORRECTIVE ACTION PLAN PART A

Facility Name: USTs 27 & 28, Building 8059 Street Address: Building 8059, HAAF

Facility ID: 9-025083 City: Savannah County: Chatham Zip Code: 31406

Latitude: 32°00'50"N Longitude: 81°08'40"W

Submitted by UST Owner/Operator:
Name: Thomas C. Fry/Environmental Branch
Company: U.S. Army/HQ 3d, Inf. Div. (Mech)
Address: DPW ERD ENV. Br. (Fry)
1557 Frank Cochran Drive
City: Fort Stewart State: Georgia
Zip Code: 31314-4928
Telephone: (912) 767-1078

Prepared by Consultant/Contractor:
Name: C. Allison Bailey
Company: SAIC
Address: P.O. Box 2502
City: Oak Ridge State: TN
Zip Code: 37831
Telephone: (423) 481-8719

I. PLAN CERTIFICATION:

A. UST Owner/Operator Certification

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

Name: Thomas C. Fry
Signature: Thomas C. Fry Date: 03/22/99

B. Registered Professional Engineer or Professional Geologist Certification

I hereby certify that I have directed and supervised the field work and preparation of this plan, in accordance with State Rules and Regulations. As a registered professional geologist and/or professional engineer, I certify that I am a qualified groundwater professional, as defined by the Georgia State Board of Professional Geologists. All of the information and laboratory data in this plan and in all of the attachments are true, accurate, complete, and in accordance with applicable State Rules and Regulations.

Name: John B. Reeves, P.E.
Signature: John B Reeves
Date: 3-16-99

Georgia Stamp or Seal

General: READ THE GUIDANCE DOCUMENT FOR CAP PART-A BEFORE COMPLETING THIS FORM. FAILURE TO READ THE GUIDANCE DOCUMENT WILL MOST LIKELY RESULT IN PREPARATION OF AN UNACCEPTABLE REPORT. All text, figures, and tables requested in their respective sections should be prepared strictly in accordance with the Georgia EPD CAP-A guidance document. Please fill out this form as provided. Do not change the size of the fields or alter the placement of each section on each page.
(Appendix I: All Report Figures)
(Appendix II: All Report Tables)

II. INITIAL RESPONSE REPORT

A. Initial Abatement

Were initial abatement actions initiated? YES ____ NO X
If Yes, please summarize. If No, please explain why not.

Actions were not required to abate imminent hazards and/or emergency conditions at the underground storage tanks (USTs) 27 and 28, Building 8059 site. Therefore, contaminant migration and release prevention, fire and vapor mitigation, or emergency free product removal were not performed prior to, or during, the removal of USTs 27 and 28.

B. Free Product Removal

(Table 1: Summary of Free Product Removal – must include Free Product thickness in each well in which it was detected, and volume of product removed)

Free Product Detected? YES ____ NO X
If Yes, please summarize free product recovery efforts.

Continuing free product recovery proposed? YES ____ NO X
If yes, please indicate the method and frequency of removal.

C. Tank History

List current and former UST's operated at site based on owner/operator knowledge consistent with EPA 7530-1 Form). Systems must be illustrated on Figure 2 (Site Plan), as described in section D below.

CURRENT UST SYSTEMS (if applicable)

Tank ID Number	Capacity (gal)	Substance Stored	Age (yrs)	Meets 1998 Upgrade Standards (Yes/No)
N/A	N/A	N/A	N/A	N/A

FORMER UST SYSTEMS (if applicable)

Tank ID Number	Capacity (gal)	Substance Stored	Date Removed
27	1,000	gasoline	September 24, 1996
28	3,000	diesel	September 25, 1996

D. Initial Site Characterization

(Figure 1: Vicinity/Location Map)
(Figure 2: Site Plan)

1. Regulated Substance Released (gasoline, diesel, used oil, etc.): gasoline and diesel .
Discuss how this determination was made and circumstances of discovery.

Characterization of petroleum-related contamination at the site was initiated during UST system closure activities on September 24 and September 25, 1996, by Anderson Columbia Environmental, Inc. (ACE). Following the removal of USTs 27 and 28, the ancillary piping was purged and closed in place by filling with grout. Two soil samples were collected from the UST 28 excavation pit at 12 feet below ground surface (BGS), and one soil sample was collected form the UST 27 excavation pit at 14 beet BGS (Figure 7). Soil sample 8102-TK27-S1 contained concentrations of toluene (13.3 mg/kg) and ethylbenzene (12.6 mg/kg) that exceeded the Georgia Environmental Protection Division (GA EPD) applicable soil threshold levels (i.e., Table A, column 2) of 6.0 mg/kg and 10.0 mg/kg, respectively. In addition, elevated total petroleum hydrocarbon–diesel-range organics and gasoline-range organics were detected in samples 8102-TK27-S1 and 8102-TK28-S1, respectively (Table 5a). Groundwater was not sampled from either tank pit during UST closure activities.

2. Source(s) of Contamination: Unknown; piping leakage or tank overflow suspected .
Discuss how this determination was made.

Although ACE (1996) presented a diagram showing approximate locations of the former USTs and associated dispensers, a detailed schematic diagram is not available. During tank removal activities by ACE, holes in the USTs were not reported. Therefore, the major source of contamination at the USTs 27 and 28, Building 8059 site is believed to have been piping leakage or tank overflow.

3. Local Water Resources

(Figure 3: Quadrangle Map - Public and Private drinking water and surface water)
(Appendix III: Water resources survey documentation, including, but not limited to: USGS database search, interview forms, and documentation of field survey)

a. *Site located in high/average* X *OR low* ____ *groundwater pollution susceptibility area?*

b. *Water Supplies within applicable radii?* YES X NO ____
If yes,
i. *Nearest public water supply located within:* 5,400 *feet*

ii. *Nearest down-gradient public water supply located within:* 6,600 *feet*

iii. *Nearest non-public water supply located within:* 8,160 *feet*

iv. *Nearest down-gradient non-public water supply located within:* >8,160 *feet*

c. *Surface Water Bodies and sewers:*

i. *Nearest surface water located within:* 700 *feet*

ii. *Nearest down-gradient surface water located within:* 700 *feet*

iii. *Nearest storm or sanitary sewer located within:* 5.0 *feet*

iv. *Depth to bottom of sewer at a point nearest the plume:* 11.70 *feet*

4. Impacted Environmental Media

a. *Soil Impacted*
(Table 2: Soil Analysis Results)
(Figure 4: Soil Quality Map)
(Appendix IV: Soil Boring Logs)
(Appendix V: Soil Laboratory Reports)
(Appendix VI: ATL Calculations, if applicable)

Provide a brief discussion of soil sampling.

Continuous direct-push soil cores were collected at 2.0-foot intervals during the installation of 8 boreholes (I-1 through I-5, I-9, I-A, and I-B). Field headspace gas analyses were performed on each sample to determine organic vapor concentration. Two soil samples were selected from each borehole for laboratory chemical analysis of benzene, toluene, ethylbenzene, and xylene (BTEX); TPH gasoline-range organics/diesel-range organics (GROs/DROs); and polynuclear aromatic hydrocarbons (PAHs). In boreholes where organic vapors were detected, one sample was collected from the 2.0-foot interval where the highest vapor concentration was recorded, and the other from the 2.0-foot interval located immediately above the saturated zone. If organic vapors were not detected, one sample was collected from the 2.0-foot interval directly below ground surface, and the other from the 2.0-foot interval located immediately above the saturated zone. In addition, an undisturbed (Shelby-tube) soil sample, I-8, was collected and analyzed for geotechnical parameters to determine vadose zone and aquifer characteristics at the site. The results are presented in Appendix VI, Table VI-A. Refer to Attachment A for complete documentation of the technical approach implemented during this investigation.

i. Soil contamination above applicable threshold levels?

YES X NO ____

If yes, indicate highest concentrations in soil along with locations and depths detected.

During UST system closure activities, one grab soil sample was collected from the bottom of the UST 27 excavation pit at a depth of 14 feet BGS (Figure 7). Soil sample 8102-TK27-S1 contained concentrations of ethylbenzene (12.6 mg/kg) and toluene (13.3 mg/kg) that exceeded the GA EPD applicable soil threshold levels (i.e., Table A, column 2) of 10.0 mg/kg and 6.0 mg/kg, respectively.

ii. ATLs calculated? YES X NO ____

If yes, present ATLs.

Following Appendix I of the Georgia Department of Natural Resources (GA DNR) UST CAP-Part A and B guidance documents (GA DNR 1995 and 1998), alternate threshold levels (ATLs) of 36.1 mg/kg and 29.7 mg/kg were calculated for ethylbenzene and toluene, respectively.

iii. If ATL's calculated, is soil contamination above ATL's?

YES ____ NO X N/A ____

The maximum detected soil concentrations obtained during tank closure activities of ethylbenzene (12.6 mg/kg) and toluene (13.3 mg/kg) are below their respective ATLs of 36.1 mg/kg and 29.7 mg/kg.

b. Groundwater Impacted

(Table 3: Groundwater Analysis Results)
(Figure 5: Groundwater Quality Map)
(Appendix VII: Monitoring Well Details)
(Appendix VIII: Groundwater Laboratory Results)

Provide a brief discussion of groundwater sampling.

At each borehole location (I-1 through I-5, I-9, I-A, and I-B), one groundwater sample was collected from a depth interval of approximately 1.0 to 5.0 feet below the water table using a direct-push sampling device. At vertical profile locations I-6 and I-7, discrete groundwater samples were collected every 10 feet below the water table down to approximately 55 feet BGS. Although the Hawthorn unit was not encountered, the vertical profiles were terminated because of the difficulty experienced during the extraction of groundwater samples. Chemical parameters for groundwater samples submitted for laboratory analysis included BTEX and PAHs. Refer to Attachment A for complete documentation of the technical approach used to collect groundwater samples.

i. Groundwater contamination above MCLs? YES X NO ____

ii. Groundwater contamination above In-Stream Water Quality Standards?

YES X NO ____

If yes, indicate highest concentrations in groundwater along with the locations.

Benzo(a)pyrene was detected in the groundwater sample (HI2200) collected from direct-push boring I-2 at a concentration of 6.7 µg/L. This concentration exceeds the U.S. Environmental Protection Agency (EPA) maximum contaminant level (MCL) of 0.2 µg/L and the GA EPD In-Stream Water Quality Standard of 0.0311 µg/L.

c. *Surface Water Impacted?* YES ____ NO X
If Yes, indicate concentration(s) of surface water sample(s) taken from the surface water body/bodies impacted.

d. *Point of Withdrawal Impacted?* YES ____ NO ____ N/A X
If Yes, indicate concentration(s) of water sample(s) taken from withdrawal point(s).

5. Other Geologic/Hydrogeologic Data

a. *Depth to Groundwater:* 4.26 to 5.39 ft BGS *(Table 4: Groundwater Elevations)*

b. *Groundwater Flow Direction:* northwest *(Figure 6: Potentiometric Surface Map)*

c. *Hydraulic Gradient:* 0.015 feet/feet

d. *Geophysical Province:* Coastal Plain

e. *Unique geologic/hydrogeological conditions:* None

6. Corrective Action Completed or In-Progress (if applicable)
(Table 5: UST System Closure Sampling)
(Figure 7: UST System Closure Sampling)
(Appendix IX: Contaminated Soil Disposal Manifests)

a. *Underground Storage Tank (UST) System Closure:* N/A ____
If applicable, summarize UST system closure activities conducted.

ACE removed USTs 27 and 28 on September 24 and 25, 1996, respectively. The UST piping was drained into the tanks, and all remaining contents were subsequently removed using a vacuum truck and/or compressor-driven barrel vacuum device. The piping was then closed in place by filling with grout. A backhoe was used to excavate down to the tank tops. After the tank atmospheres were tested with a combustible gas indicator, all accessible tank openings were capped and the tanks were lifted from the excavation pit.

b. Excavation and Treatment/Disposal of Backfill Materials and Native Soils
Check one: *No UST removal performed* ____
Returned to UST excavation X
Excavated soils treated or disposed off site ____
If soils were excavated, summarize excavation and treatment/disposal activities:

7. Site Ranking:
Environmental Site Sensitivity Score: 250
(Appendix X: Site Ranking Form)

8. Conclusions and Recommendations
Complete applicable section below, one section only

a. No Further Action Required (if applicable) N/A ____
(provide justification)

The groundwater and soil analytical data collected during the UST system closure and the Corrective Action Plan (CAP)-Part A investigation are sufficient to define the nature and extent of petroleum-related contamination at this site. The results of the investigation indicate that although concentrations of ethylbenzene and toluene were found to exceed applicable soil threshold levels (i.e., Table A, column 2) during UST closure activities, the concentrations were found to be below their respective calculated ATLs. In addition, data collected as part of the CAP-Part A investigation indicate that current site conditions do not exceed the applicable Table A, column 2 soil threshold levels. However, benzo(a)pyrene was detected in the groundwater at a concentration of 6.7 µg/L. Although the results of the investigation indicate groundwater contamination is present at the site, fate and transport modeling of the benzo(a)pyrene concentrations indicates that benzo(a)pyrene will never reach the nearest receptor, which is located 12.5 feet downgradient from the site. Detailed descriptions of the ATL calculations and the fate and transport model are presented in Appendix VI.

Because no soil contamination was found at the site and the results of the fate and transport model indicate no risk to the receptor, further investigation of the USTs 27 & 28, Building 8059 site is not required.

b. Monitoring Only (if applicable) N/A X
(provide justification)

c. CAP-B (if applicable N/A X
(provide justification)

III. MONITORING ONLY PLAN (if applicable): N/A X

A. Monitoring points

B. Period/Frequency of monitoring and reporting

C. Monitoring Parameters

D. Milestone Schedule

E. Scenarios for site closure or CAP-Part B

IV. SITE INVESTIGATION PLAN (if applicable): N/A X
(Figure 8: Proposed additional boring/monitoring well location)

A. Proposed Investigation of Horizontal and Vertical Extent of Contamination In:

1. Soil N/A X

2. Groundwater

a. Free Product N/A X

b. Dissolved phase N/A X

3. Surface Water N/A X

B. Proposed Investigation of Vadose Zone And Aquifer Characteristics:

V. PUBLIC NOTICE

(Figure 9. Tax Map)
(Appendix XI: Copies of public notification letters & certified return receipts or newspaper notice if approved)

USTs 27 and 28, Building 8059, Facility ID: 9-025083, are located within the confines of Hunter Army Airfield (HAAF), which is part of the Fort Stewart Military Reservation, a federally owned facility. All of the property contiguous to the site is owned by the U.S. Government. The Fort Stewart Directorate of Public Works has complied with the public notice requirements defined by Georgia Department of Natural Resources (GA DNR) guidance by publishing an announcement in the local newspaper over a period of 2 weeks. Publication of this announcement has been completed simultaneously with the submittal of this CAP-Part A report for review by the GA DNR EPD Underground Storage Tank Management Program (USTMP). A copy of the newspaper announcement used for public notification is presented in Appendix XI.

VI. CLAIM FOR REIMBURSEMENT (for GUST Trust Fund sites only): N/A X

(Appendix XII: GUST Trust Fund Reimbursement Application and Claim for reimbursement)

The HAAF is a federally owned facility and has funded the investigation for the USTs 27 and 28, Building 8059 site, Facility ID: 9-025083, using Environmental Restoration Account funds. Application for Georgia Underground Storage Tank Trust Fund reimbursement is not being pursued at this time.

APPENDIX I

REPORT FIGURES

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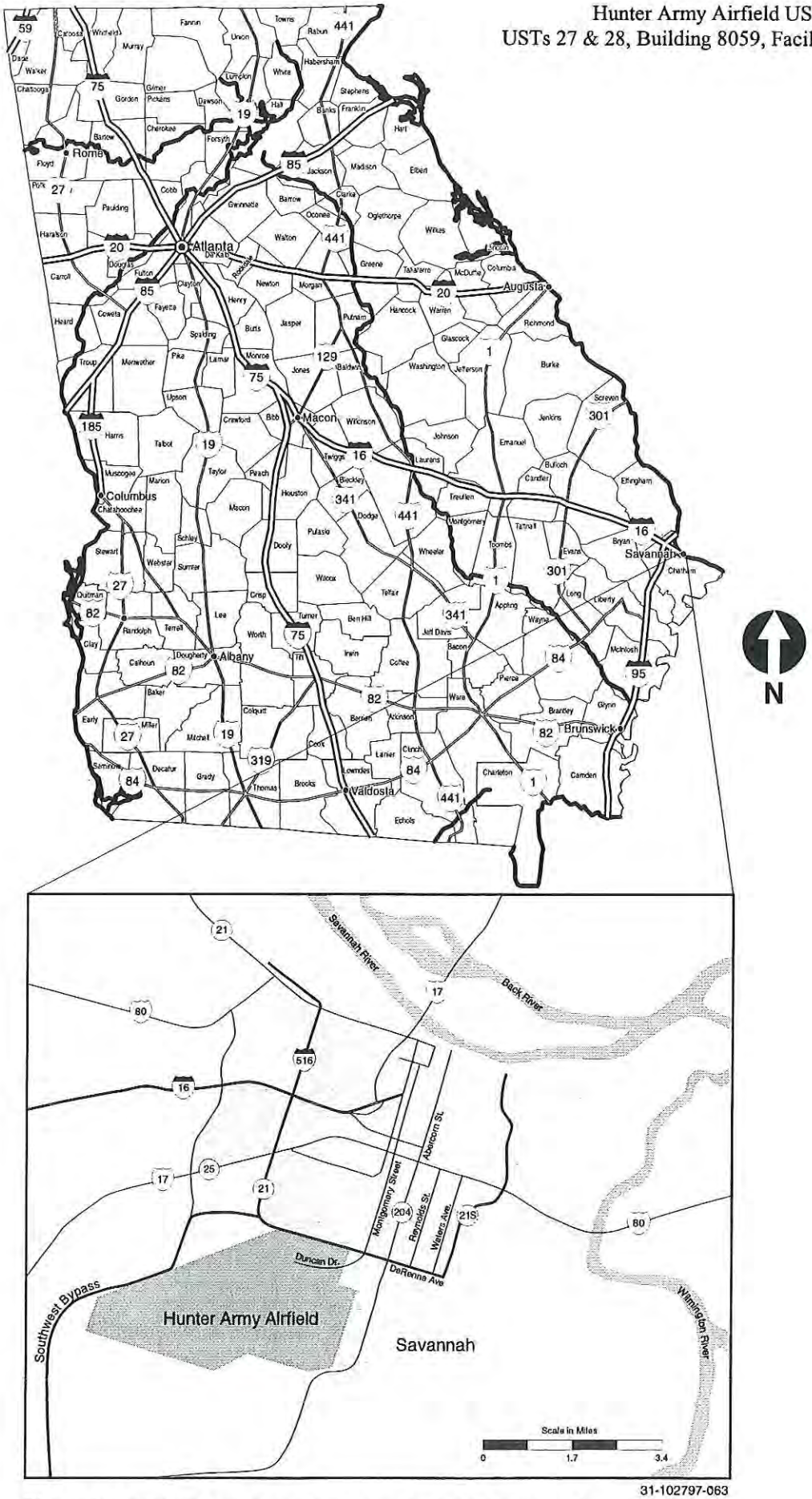


Figure 1. Location Map of Hunter Army Airfield, Chatham County, Georgia

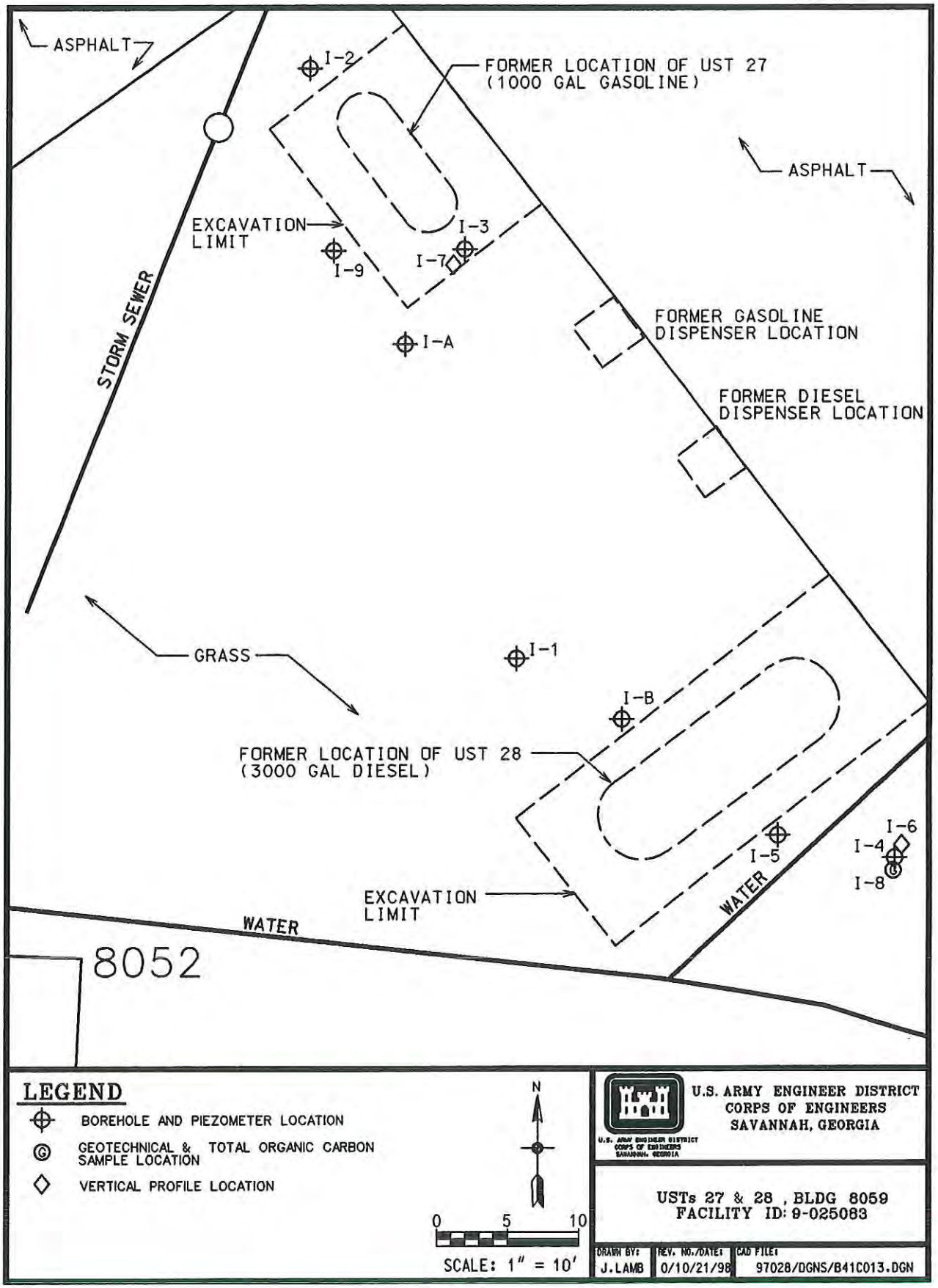
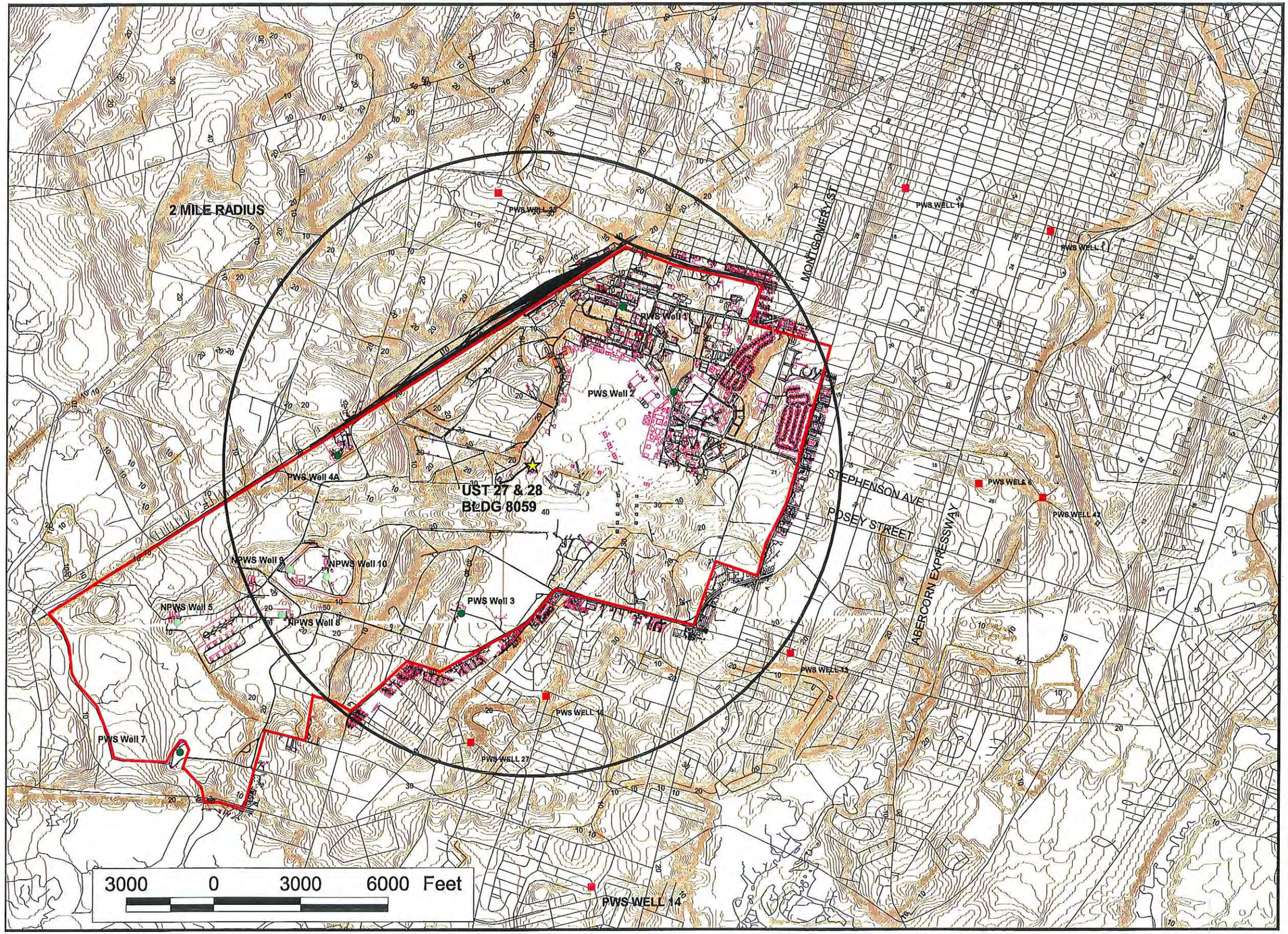


Figure 2. Site Plan for the USTs 27 & 28, Building 8059 Site Investigation



Legend:

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

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

N

GA State Plane NAD83 (feet)

SAIC
Science Applications International Corporation

UST 27 & 28, BLDG 8059
FACILITY ID: 9-025083

REVISION	DRAWN BY:	CHKD BY:	DATE:
0	M.Norris	A. Bailey	10/27/98

FILE REFERENCES

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

SHT 1 of 1 — DRAWING #

G:\HunterAFB\HunterBase ust27.APR — ARCVIEW PROJECT NAME

Figure 3a. Topographic Quadrangle Map of Hunter Army Airfield and Surrounding Area

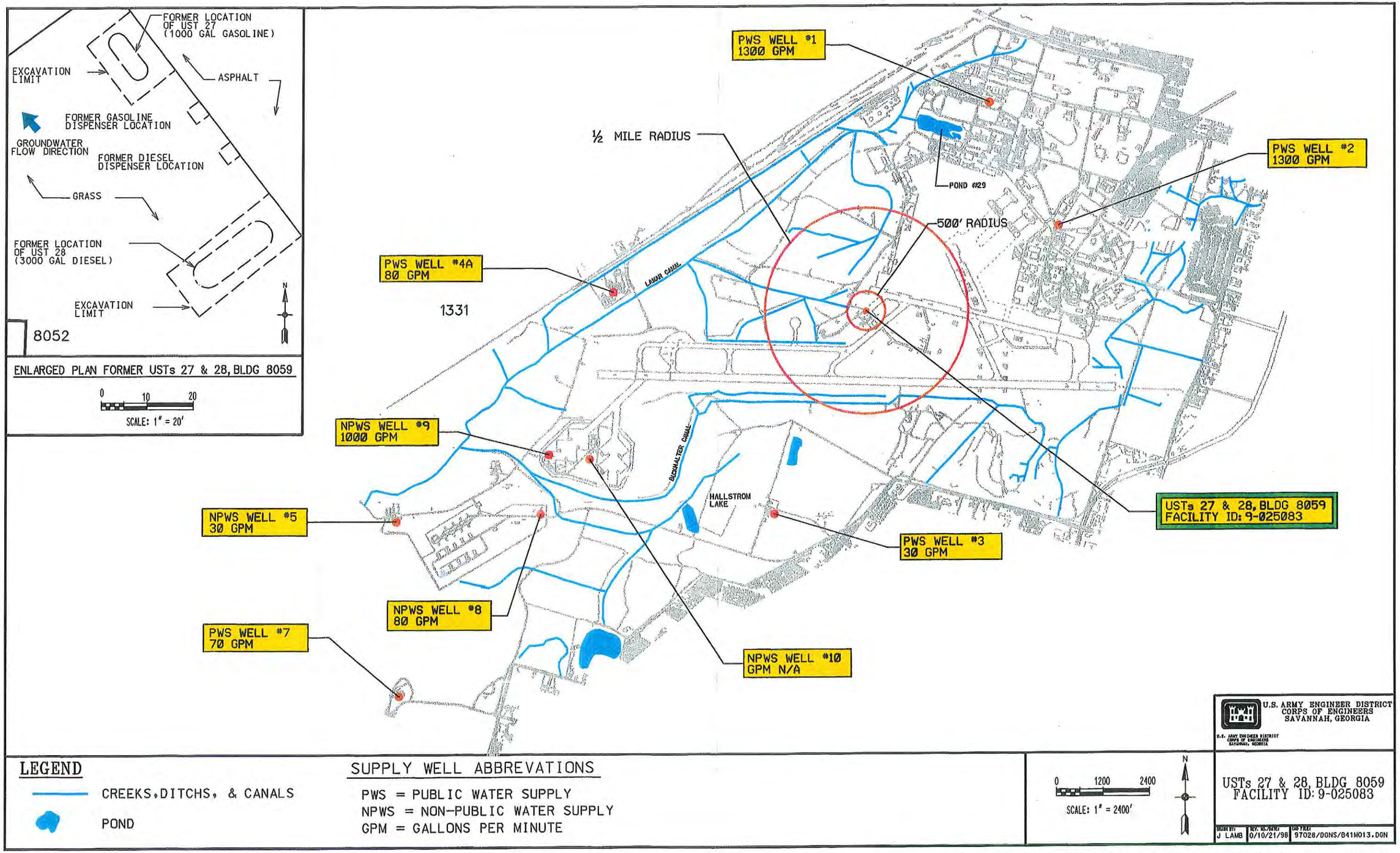


Figure 3b. Detailed Map Showing Public and Private Drinking Water Sources and Surface Water Bodies at Hunter Army Airfield

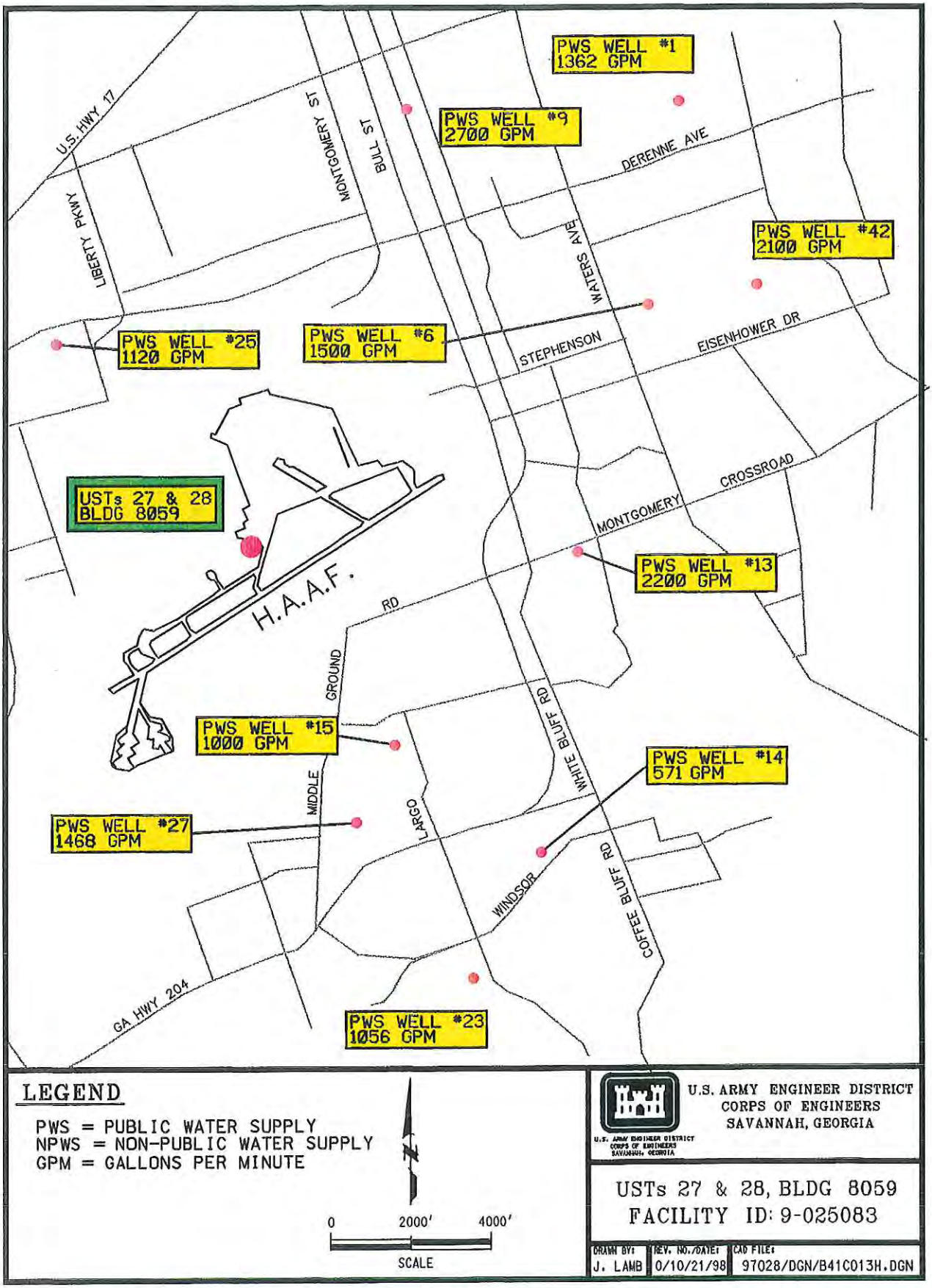


Figure 3c. Detailed Map Showing Public and Private Drinking Water Sources in Areas Adjacent to Hunter Army Airfield

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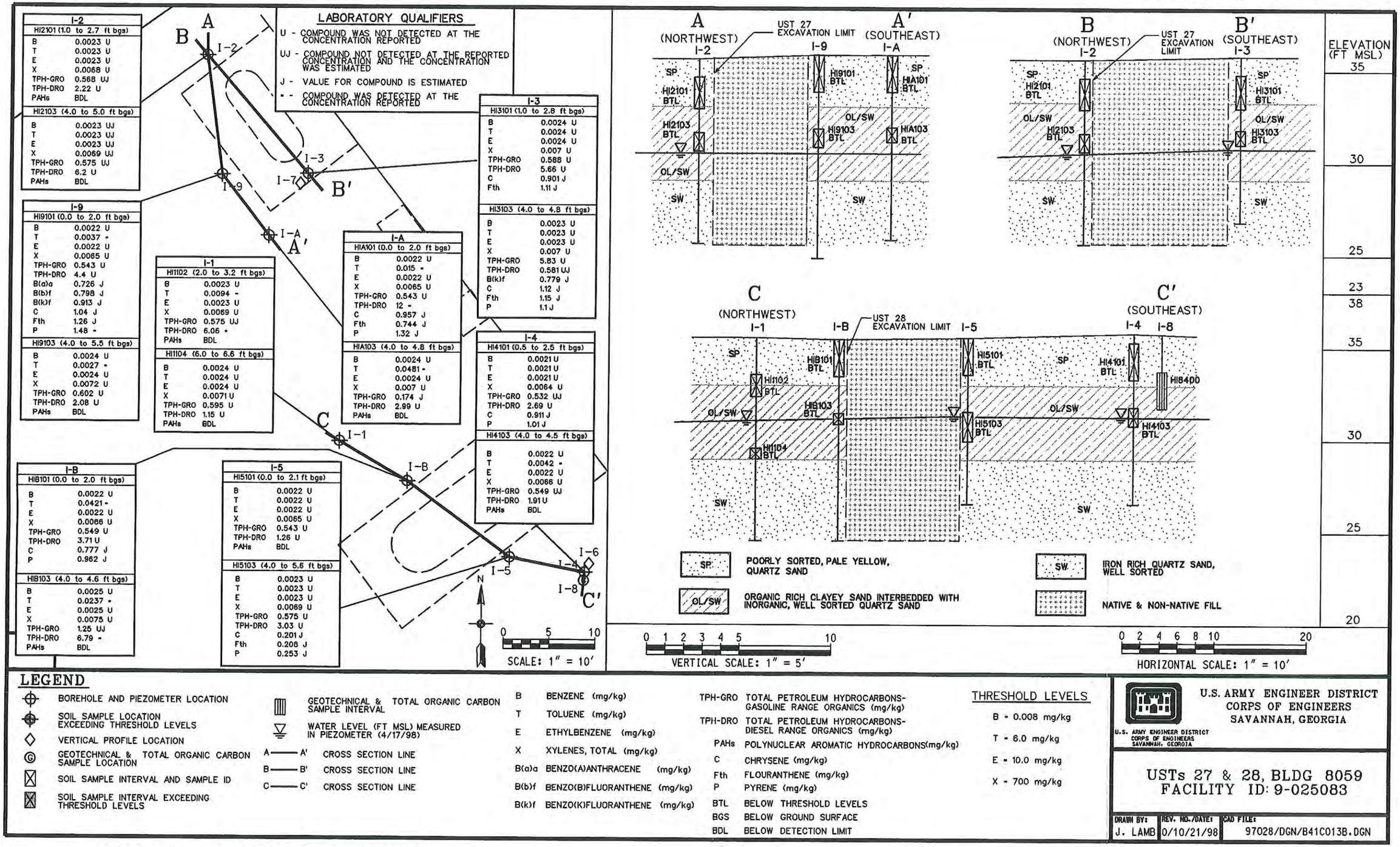
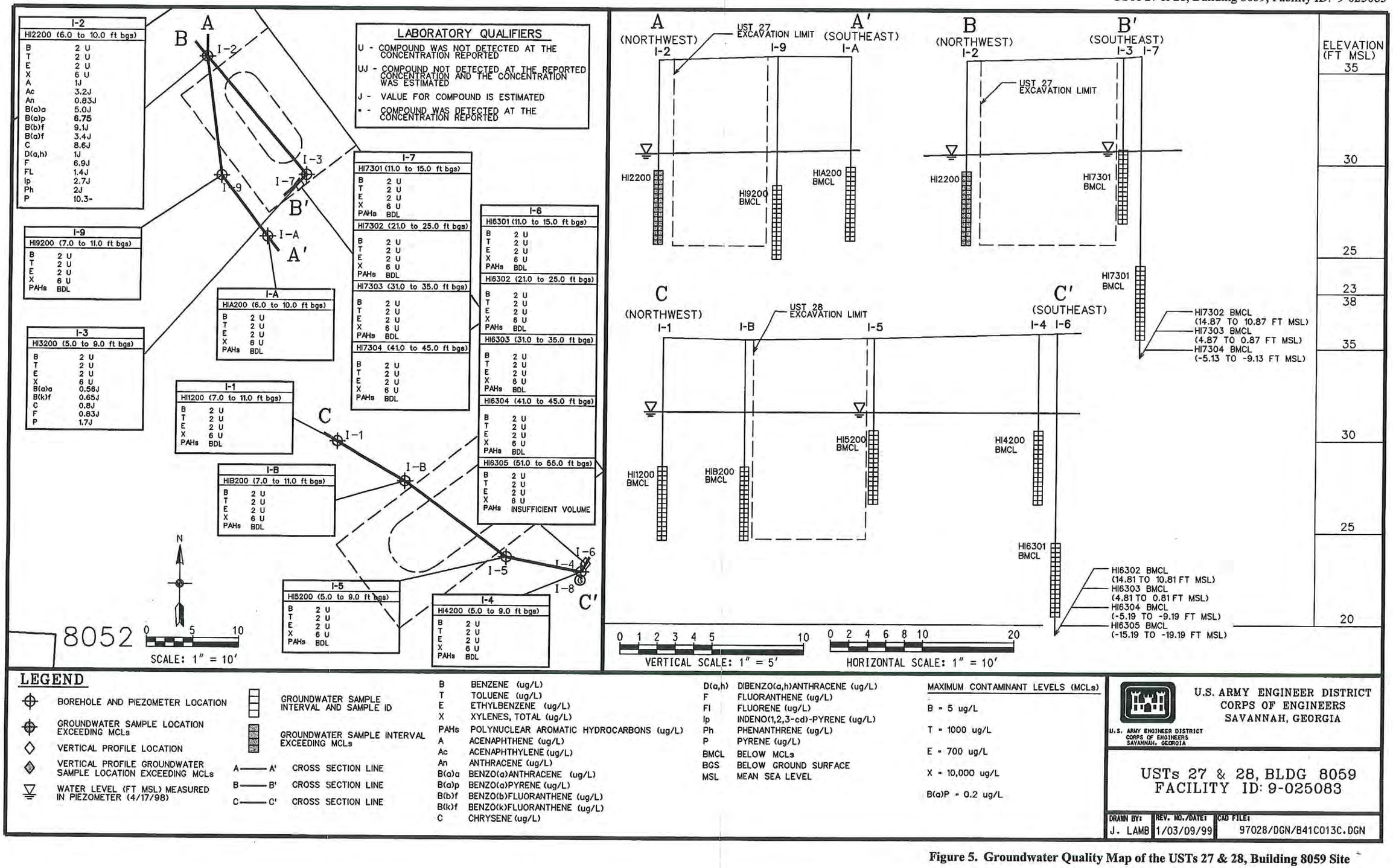


Figure 4. Soil Quality Map of the USTs 27 & 28, Building 8059 Site



LEGEND

- BOREHOLE AND PIEZOMETER LOCATION
- GROUNDWATER SAMPLE LOCATION EXCEEDING MCLs
- VERTICAL PROFILE LOCATION
- VERTICAL PROFILE GROUNDWATER SAMPLE LOCATION EXCEEDING MCLs
- WATER LEVEL (FT MSL) MEASURED IN PIEZOMETER (4/17/98)
- GROUNDWATER SAMPLE INTERVAL AND SAMPLE ID
- GROUNDWATER SAMPLE INTERVAL EXCEEDING MCLs
- A —— A' CROSS SECTION LINE
- B —— B' CROSS SECTION LINE
- C —— C' CROSS SECTION LINE

B	BENZENE (ug/L)
T	TOLUENE (ug/L)
E	ETHYLBENZENE (ug/L)
X	XYLENES, TOTAL (ug/L)
PAHs	POLYNUCLEAR AROMATIC HYDROCARBONS (ug/L)
A	ACENAPHTHENE (ug/L)
Ac	ACENAPHTHYLENE (ug/L)
An	ANTHRACENE (ug/L)
B(a)a	BENZO(a)ANTHRACENE (ug/L)
B(a)p	BENZO(a)PYRENE (ug/L)
B(b)f	BENZO(b)FLUORANTHENE (ug/L)
B(k)f	BENZO(k)FLUORANTHENE (ug/L)
C	CHRYSENE (ug/L)
D(a,h)	DIBENZO(a,h)ANTHRACENE (ug/L)
F	FLUORANTHENE (ug/L)
Fl	FLUORENE (ug/L)
Ip	INDENO(1,2,3-cd)-PYRENE (ug/L)
Ph	PHENANTHRENE (ug/L)
P	PYRENE (ug/L)
BMCL	BELOW MCLs
BGS	BELOW GROUND SURFACE
MSL	MEAN SEA LEVEL

MAXIMUM CONTAMINANT LEVELS (MCLs)

- B = 5 ug/L
- T = 1000 ug/L
- E = 700 ug/L
- X = 10,000 ug/L
- B(a)P = 0.2 ug/L

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

USTs 27 & 28, BLDG 8059
FACILITY ID: 9-025083

DRAWN BY:	REV. NO./DATE:	CAD FILE:
J. LAMB	1/03/09/99	97028/DGN/B41C013C.DGN

Figure 5. Groundwater Quality Map of the USTs 27 & 28, Building 8059 Site

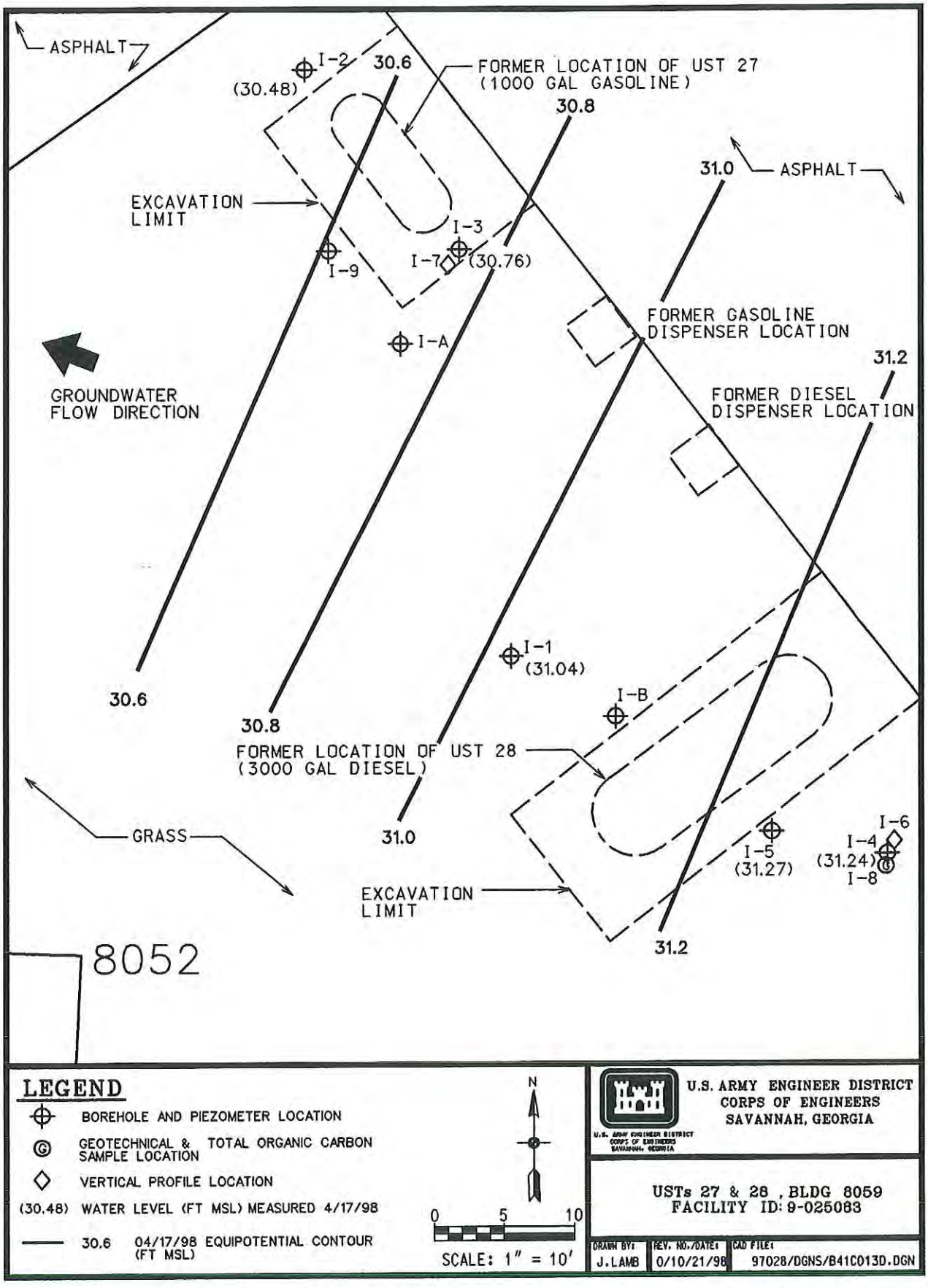


Figure 6. Potentiometric Surface Map of the USTs 27 & 28, Building 8059 Site

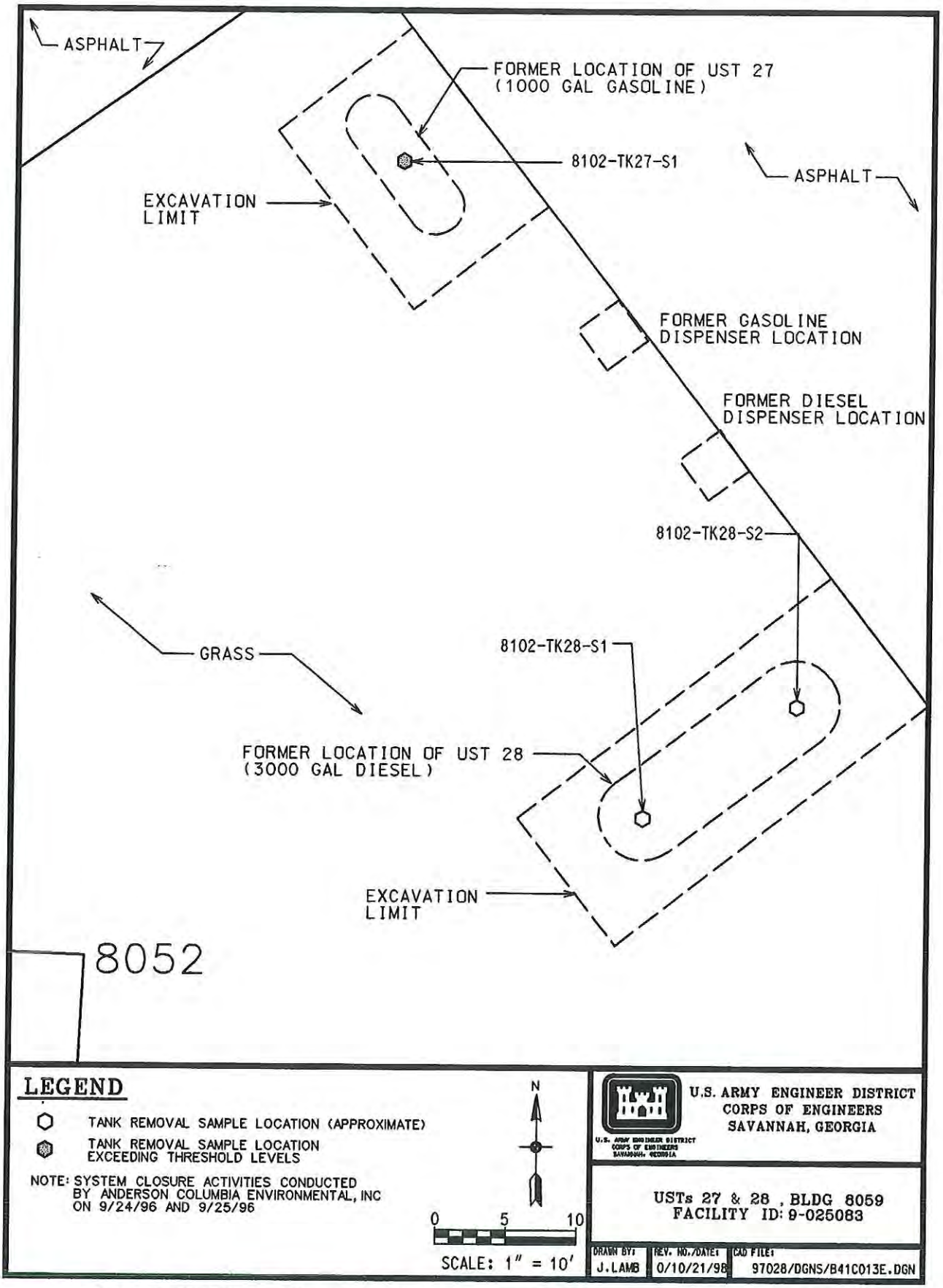


Figure 7. UST System Closure Sampling Locations at the USTs 27 & 28, Building 8059 Site

NOT APPLICABLE FOR THE USTs 27 & 28, BUILDING 8059, FACILITY ID: 9-025083 SITE INVESTIGATION

Figure 8. Proposed Additional Boring/Monitoring Well Locations

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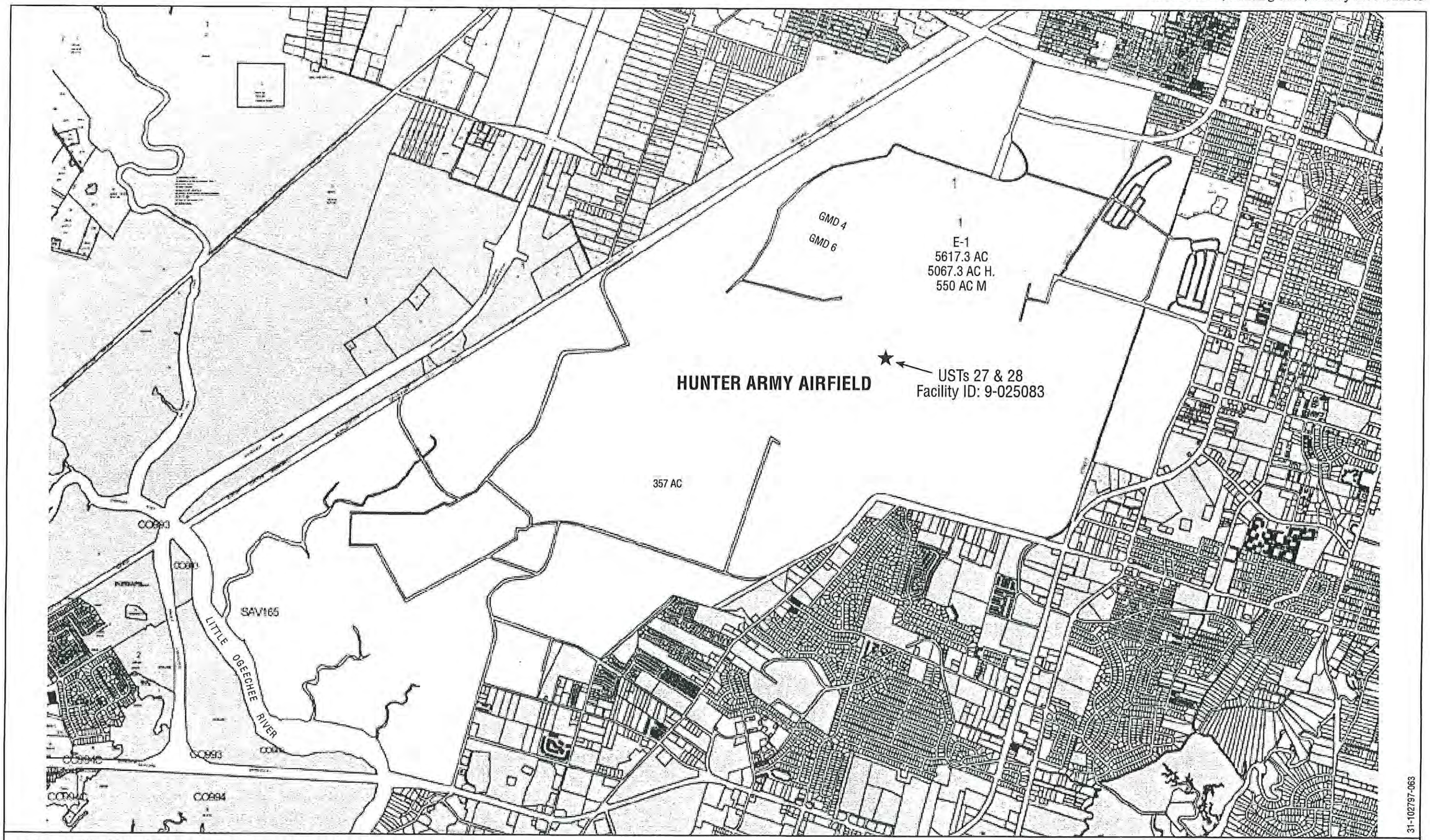

Figure 9. Tax Map of Hunter Army Airfield and Vicinity, Chatham County, Georgia

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APPENDIX II

REPORT TABLES

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USTs 27 & 28, Building 8059
Hunter Army Airfield
Chatham County, Facility ID: 9-025083

TABLE 1: FREE PRODUCT REMOVAL

Monitoring Well Number: N/A				
Date of Measurement	Groundwater Elev. (ft MSL)	Product Thickness (ft)	Corrected Water Elev. (ft MSL)	Product Removed (gal)
			TOTAL	NONE[1]

Monitoring Well Number: N/A				
Date of Measurement	Groundwater Elev. (ft MSL)	Product Thickness (ft)	Corrected Water Elev. (ft MSL)	Product Removed (gal)
			TOTAL	NONE[1]

NOTE: MSL - mean sea level.
[1]Free product was not found.

USTs 27 & 28, Building 8059
Hunter Army Airfield
Chatham County, Facility ID: 9-025083

TABLE 2a: SOIL ANALYTICAL RESULTS[3]
(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[2] (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)
I-1	HI1102	2.0 to 3.2	04/15/98	0.0023 U	0.0094 =	0.0023 U	0.0069 U	0.0094	6.06 =	0.575 UJ
I-1	HI1104	6.0 to 6.6	04/15/98	0.0024 U	0.0024 U	0.0024 U	0.0071 U	BDL	1.15 U	0.595 U
I-2	HI2101	1.0 to 2.7	04/15/98	0.0023 U	0.0023 U	0.0023 U	0.0068 U	BDL	2.22 U	0.568 UJ
I-2	HI2103	4.0 to 5.0	04/15/98	0.0023 UJ	0.0023 UJ	0.0023 UJ	0.0069 UJ	BDL	6.2 U	0.575 UJ
I-3	HI3101	1.0 to 2.8	04/15/98	0.0024 U	0.0024 U	0.0024 U	0.007 U	BDL	5.66 U	0.588 U
I-3	HI3110[4]	1.0 to 2.8	04/15/98	0.0023 U	0.0023 U	0.0023 U	0.0069 U	BDL	6.37 U	0.575 UJ
I-3	HI3103	4.0 to 4.8	04/15/98	0.0023 U	0.0023 U	0.0023 U	0.007 U	BDL	5.83 U	0.581 UJ
I-4	HI4101	0.5 to 2.5	04/15/98	0.0021 U	0.0021 U	0.0021 U	0.0064 U	BDL	2.69 U	0.532 UJ
I-4	HI4103	4.0 to 4.5	04/15/98	0.0022 U	0.0042 =	0.0022 U	0.0066 U	0.0042	1.91 U	0.549 UJ
I-5	HI5101	0.0 to 2.1	04/15/98	0.0022 U	0.0022 U	0.0022 U	0.0065 U	BDL	1.26 U	0.543 U
I-5	HI5103	4.0 to 5.6	04/15/98	0.0023 U	0.0023 U	0.0023 U	0.0069 U	BDL	3.03 U	0.575 U
I-9	HI9101	0.0 to 2.0	04/21/98	0.0022 U	0.0037 =	0.0022 U	0.0065 U	0.0037	4.4 U	0.543 U
I-9	HI9103	4.0 to 5.5	04/21/98	0.0024 U	0.0027 =	0.0024 U	0.0072 U	0.0027	2.08 U	0.602 U
Applicable Standards[1]				0.008	6.000	10	700	NRC	NRC	NRC

NOTE: [1]Georgia Department of Natural Resources (GA DNR) Applicable Soil Threshold Levels (i.e., Table A, column 2).
[2]The total value reported represents the sum of all detected compounds. A total is not reported if all the compounds are below the laboratory detection limits.
[3]**All field work and analytical sampling were performed prior to the release of the new GA DNR Corrective Action Plan (CAP)-Part A Guidance (i.e., May 1998); therefore, the new analytical methods specified were not used.**
[4]Duplicate sample for sample collected from location I-3 at a depth of 1.0 to 2.8 feet BGS.
BDL - Below detection limit
BGS - Below ground surface.
BTEX - Benzene, toluene, ethylbenzene, and xylene.
NRC - No regulatory criteria.
TPH-DRO - Total petroleum hydrocarbon–diesel-range organics.
TPH-GRO - Total petroleum hydrocarbon–gasoline-range organics.

Laboratory Qualifiers
U - Indicates the compound was not detected at the concentration reported.
J - Indicates the value for the compound is an estimated value.
UJ - Indicates the compound was not detected at the reported concentration and the concentration was estimated.
= - Indicates the compound was detected at the concentration reported.

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TABLE 2a: SOIL ANALYTICAL RESULTS[3] (continued)
(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[2] (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)
I-9	HI9111	0.0 to 2.0	04/21/98	0.0022 U	0.0027 =	0.0022 U	0.0064 U	0.0027	3.91 U	0.538 U
I-A	HIA101	0.0 to 2.0	04/21/98	0.0022 U	0.015 =	0.0022 U	0.0065 U	0.015	12 =	0.543 U
I-A	HIA103	4.0 to 4.8	04/21/98	0.0024 U	0.0481 =	0.0024 U	0.007 U	0.0481	2.99 U	0.174 J
I-B	HIB101	0.0 to 2.0	04/21/98	0.0022 U	0.0421 =	0.0022 U	0.0066 U	0.0421	3.71 U	0.549 U
I-B	HIB111[4]	0.0 to 2.0	04/21/98	0.0022 U	0.0245 =	0.0022 U	0.0064 U	0.0245	6.9 =	0.538 U
I-B	HIB103	4.0 to 4.6	04/21/98	0.0025 U	0.0237 =	0.0025 U	0.0075 U	0.0237	6.79 =	1.25 UJ
Applicable Standards[1]				0.008	6.000	10	700	NRC	NRC	NRC

NOTE: [1]Georgia Department of Natural Resources (GA DNR) Applicable Soil Threshold Levels (i.e., Table A, column 2).

[2]The total value reported represents the sum of all detected compounds. A total is not reported if all the compounds are below the laboratory detection limits.

[3]All field work and analytical sampling were performed prior to the release of the new GA DNR Corrective Action Plan (CAP)-Part A Guidance (i.e., May 1998); therefore, the new analytical methods specified were not used.

[4]Duplicate sample for sample collected from location I-B at a depth of 0.0 to 2.0 feet BGS.

BDL - Below detection limit
BGS - Below ground surface.
BTEX - Benzene, toluene, ethylbenzene, and xylene.
NRC - No regulatory criteria.
TPH-DRO - Total petroleum hydrocarbon–diesel-range organics.
TPH-GRO - Total petroleum hydrocarbon–gasoline-range organics.

Laboratory Qualifiers
U - Indicates the compound was not detected at the concentration reported.
J - Indicates the value for the compound is an estimated value.
UJ - Indicates the compound was not detected at the reported concentration and the concentration was estimated.
= - Indicates the compound was detected at the concentration reported.

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TABLE 2b: SOIL ANALYTICAL RESULTS[3]
(POLYNUCLEAR AROMATIC HYDROCARBONS)

Sample Location	Sample ID	Depth (ft BGS)	Date Sampled	Detected PAH Compounds (mg/kg)						Total PAHs (mg/kg)
				Benzo(a)-anthracene	Benzo(b)-fluoranthene	Benzo(k)-fluoranthene	Chrysene	Fluoranthene	Pyrene	
I-1	HI1102	2.0 to 3.2	04/15/98	0.383 U	0.383 U	0.383 U	0.383 U	0.383 U	0.383 U	BDL[2]
I-1	HI1104	6.0 to 6.6	04/15/98	0.397 U	0.397 U	0.397 U	0.397 U	0.397 U	0.397 U	BDL
I-2	HI2101	1.0 to 2.7	04/15/98	1.52 U	1.52 U	1.52 U	1.52 U	1.52 U	1.52 U	BDL
I-2	HI2103	4.0 to 5.0	04/15/98	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	BDL
I-3	HI3101	1.0 to 2.8	04/15/98	1.57 U	1.57 U	1.57 U	0.901 J	1.11 J	1.57 U	2.011
I-3	HI3110[4]	1.0 to 2.8	04/15/98	1.53 U	1.53 U	1.53 U	1.53 U	0.964 J	0.794 J	0.964
I-3	HI3103	4.0 to 4.8	04/15/98	1.55 U	1.55 U	0.779 J	1.12 J	1.15 J	1.55 U	3.049
I-4	HI4101	0.5 to 2.5	04/15/98	1.42 U	1.42 U	1.42 U	0.911 J	1.42 U	1.01 J	1.921
I-4	HI4103	4.0 to 4.5	04/15/98	1.46 U	1.46 U	1.46 U	1.46 U	1.46 U	1.46 U	BDL
I-5	HI5101	0.0 to 2.1	04/15/98	0.362 U	0.362 U	0.362 U	0.362 U	0.362 U	0.362 U	BDL
I-5	HI5103	4.0 to 5.6	04/15/98	0.383 U	0.383 U	0.383 U	0.201 J	0.208 J	0.253 J	0.662
I-9	HI9101	0.0 to 2.0	04/21/98	0.726 J	0.798 J	0.913 J	1.04 J	1.26 J	1.48 =	6.217
I-9	HI9103	4.0 to 5.5	04/21/98	1.58 U	1.58 U	1.58 U	1.58 U	1.58 U	1.58 U	BDL
Applicable Standards[1]				N/A	N/A	N/A	N/A	N/A	N/A	NRC

NOTE: [1]Georgia Department of Natural Resources (GA DNR) Applicable Soil Threshold Levels (Table A, column 2).
[2]BDL - Below detection limit; PAH compounds were not detected above the laboratory detection limit. Refer to Appendix V, Table V-A, for a complete list of PAH results.
[3]All field work and analytical sampling were performed prior to the release of the new GA DNR Corrective Action Plan (CAP)-Part A Guidance (i.e., May 1998); therefore, the new analytical methods specified were not used.
[4]Duplicate sample for sample collected from location I-3 at a depth of 1.0 to 2.8 feet BGS.
N/A - Not applicable; the health-based threshold level exceeds the expected soil concentration under free-product conditions.
BGS - Below ground surface.
NRC - No regulatory criteria.
PAH - Polynuclear aromatic hydrocarbon.
Laboratory Qualifiers
U - Indicates the compound was not detected at the concentration reported.
J - Indicates the value for the compound is an estimated value.
= - Indicates the compound was detected at the concentration reported.

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TABLE 2b: SOIL ANALYTICAL RESULTS[3] (continued)
(POLYNUCLEAR AROMATIC HYDROCARBONS)

Sample Location	Sample ID	Depth (ft BGS)	Date Sampled	Detected PAH Compounds (mg/kg)						Total PAHs (mg/kg)
				Benzo(a)-anthracene	Benzo(b)-fluoranthene	Benzo(k)-fluoranthene	Chrysene	Fluoranthene	Pyrene	
I-9	HI9111	4.0 to 5.5	04/21/98	1.43 U	1.43 U	1.43 U	1.43 U	1.43 U	1.43 U	BDL[2]
I-A	HIA101	0.0 to 2.0	04/21/98	1.42 U	1.42 U	1.42 U	0.957 J	0.744 J	1.32 J	3.021
I-A	HIA103	4.0 to 4.8	04/21/98	1.55 U	1.55 U	1.55 U	1.55 U	1.55 U	1.55 U	BDL
I-B	HIB101	0.0 to 2.0	04/21/98	1.46 U	1.46 U	1.46 U	0.777 J	1.46 U	0.962 J	1.739
I-B	HIB111[4]	0.0 to 2.0	04/21/98	0.837 J	1.43 U	0.825 J	1.12 J	0.920 J	1.63 =	5.332
I-B	HIB103	4.0 to 4.6	04/21/98	1.65 U	1.65 U	1.65 U	1.65 U	1.65 U	1.65 U	BDL
Applicable Standards[1]				N/A	N/A	N/A	N/A	N/A	N/A	NRC

NOTE: [1]Georgia Department of Natural Resources (GA DNR) Applicable Soil Threshold Levels (i.e., Table A, column 2).
[2]BDL - Below detection limit; PAH compounds were not detected above the laboratory detection limit. Refer to Appendix V, Table V-A, for a complete list of PAH results.
[3]**All field work and analytical sampling were performed prior to the release of the new GA DNR Corrective Action Plan (CAP)-Part A Guidance (i.e., May 1998); therefore, the new analytical methods specified were not used.**
[4]Duplicate sample for sample collected from location I-B at a depth of 0.0 to 2.0 feet BGS.
N/A - Not applicable; the health-based threshold level exceeds the expected soil concentration under free-product conditions.
BGS - Below ground surface.
NRC - No regulatory criteria.
PAH - Polynuclear aromatic hydrocarbon.

Laboratory Qualifiers
U - Indicates the compound was not detected at the concentration reported.
J - Indicates the value for the compound is an estimated value.
= - Indicates the compound was detected at the concentration reported.

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TABLE 3a: GROUNDWATER ANALYTICAL RESULTS[4]
(VOLATILE ORGANIC COMPOUNDS)

Sample Location	Sample ID	Depth (ft BGS)	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	Total BTEX[3] (µg/L)
I-1	HI1200	7.0 to 11.0	04/15/98	2 U	2 U	2 U	6 U	BDL[2]
I-2	HI2200	6.0 to 10.0	04/15/98	2 U	2 U	2 U	6 U	BDL
I-3	HI3200	5.0 to 9.0	04/15/98	2 U	2 U	2 U	6 U	BDL
I-4	HI4200	5.0 to 9.0	04/15/98	2 U	2 U	2 U	6 U	BDL
I-5	HI5200	5.0 to 9.0	04/15/98	2 U	2 U	2 U	6 U	BDL
I-6	HI6301	11.0 to 15.0	04/15/98	2 U	2 U	2 U	6 U	BDL
I-6	HI6302	21.0 to 25.0	04/15/98	2 U	2 U	2 U	6 U	BDL
I-6	HI6303	31.0 to 35.0	04/15/98	2 U	2 U	2 U	6 U	BDL
I-6	HI6304	41.0 to 45.0	04/15/98	2 U	2 U	2 U	6 U	BDL
I-6	HI6305	51.0 to 55.0	04/15/98	2 U	2 U	2 U	6 U	BDL
I-7	HI7301	11.0 to 15.0	04/18/98	2 U	2 U	2 U	6 U	BDL
I-7	HI7310[5]	11.0 to 15.0	04/18/98	2 U	2 U	2 U	6 U	BDL
I-7	HI7302	21.0 to 25.0	04/18/98	2 U	2 U	2 U	6 U	BDL
I-7	HI7303	31.0 to 35.0	04/18/98	2 U	2 U	2 U	6 U	BDL
I-7	HI7304	41.0 to 45.0	04/18/98	2 U	2 U	2 U	6 U	BDL
I-9	HI9200	7.0 to 11.0	04/12/98	2 U	2 U	2 U	3.65	3.6
I-9	HI9210[6]	7.0 to 11.0	04/21/98	2 U	2 U	2 U	6 U	BDL
I-A	HIA200	6.0 to 10.0	04/21/98	2 U	2 U	2 U	6 U	BDL
I-B	HIB200	7.0 to 11.0	04/21/98	2 U	2 U	2 U	6 U	BDL
Applicable Standards[1]				5	1,000	700	10,000	NRC

NOTE: [1]U.S. Environmental Protection Agency Safe Drinking Water Act maximum contaminant level.
[2]BDL - Below detection limit.
[3]The total value reported represents the sum of all detected compounds. A total is not reported if all the compounds are below the laboratory detection limits.
[4]All field work and analytical sampling were performed prior to the release of the new Georgia Department of Natural Resources (GA DNR) Corrective Action Plan (CAP)-Part A Guidance (i.e., May 1998); therefore, the new analytical methods specified were not used.
[5]Duplicate sample for sample collected from location I-7 at a depth of 11.0 to 15.0 feet BGS.
[6]Duplicate sample for sample collected from location I-9 at a depth of 7.0 to 11.0 feet BGS.
BGS - Below ground surface.
BTEX - Benzene, toluene, ethylbenzene, and xylene.
NRC - No regulatory criteria.
PAHs - Polynuclear aromatic hydrocarbons.

Laboratory Qualifiers
U - Indicates the compound was not detected at the concentration reported.

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TABLE 3b: GROUNDWATER ANALYTICAL RESULTS[4]
(POLYNUCLEAR AROMATIC HYDROCARBONS)

Sample Location	Sample ID	Depth (ft BGS)	Date Sampled	Detected PAH Compounds (µg/L)							
				Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene	Benzo(b)-fluoranthene	Benzo(g,h,i)-perylene	Benzo(k)-fluoranthene
I-1	HI1200	7.0 to 11.0	04/15/98	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
I-2	HI2200	6.0 to 10.0	04/15/98	1 J	3.2 J	0.83 J	5.0 J	**6.75**	9.1 J	3.4 J	10.1 U
I-3	HI3200	5.0 to 9.0	04/15/98	10.5 UJ	10.5 UJ	10.5 UJ	0.56 J	10.5 UJ	10.5 UJ	10.5 UJ	0.65 J
I-4	HI4200	5.0 to 9.0	04/15/98	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
I-5	HI5200	5.0 to 9.0	04/15/98	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U
I-6	HI6301	11.0 to 15.0	04/15/98	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U
I-6	HI6302	21.0 to 25.0	04/15/98	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
I-6	HI6303	31.0 to 35.0	04/15/98	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
I-6	HI6304	41.0 to 45.0	04/15/98	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U
I-6	HI6305	51.0 to 55.0	04/15/98	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
I-7	HI7301	11.0 to 15.0	04/18/98	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U
I-7	HI7310[5]	11.0 to 15.0	04/18/98	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U
I-7	HI7302	21.0 to 25.0	04/18/98	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U
I-7	HI7303	31.0 to 35.0	04/18/98	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U
I-7	HI7304	41.0 to 45.0	04/18/98	10.6 U	10.6 U	10.6 U	10.6 U	10.6 U	10.6 U	10.6 U	10.6 U
I-9	HI9200	7.0 to 11.0	04/21/98	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U
Applicable Standards[1]				NRC	NRC	NRC	NRC	0.2	NRC	NRC	NRC

NOTE: [1]U.S. Environmental Protection Agency maximum contaminant level.
[2]BDL - Below detection limit; PAH compounds were not detected above the laboratory detection limit. Refer to Appendix VIII, Table VIII-A, for complete list of PAH results.
[3]The total value reported represents the sum of all detected compounds. A total is not reported if all the compounds are below the laboratory detection limits.
[4]All field work and analytical sampling were performed prior to the release of the new Georgia Department of Natural Resources (GA DNR) Corrective Action Plan (CAP)-Part A Guidance (i.e., May 1998); therefore, the new analytical methods specified were not used.
[5]Duplicate sample for sample collected from location I-7 at a depth of 11.0 to 15.0 feet BGS.
BGS - Below ground surface.
N/A - Not applicable; a sufficient volume of groundwater was not available during collection, and the analysis for this compound could not be performed.
NRC - No regulatory criteria.
PAHs - Polynuclear aromatic hydrocarbons.

Laboratory Qualifiers
U - Indicates the compound was not detected at the concentration reported.
J - Indicates the value for the compound is an estimated value.
UJ - Indicates the compound was not detected at the reported concentration and the concentration was estimated.

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TABLE 3b: GROUNDWATER ANALYTICAL RESULTS[4] (continued)
(POLYNUCLEAR AROMATIC HYDROCARBONS)

Sample Location	Sample ID	Depth (ft BGS)	Date Sampled	Detected PAH Compounds (µg/L)							Total PAHs[3] (µg/L)
				Chrysene	Dibenzo(a,h)-anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)-pyrene	Phenanthrene	Pyrene	
I-1	HI1200	7.0 to 11.0	04/15/98	10 U	10 U	10 U	10 U	10 U	10 U	10 U	BDL[2]
I-2	HI2200	6.0 to 10.0	04/15/98	8.6 J	1 J	6.9 J	1.4 J	2.7 J	2 J	10.3 =	62.13
I-3	HI3200	5.0 to 9.0	04/15/98	0.8 J	10.5 UJ	0.83 J	10.5 UJ	10.5 UJ	10.5 UJ	1.7 J	4.54
I-4	HI4200	5.0 to 9.0	04/15/98	10 U	10 U	10 U	10 U	10 U	10 U	10 U	BDL[2]
I-5	HI5200	5.0 to 9.0	04/15/98	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	BDL[2]
I-6	HI6301	11.0 to 15.0	04/15/98	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	BDL[2]
I-6	HI6302	21.0 to 25.0	04/15/98	10 U	10 U	10 U	10 U	10 U	10 U	10 U	BDL[2]
I-6	HI6303	31.0 to 35.0	04/15/98	10 U	10 U	10 U	10 U	10 U	10 U	10 U	BDL[2]
I-6	HI6304	41.0 to 45.0	04/15/98	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	BDL[2]
I-6	HI6305	51.0 to 55.0	04/15/98	N/A	N/A	N/A	N/A	N/A	N/A	N/A	BDL[2]
I-7	HI7301	11.0 to 15.0	04/18/98	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	BDL[2]
I-7	HI7310[5]	11.0 to 15.0	04/18/98	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	BDL[2]
I-7	HI7302	21.0 to 25.0	04/18/98	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	BDL[2]
I-7	HI7303	31.0 to 35.0	04/18/98	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	BDL[2]
I-7	HI7304	41.0 to 45.0	04/18/98	10.6 U	10.6 U	10.6 U	10.6 U	10.6 U	10.6 U	10.6 U	BDL[2]
I-9	HI9200	7.0 to 11.0	04/21/98	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	BDL[2]
Applicable Standards[1]				NRC	NRC	NRC	NRC	NRC	NRC	NRC	NRC

NOTE: [1]U.S. Environmental Protection Agency maximum contaminant level.
[2]BDL - Below detection limit; PAH compounds were not detected above the laboratory detection limit. Refer to Appendix VIII, Table VIII-A, for complete list of PAH results.
[3]The total value reported represents the sum of all detected compounds. A total is not reported if all the compounds are below the laboratory detection limits.
[4]All field work and analytical sampling were performed prior to the release of the new Georgia Department of Natural Resources (GA DNR) Corrective Action Plan (CAP)-Part A Guidance (i.e., May 1998); therefore, the new analytical methods specified were not used.
[5]Duplicate sample for sample collected from location I-7 at a depth of 11.0 to 15.0 feet BGS.
BGS - Below ground surface.
N/A - Not applicable; a sufficient volume of groundwater was not available during collection, and the analysis for this compound could not be performed.
NRC - No regulatory criteria.
PAHs - Polynuclear aromatic hydrocarbons.

Laboratory Qualifiers
U - Indicates the compound was not detected at the concentration reported.
J - Indicates the value for the compound is an estimated value.
UJ - Indicates the compound was not detected at the reported concentration and the concentration was estimated.
= - Indicates the compound was detected at the concentration reported.

USTs 27 & 28, Building 8059
Hunter Army Airfield
Chatham County, Facility ID: 9-025083

TABLE 4: GROUNDWATER ELEVATIONS

Well Number	Date Measured	Ground Surface Elev. (ft MSL)	Top of Casing Elev. (ft MSL)	Depth of Screened Interval (ft BGS)	Depth of Free Product (ft BTOC)	Water Depth (ft BTOC)	Product Thickness (ft)	Specific Gravity Adjustment	Corrected Groundwater Elev. (ft MSL)
I-1	04/17/98	35.53	36.36	6.0 to 11.0	N/A	5.32	N/A	N/A	31.04
I-2	04/17/98	35.60	36.89	5.0 to 10.0	N/A	6.41	N/A	N/A	30.48
I-3	04/17/98	35.79	37.84	4.0 to 9.0	N/A	7.08	N/A	N/A	30.76
I-4	04/17/98	35.78	36.70	4.0 to 9.0	N/A	5.46	N/A	N/A	31.24
I-5	04/17/98	35.53	37.93	4.0 to 9.0	N/A	6.66	N/A	N/A	31.27
L-9	04/22/98	35.81	36.63	6.0 to 11.0	N/A	6.18	N/A	N/A	30.45
I-A	04/22/98	35.9	36.6	5.0 to 10.0	N/A	6.09	N/A	N/A	30.51
I-B	04/22/98	35.45	36.38	6.0 to 11.0	N/A	5.71	N/A	N/A	30.67

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

USTs 27 & 28, Building 8059
Hunter Army Airfield
Chatham County, Facility ID: 9-025083

TABLE 5a: UST SYSTEM CLOSURE[1] - SOIL ANALYTICAL RESULTS
(VOLATILE ORGANIC COMPOUNDS)

Sample Location	Depth (ft BGS)	Date Sampled	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)
8102-TK27-S1	14	9/24/96	BDL	13.3	12.6	103.6	129.5	N/A	1,110
8102-TK28-S1	12	9/24/96	BDL	BDL	BDL	BDL	BDL	205	N/A
8102-TK28-S2	12	9/25/96	BDL	BDL	BDL	BDL	BDL	BDL	N/A
Applicable Standards[2]			0.008	6	10	700	NRC	NRC	NRC

NOTE: [1]Underground storage tank system closure performed by Anderson Columbia Environmental, Inc. (1996).
[2]Georgia Department of Natural Resources Applicable Soil Threshold Levels (i.e., Table A, column 2).
BDL - Below detection limit. Analytical result/detection limit not provided.
BGS - Below ground surface.
BTEX - Benzene, toluene, ethylbenzene, and xylene.
NRC - No regulatory criteria.
TPH-DRO - Total petroleum hydrocarbon–diesel-range organics.
TPH-GRO - Total petroleum hydrocarbon–gasoline-range organics.

USTs 27 & 28, Building 8059
Hunter Army Airfield
Chatham County, Facility ID: 9-025083

TABLE 5b: UST SYSTEM CLOSURE[1] - SOIL ANALYTICAL RESULTS
(POLYNUCLEAR AROMATIC HYDROCARBONS)

Sample Location	Depth (ft BGS)	Date Sampled	Detected PAH Compounds (mg/kg)									Total PAHs (mg/kg)
			Acenaphthylene	Anthracene	Benz(a)-anthracene	Chrysene	1-Methyl-Naphthalene	2-Methyl-Naphthalene	Naphthalene	Phenanthrene	Pyrene	
8102-TK27-S1	14	9/24/96	BDL	BDL	BDL	BDL	BDL	1.59	0.9453	BDL	BDL	2.53
8102-TK28-S1	12	9/25/96	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
8102-TK28-S2	12	9/25/96	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Applicable Standards[2]			N/A[3]	N/A[3]	N/A[3]	N/A[3]	NRC	NRC	N/A[3]	N/A[3]	N/A[3]	NRC

NOTE: [1]Underground storage tank system closure performed by Anderson Columbia Environmental, Inc. (1996).
[2]Georgia Department of Natural Resources Applicable Soil Threshold Levels.
[3]Not applicable; the health-based threshold level exceeds the expected soil concentration under free-product conditions.
BDL - Below detection limit.
BGS - Below ground surface.
NRC - No regulatory criteria.
PAHs - Polynuclear aromatic hydrocarbons.

USTs 27 & 28, Building 8059
Hunter Army Airfield
Chatham County, Facility ID: 9-025083

TABLE 6a: UST SYSTEM CLOSURE[1] - GROUNDWATER ANALYTICAL RESULTS
(VOLATILE ORGANIC COMPOUNDS)

Sample Location	Depth (ft BGS)	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
N/A[2]							
Applicable Standards[2]			5	1,000	700	10,000	NRC

TABLE 6b: UST SYSTEM CLOSURE[1] - GROUNDWATER ANALYTICAL RESULTS
(POLYNUCLEAR AROMATIC HYDROCARBONS)

Sample Location	Depth (ft BGS)	Date Sampled	Detected PAH Compounds (µg/L)			Total PAHs (µg/L)
N/A[2]						
Applicable Standards[3]						NRC

NOTE: [1]UST system closure performed by Anderson Columbia Environmental, Inc. (1996).
[2]Not applicable; groundwater samples were not collected by Anderson Columbia Environmental, Inc. (1996).
[3]U.S. Environmental Protection Agency maximum contaminant levels.
BDL - Below detection limit.
BGS - Below ground surface.
NRC - No regulatory criteria.

APPENDIX III

WATER RESOURCES SURVEY DOCUMENTATION

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WATER RESOURCES SURVEY DOCUMENTATION

1.0 LOCAL WATER RESOURCES

As required by the Georgia Department of Natural Resources (GA DNR) Underground Storage Tank (UST) Corrective Action Plan (CAP)-Part A Guidance (GA DNR 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 all the Hunter Army Airfield (HAAF) UST investigation sites in April, May, and June 1998. The information presented in this section provides the supporting documentation for Section II.D.3 of the CAP-Part A form.

1.1 WATER SUPPLY WELL SURVEY

The water supply well survey was conducted using the following GA DNR guidelines/requirements:

- HAAF is located in an area of average or higher groundwater pollution susceptibility (GA DNR 1976).
- Locate all public supply wells, as defined by the GA DNR, 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 from the Fort Stewart Directorate of Public Works (FS DPW) and the City of Savannah Bureau of Water Operations, performing a field survey, and conducting a U.S. Geological Survey (USGS) database search. A summary of the information obtained during the survey is provided in the following sections.

1.1.1 Fort Stewart Directorate of Public Works Survey Summary

According to the FS DPW, nine water supply wells are located within the confines of the HAAF area (Figures 3a and 3b, Appendix I). These wells have the potential to provide up to 3890 gallons per minute (gpm) of water to occupants of the HAAF installation. The FS DPW was unable to provide documentation listing the companies responsible for well installation, and drillers' logs showing as-built information and subsurface geologic data. Information concerning such documentation was requested from several water well drilling companies in the Chatham County area; however, data were procured with very limited success. The FS DPW provided well locations, pump rates, treatment methods, casing depths, and total depths for eight of the nine wells located at HAAF (Table III-A). However, documentation of subsurface geology based on HAAF drill logs remains extremely limited. Therefore, other references providing deep-well

information were used to document the subsurface geology and aquifer characteristics beneath the HAAF area. Refer to Appendix X, Section 1.0, for further geologic discussion.

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

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

Based on the GA DNR 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 (Figure 3a, Appendix I). Pump rates, casing depths, bore depths, treatment methods, and storage tank information are provided in Table III-A.

Well 10 is a non-potable water source (Figure 3b, Appendix I). Water from Well 10 is used for the cleaning of military equipment at a wash-rack facility. Additional information including capacity, borehole depth, and casing depth is not available.

1.1.2 City of Savannah Bureau of Water Operations Survey Summary

The locations of supply wells found outside the boundary of HAAF that are within 2 miles of one or more of the CAP-Part A investigation sites are shown on Figure 3b, Appendix I. These wells include 25, 15, 27, 14, 23, 6, and 9. 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 drill logs or as-built well information.

1.1.3 U.S. Geological Survey Summary

Chatham County encompasses three watersheds: Lower Savannah, Lower Ogeechee, and Ogeechee Coastal (EPA 1998). The HAAF installation is located within the Ogeechee Coastal watershed which covers 1,477 square miles; includes 18 rivers and streams, including the Little Ogeechee River which borders the south western portion of HAAF; and contains land usage areas

classified as 2 percent urban, 67 percent forest, and 24 percent agricultural. Water use survey data for the watershed estimate that the area has a total population of 200,000 with domestic, industrial, and commercial water supplies mainly derived from groundwater sources (USGS 1990). Domestic water supply data show that a population of 144,000 receives public-supplied water from groundwater sources, 48,000 receive water from self-supplied groundwater sources, and 8,000 from public-supplied surface water sources. The water use survey also reports that two industrial facilities within the watershed are self-supplied with water obtained from groundwater sources. The survey also notes that a total of five wastewater facilities are located in the area with three reported as public wastewater treatment facilities.

1.2 SURFACE WATER BODIES

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

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

The locations of surface water bodies at HAAF were obtained from USGS aerial photographs, USGS topographic maps, and from maps provided by the FS DPW. Storm and sanitary sewer location maps, storm sewer invert elevations, and storm sewer and culvert construction details were provided by the FS DPW and the City of Savannah Bureau of Water and Sewer Planning (1998).

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 3b, Appendix I). Several unnamed drainage canals 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 are perennial, whereas most of the drainage canals and ditches are intermittent. Most of the drainage canals are at least partially enclosed in culverts.

1.3 POTENTIAL RECEPTOR SURVEY SUMMARY OF THE USTs 27 & 28, BUILDING 8059 SITE

A field potential receptor survey was conducted for the USTs 27 & 28, Building 8059 site on April 30, 1998. The site and adjacent areas were surveyed for locations of surface water bodies, utility lines, and basements. Basements do not exist in the buildings adjacent to the site. Additional information, provided by the FS DPW, was used to determine the location of the nearest public and non-public water supply wells and downgradient surface water bodies not located during the field survey.

1.3.1 Water Supply Wells Near the USTs 27 & 28, Building 8059 Site

The USTs 27 & 28, Building 8059 site is located approximately 5,400 feet southwest (cross-gradient) of HAAF Well 2, which is located at Building 1205 on Strachen Drive, HAAF (Figure 3a, Appendix I). Therefore, the USTs 27 & 28, Building 8059 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 7,500 persons through 525 service connections. Based on the estimated nature and extent of petroleum-related groundwater contamination at the site, there is no indication that Well 2 has been impacted (Figure 3a, Appendix I). Therefore, collection and analysis of groundwater samples from Well 2 is not recommended.

1.3.2 Surface Water Bodies Near the USTs 27 & 28, Building 8059 Site

A drainage ditch is located approximately 700 feet northwest (downgradient) of the USTs 27 & 28, Building 8059 site. Water that drains into this ditch flows westward and ultimately into the Little Ogeechee River, located southwest of HAAF.

TABLES

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CAP-Part A UST Investigation Sites
Hunter Army Airfield, Chatham County

TABLE III-A. WATER SUPPLY WELL INFORMATION PROVIDED BY THE FORT STEWART DPW

Building	Well ID	Year Drilled	Bore Depth	Casing Depth	Pump Rate (gpm)	Number of Service Connections	Population	Public or Non-Public Supply
711	1	1941	550	250	1,300	525	7,500	Public
1205	2	1941	600	250	1,300	525	7,500	Public
8455	3	1951	360	40	30	2	25	Public
8581	4A	Unk	300	92	80	10	50	Public
8641	5	1955	380	85	30	Unk	Unk	Non-public
8703	7	1980	450	330	70	8	500	Public
8632	8	1956	370	255	80	5	Unk	Non-public
8654	9	Unk	600	255	1,000	Unk	Unk	Non-public
8464	10	Unk	Unk	Unk	Unk	N/A	N/A	Non-public

NOTE: DPW - Directorate of Public Works.
N/A - Not applicable.
gpm - Gallons per minute.
Unk - Unknown.

CAP-Part A UST Investigation Sites
Hunter Army Airfield, Chatham County

TABLE III-B. WATER SUPPLY WELL INFORMATION PROVIDED BY THE CITY OF SAVANNAH BUREAU OF WATER OPERATIONS

Well ID	Year Drilled	Bore Depth (feet)	Casing Depth (feet	Pump Rate (gpm)	Number of Service Connections	Population[1]	Public or Non-Public Supply[1]
1	Unk	1,006	300	1,362	Unk	Unk	Public
6	Unk	750	240	1,500	Unk	Unk	Public
9	Unk	710	267	2,700	Unk	Unk	Public
13	Unk	1,000	270	2,200	Unk	Unk	Public
14	Unk	800	338	571	Unk	Unk	Public
15	Unk	414	252	1,000	Unk	Unk	Public
23	Unk	639	320	1,056	Unk	Unk	Public
25	Unk	540	287	1,120	Unk	Unk	Public
27	Unk	550	321	1,468	Unk	Unk	Public
42	Unk	550	260	2,100	Unk	Unk	Public

NOTE: gpm - Gallons per minute.
Unk - Unknown.
[1]All wells are part of the same public water supply system serving the population of the City of Savannah.

APPENDIX IV

SOIL BORING LOGS

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HTRW DRILLING LOG

1. COMPANY NAME: SAIC	2. DRILL SUBCONTRACTOR: RE Wright (SAIC)	DISTRICT: USCOE Savannah
3. PROJECT: Hunter AAF CAP Part A UST Sites	4. LOCATION: Bldg 8059, Tanks 27+28	HOLE NUMBER: I-1
5. NAME OF DRILLER: Andy Knickerbocker	6. MANUFACTURER'S DESIGNATION OF DRILL: Geoprobe Salina, KA	SHEET 1 OF 2
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: GBR 4-15-98; 2" dia. macrocore; acetate liner = 4' lgth; shoe to drive cap=4.6'; push rods = 3' + 4'; large bore rods = 3', diam = 1.5"; screen length = 3-5'; screen diam. = 1" dia.	8. HOLE LOCATION: I-1	
	9. SURFACE ELEVATION: TBD	
	10. DATE STARTED: 4-15-98	11. DATE COMPLETED: 4-15-98
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: GBR 4-15-98 See water level 6.6'	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: See water level log	
14. TOTAL DEPTH OF HOLE: 8' NA 11.0' ft BGS	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): See water level log	

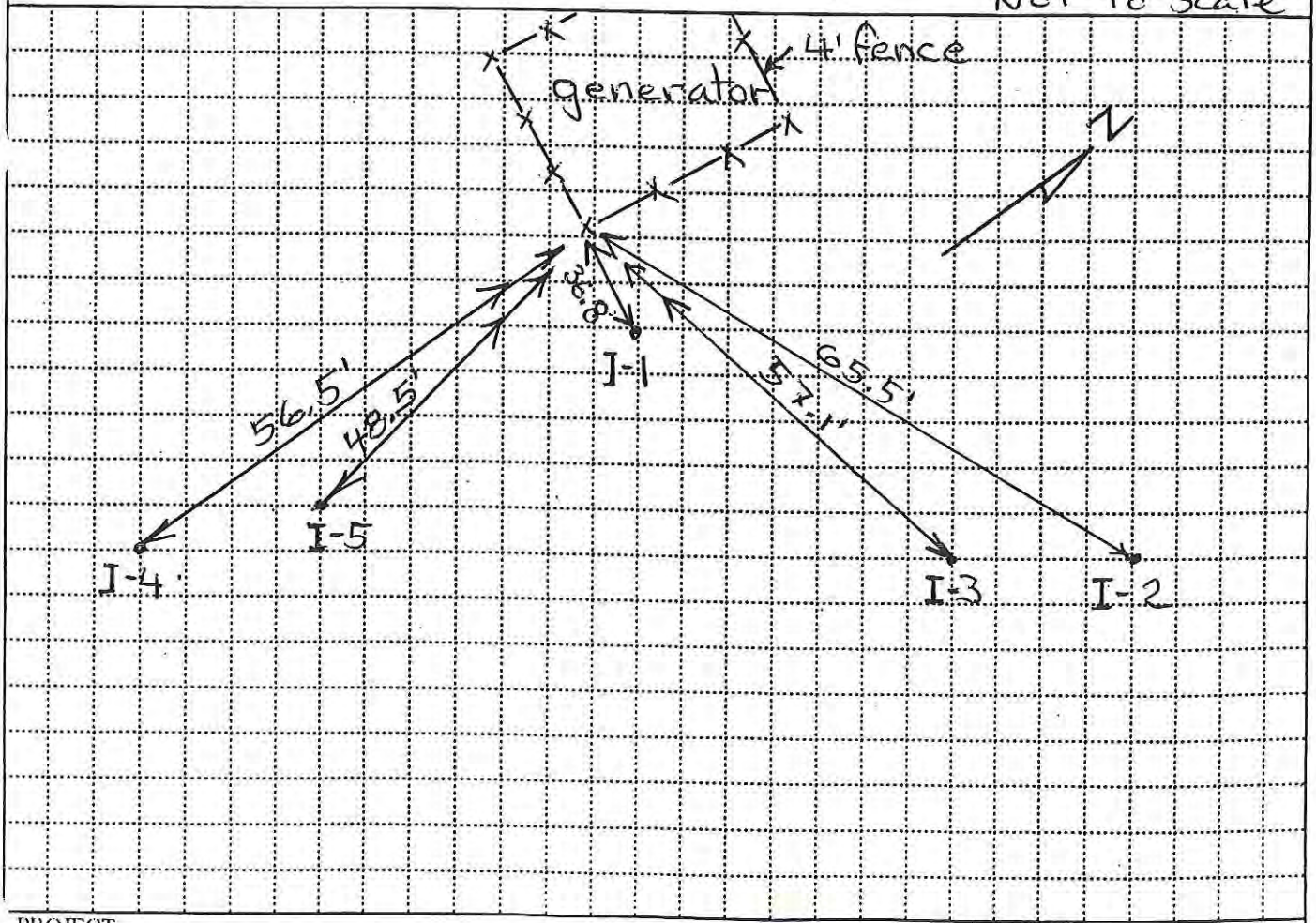
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	BTEX/VOC	PAH/METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
Soil / water	2 / 1	2 / 1	DRO 2/0	GRO 2/0	NA	0 %

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
piezometer	✓	NA	NA	John B Reeves

LOCATION SKETCH/COMMENTS

SCALE: Not to scale



PROJECT	HOLE NO.
Hunter AAF CAP Part A UST Sites	I-1

ENG FORM 5056-R, AUG 94 (Proponent: CECW-EG)

DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMP OR CORE BOX N (E)		
0'	0' to 0.4' Top Soil 0.4' to 2.6' gradational Med grained quartz sand, moist soft sub angular to subrounded grains, poorly sorted pale yellow 2.5Y 7/4 (SW)	0' to 2' see Note at 6.0' to 6.6'		2' to 4' HI 1102	start 0855 end 0900 drilled 4' recovered 3.2'
4'	2.6' to 3.2' moist organic fine sand with laminations of light gray inorganic sand soft (OL) 10YR 2/1 black gradational same as (SW) above gradational same as (OL) above gradational same as (SW) above to 8.0'	6.0 to 6.6 PID not taken due to high humidity		6.0' to 6.6 HI 1104	start 0905 end 0910 drilled 4' recovered 4'
8'	WT same as (SW) above except wet water sample taken from 7.0 - 11.0 ft BGS TD = 11.0			HI 1200 ground water	

PROJECT: Hunter AAF CAP Part A UST Sites

HOLE NO:

HTRW DRILLING LOG

1. COMPANY NAME: SAIC	DISTRICT: USACE Savannah	HOLE NUMBER: I-2
	2. DRILL SUBCONTRACTOR: RE Wright (SAIC)	SHEET: SHEETS OF
3. PROJECT: Hunter AAF CAP Part A UST Sites	4. LOCATION: Bldg 8059 Tanks 27 & 28	
5. NAME OF DRILLER: Andy Knickerbocker	6. MANUFACTURERS DESIGNATION OF DRILL: Geoprobe Salina KA	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" dia macrocore Acetate liner 4', shoe to drive cap 4.6" push rods 3' & 4', large bore rods = 3" 1.5" ID Screen length 3.5', screen ~~length~~ diameter = 1".	8. HOLE LOCATION: I-2	
	9. SURFACE ELEVATION: TBD	
	10. DATE STARTED: 4-15-98	11. DATE COMPLETED: 4-15-98
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 5.0'	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: See water level log	
14. TOTAL DEPTH OF HOLE: 8' 10' KG 4/24/98	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): See water level log	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	~~VOC~~ BTEX	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
Soil/water	2/1	2/1	DRO 2/0	GRO 2/0	NA	65

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Piezometer	✓	NA	NA	John B Reeves

LOCATION SKETCH/COMMENTS — SCALE:

See page 20

PROJECT	HOLE NO.
Hunter AAF CAP Part A UST Sites	I-2

ENG FORM 5056-R, AUG 94 (Proponent: CECW-EG)

USCS (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	(F)	
	0	0' to 0.3' Topsoil DBF 4-15-98 0.3' to ~~1.6~~ 2.7' organic sandy soil (OL) med grained sand Sub angular grains soft moist dark gray 10YR4/1 well sorted	1' to 2.7' to humid to take PID readings		1' to 2.7 HI-210	Start 1025 end 1030 drilled 4' recovered 2.7'
	4'	4' to 8' same as above except for organics ~~~ WT ~~~			4' to 5' H1210	Start 1035 end 1040 drilled 4' recovered 2.5'
	8'					

PROJECT: Hunter AAF CAP Part A UST sites

HOLE NO: I-2

HTRW DRILLING LOG

1. COMPANY NAME: SAIC	2. DRILL SUBCONTRACTOR: R E Wright (SAIC)	DISTRICT: USACOE Savannah; HOLE NUMBER: I-3; SHEET 1 OF 1
3. PROJECT: Hunter AAF CAP Part A UST Sites	4. LOCATION: Bldg 8059, Tanks 27 & 28	
5. NAME OF DRILLER: Andy Knickerbocker	6. MANUFACTURER'S DESIGNATION OF DRILL: Geoprobe Salina KA	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" dia macrocore; Acetate liner 4' shoe to drive cap 4.6'; Push rods 3" ±4', large bore rods 3' by 1.5" dia. Screen 3.5' x 1" diameter	8. HOLE LOCATION: I-3	
	9. SURFACE ELEVATION: TBD	
	10. DATE STARTED: 4-15-98	11. DATE COMPLETED: 4-15-98
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 4.8'	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: See water level log	
14. TOTAL DEPTH OF HOLE: 9.8'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): See water level log	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
Soil/Water	2/1	2/1	DRO 2/0	GRO 2/0	NA	70

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Piezometer	✓	NA	NA	John B Reeves

LOCATION SKETCH/COMMENTS: See page 36 for I-9 log. SCALE:

See page 20

PROJECT	HOLE NO.
Hunter AAF CAP Part A UST Sites	I-3

ENG FORM 5056-R, AUG 94 (Proponent: CECW-EG)

USCS (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	(F)	
	0'	0' to 0.8' coarse grained quartz sand used as fill material pale yellow 2.5Y8/4 moist & soft 0.8' to 2.8' 10YR3/3 dark brown moist soft sandy organic soil fine grain poorly sorted soft & moist native material	NA	NA	1' to 2.8' H131Ø1	Start 1115 end 1120 drilled 4' recovered 2.8'
	4'	4.0' to 6.8' same as above ~~ WT ~~	NA	NA	4 to 4.8' H131Ø3	Start 1130 end 1135 drilled 4' recovered 2.8'
	8'					

PROJECT HAAF UST

BOR. NO I-3

HTRW DRILLING LOG

1 COMPANY NAME: SAIC	DISTRICT: USACE Savannah	HOLE NUMBER: I-4
3. PROJECT: Hunter AAF CAP Part A UST Sites	2 DRILL SUBCONTRACTOR: RE Wright (SAIC)	SHEET 1 OF 1
5 NAME OF DRILLER: Andy Knickerbocker	4. LOCATION: Bldg 8059 Tanks 27+28	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" dia macrocore	6. MANUFACTURERS DESIGNATION OF DRILL: Geoprobe Salina, KA	
Acetate liner = 4', Shoot to drive past 4.6'	8. HOLE LOCATION: I-4	
Push rods = 3' + 4' Large bore rods = 3' x 1.5"	9. SURFACE ELEVATION: TBD	
Screen length = 3.5' screen diameter = 1" diameter	10. DATE STARTED: 4-15-98	11. DATE COMPLETED: 4-15-98
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 5.0'	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: See water level log	
14. TOTAL DEPTH OF HOLE: 8' 10.0' 5/4/98	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): See water level log	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
Soil/water	2/1	2/1	RO 2/0	GRO 2/0	NA	46

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Piezometer	✓	NA	NA	John B Rennett

LOCATION SKETCH/COMMENTS: See page 43 for I-A log SCALE:

See page 20

PROJECT	HOLE NO.
Hunter AAF CAP Part A UST Sites	I-4

ENG FORM 5056-R, AUG 94 (Proponent: CECW-EG)

(A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	(F)	
	0'	0' to 0.2 Top Soil 4-15-98 0.2' to 0.7 very fine to medium organic sand 20% silt soft & moist poorly sorted 7.5YR3/2 dark brown 0.7 to 2.5' same as above	Too humid	N/A	0.5' to 2.5' H14101	Start 1240 end 1245 drilled 4' recovery 2.5
	4'	4.0' to 5.2' same as above WT		N/A	4' to 5.0' H14103	Start 1255 end 1300 drilled 4' recovery 1.2'
	8'					

PROJECT: HAAF UST

BOR NO: I-4

HTRW DRILLING LOG

1. COMPANY NAME: SAIC	2. DRILL SUBCONTRACTOR: RE Wright (SAIC)	DISTRICT: USACE Savannah; HOLE NUMBER: I-5; SHEET 1 OF SHEETS
3. PROJECT: Hunter AAF CAP Part A UST Sites	4. LOCATION: Bldg. 8059 Tanks 27+28	
5. NAME OF DRILLER: Andy Knickerbocker	6. MANUFACTURERS DESIGNATION OF DRILL: Geoprobe Saliva kA	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" dia macrocore; Acetate Liner 4' Geoprobe drive up 4.6'; Push rods 3'+4' Large bore rod 3'x 1"; Screen length = 3.5' x 1"	8. HOLE LOCATION: I-5	
	9. SURFACE ELEVATION: TBD	
	10. DATE STARTED: 4-15-98	11. DATE COMPLETED: 4-15-98
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 5.6'	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: see water level log	
14. TOTAL DEPTH OF HOLE: 7.5'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): see water level log	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC BTEX	PAH METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
Soil / Water	2 / 1	2 / 1	2 / 0	2 / 0	NA	50
22. DISPOSITION OF HOLE	**BACKFILLED**	**MONITORING WELL**	**OTHER (SPECIFY)**	**23. SIGNATURE OF INSPECTOR**		
Piezometer	✓	NA	NA	John B Reeves		

LOCATION SKETCH/COMMENTS: See page 50 for I-B log SCALE:

See page 20

PROJECT	HOLE NO.
Hunter AAF CAP Part A UST Sites	I-5

ENG FORM 5056-R, AUG 94 (Proponent: CECW-EG)

USCS (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	(F)	
	0'	0' to 1.7' coarse grained quartz sand used as fill material 1.7' to 2.1' 10YR3/3 dark brown moist soft fine grained poorly sorted	0 ppm		0' to 2.1' H15101	Start 1355 end 1400 drilled 4' recovered 2.1'
	4'	4.0' to 5.6' same as above w/ 1	0 ppm		4' to 5.6' H15103	Start 1410 end 1415 drilled 3.5' recovered 1.6'
	8'	Note: Hit tank pad at 7.5'				

PROJECT

HOLE NO: I5

HTRW DRILLING LOG

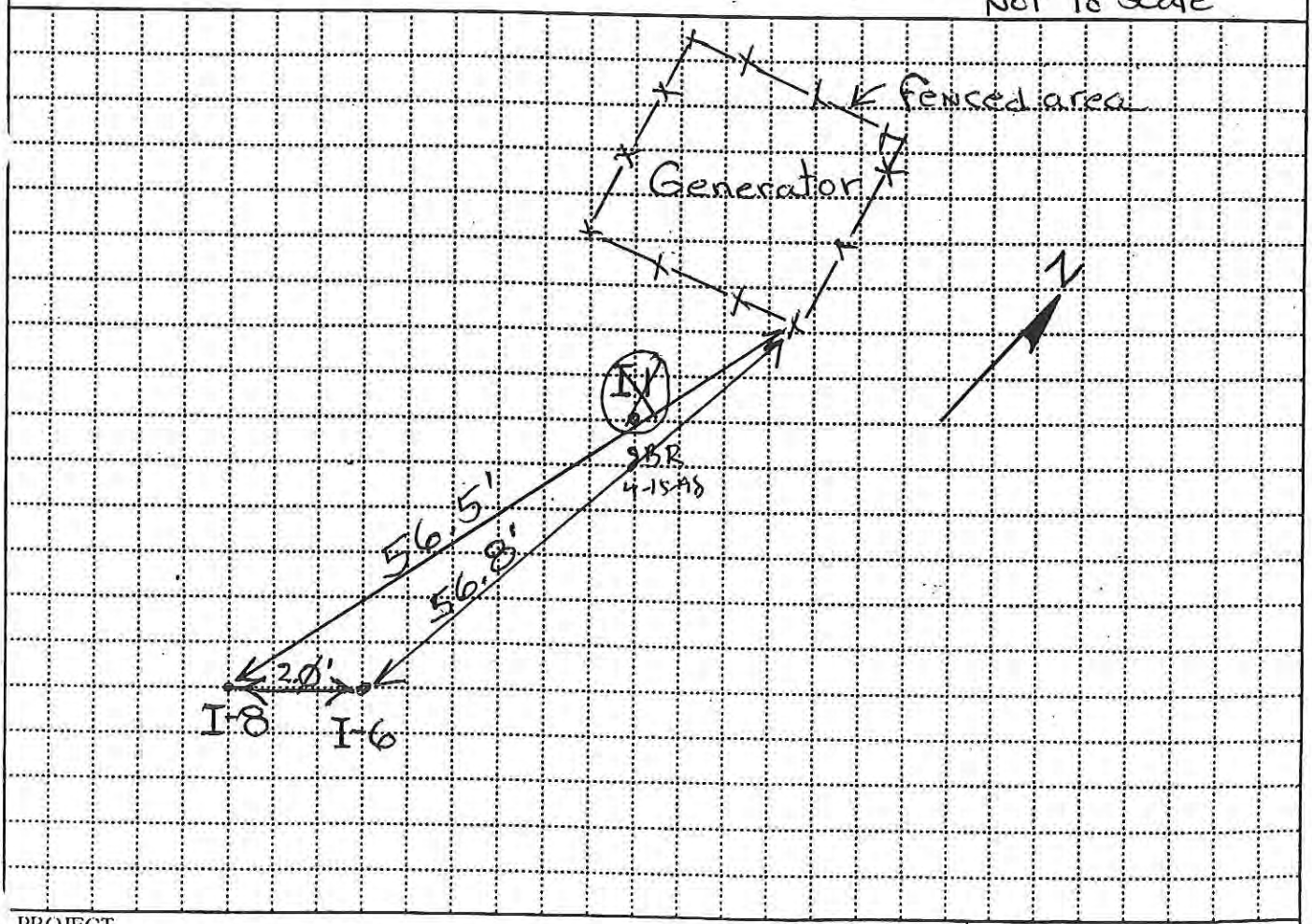
1. COMPANY NAME: SAIC	2. DRILL SUBCONTRACTOR: REWright (SAIC)	DISTRICT: USCOE Savannah; HOLE NUMBER: I 6+18; SHEET 1 OF 2
3. PROJECT: Hunter AAF CAP Part A UST Sites	4. LOCATION: Bldg 8059 ; TKS 27+28	
5. NAME OF DRILLER: Andy Knickerbocker	6. MANUFACTURER'S DESIGNATION OF DRILL: Geoprobe Salina KA	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" dia macrocore; acetate liner - 4' long; shoe to drive cap = 4.6' long; push rods = 3' and 4' long.; large bore rods = 3' long. 1.5" dia. screen = 3.5' long = 1" dia.	8. HOLE LOCATION: I area Bldg. 8059 Tanks 27+28	
	9. SURFACE ELEVATION: TBD	
	10. DATE STARTED: 4-15-98	11. DATE COMPLETED: 4-15-98
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 5.0 ft BGS	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: See water level log	
14. TOTAL DEPTH OF HOLE: 55 ft BGS	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): See water level log	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	1 NA	John B 6/12/98 NA

20. SAMPLES FOR CHEMICAL ANALYSIS	BTEX VOC	METALS	PAH OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
water	4	NA	4	NA	NA	100

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
vertical profile	✓	NA	NA	John B Reeves

LOCATION SKETCH/COMMENTS — SCALE: Not to scale



PROJECT: HUNTER AAF CAP Part A UST Sites — HOLE NO.: I 6+18

ENG FORM 5056-R, AUG 94 (Proponent: CECW-EG)

USCS (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMP OR CORE BOX N (E)	(F)
	0				
	5'	▽ WT.			
	10'	sampled interval HI63Ø1	at 11.Ø' to 15.Ø' ground surface 1Ø' below ground water surface Sample HI G3Ø1 collected		
	15'				
	2Ø'				
	4	gBR 4-15-96			
		sampled interval HI63Ø2	2Ø' below groundwater surface Sample HI G3Ø2 collected 21-25.Ø'		
	25'				
	3Ø'				
		sampled interval HI63Ø3	3Ø' below groundwater surface Sample HI-G3Ø3 collected 31-35'		
	35'				
	8	gBR 4-15-96			
	4Ø'				
		sampled interval HI63Ø4	4Ø' below groundwater surface Sample HI-G3Ø4 collected		
	45'				
		45.Ø-47.Ø- well sorted, quartz sand, medium grained subangular to subrounded light greenish grey 5G4/1	47.Ø' BGS soil sample taken for VOA reading Head Space >2ØØØ		51-55' Groundwater Sample taken HI63Ø5
	5Ø'				
		sampled interval			

Hunter AAF CAP Part A UST sites

BOR. NO. I-6

HTRW DRILLING LOG

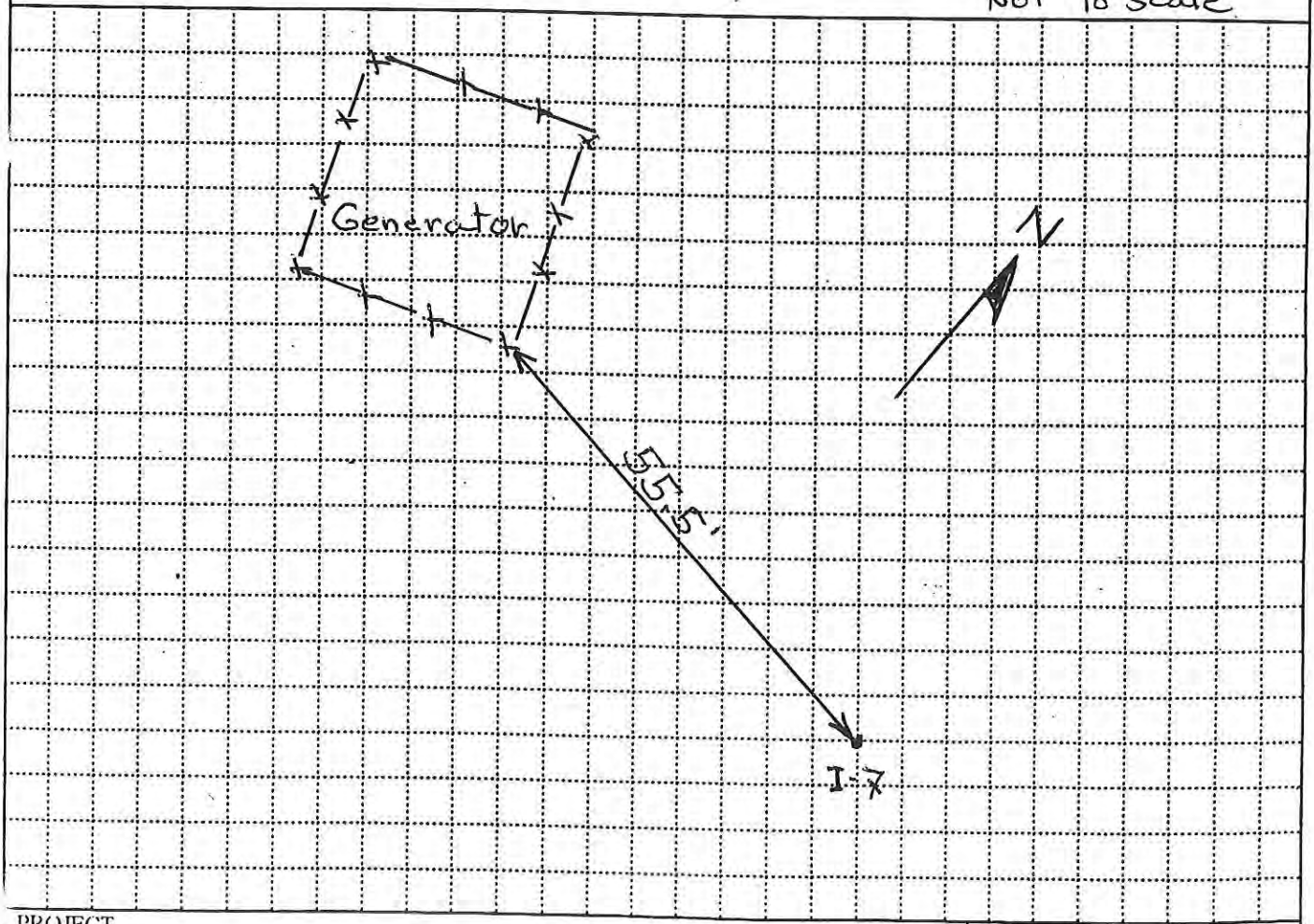
1. COMPANY NAME: SAIC	DISTRICT: USACE Savannah	HOLE NUMBER: I-7 & I-9 JBR 4-18-98
	2. DRILL SUBCONTRACTOR: RE Wright (SAIC)	SHEET 1 OF 2 SHEETS
3. PROJECT: Hunter AAF CAP Part A UST Sites	4. LOCATION: Bldg. 8059 Tanks 27+28	
5. NAME OF DRILLER: Andy Knickerbocker	6. MANUFACTURERS DESIGNATION OF DRILL: Geoprobe Salina, KA	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" dia macrocore acetate liner = 4' long, shoe to drive casing = 4.6' long, push rods = 3.0 and 4.0 long, large bore rods = 3' long and 1.5" diam, screen = 3.5' long	8. HOLE LOCATION: I-7 & I-9	
	9. SURFACE ELEVATION: TBD	
	10. DATE STARTED: 4-16-98	11. DATE COMPLETED: 4-16-98
12. OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED: 5.0 ft BGS	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: See water level log	
14. TOTAL DEPTH OF HOLE: 45'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): See water level log	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA	NA	NA	NA

20. SAMPLES FOR CHEMICAL ANALYSIS	BTEX VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
water	4	NA	4	NA	NA	100

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Vertical profile	✓	NA	NA	John B Reeves

LOCATION SKETCH/COMMENTS — SCALE: Not to scale



PROJECT: Hunter AAF CAP Part A UST Sites

HOLE NO.: I-7 & I-9 JBR 4-18-98

ENG FORM 5056-R, AUG 94

(Proponent: CECW-EG)

(A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMP OR CORE BOX N (E)	(F)
	0'				
	5'	▽ WT ~~~~			
	10'	sampled interval	At 10' below groundwater surface Sample HI73Ø1 collected 11-15' BGS		
	15'				
	20'	sampled interval	At 2Ø' below groundwater surface Sample HI73Ø2 collected 21-25' BGS		
	25'				
	3Ø'	sampled interval	At 3Ø below groundwater surface sample HI73Ø3 31-35' BGS		
	35'				
	40'	sampled interval	HI73Ø4 41-45' BGS		
	45'				

PROJECT HAAF CAP A UST Site Investigation HOLE NO. I-7

USCS (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	(F)	
	0	gravelly sand: poorly sorted coarse grained fill material	Φ-2 HS = >2000 ppm ~~Too humid FOR PID~~	NA mwH 4/21	HI911 (dup) HI91Φ1 (SOIL)	START: Φ82Φ STOP: Φ83Φ DRILLED: 4.Φ RECOVERED: 3.1
	1.Φ	10YR 3/3 - Dark brown Moist, soft, silty organic rich sand fine grained, bimodal homogenous, non plastic				
	2.Φ		2-3.1 HS = 130Φ ppm ~~Too humid FOR PID~~	NA mwH 4/21		
	3.Φ	NO RECOVERY				Hammer was not used on geoprobe
	4.Φ	SAME AS ABOVE	4-5.5 HS = >2000 ppm ~~Too Humid FOR PID~~	NA mwH 4/21	HI91Φ3 HI9123 (SPLIT) (SOIL)	START: Φ835 STOP: Φ84Φ DRILLED: 4.Φ' RECOVERED: 2.3'
	5.Φ	~~WET~~				
		WT	5.5 ft BGS			
	6.Φ	MODERATELY PLASTIC WET CLAY, SANDY, BROWN				
		fine grained sand same as 4-4.5, soft wet, bimodal, 15% silt some organics				
	7.Φ				WATER HI92ΦΦ HI921Φ (DUP) HI922Φ (SPLIT)	
		NO Recovery 6.3 - 8.Φ				Hammer was not used on geoprobe
	8.Φ					
		STEEL SCREENED INTERVAL FOR WATER EXTRACTION 7.Φ - 11.Φ ft				START: Φ845 STOP: Φ85Φ DRILLED TO 11.Φ ft ~~RECOVERED~~ BGS
	9.Φ					
	2Φ					

PROJECT: HAAF CAP A UST INVESTIGATION

HOLE NO: I-9

TD = 11.Φ ft BGS

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DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	(F)	
0.0	coarse gravelly sand; fill	0-2 HS = 100 ppm	NA	HIA101 HIA121	START : 0950 STOP : 0955 DRILLED: 4.0' REC'D: 3.2'
1.0	Soft, moist, poorly sorted, silty sand fine grained 15-20% silt; 7.5YR 3/2 Dark Brown				
2.0		2-3.2 HS = 70 ppm	NA		
3.0	NO RECOVERY				Hammer was not used on geoprobe
4.0	SAME AS ABOVE	4-4.8 HS = 250 ppm	NA	HIA103	START 1000 STOP : 1005 DRILLED 4.0 ft REC'D: 0.8
5.0	SAMPLE ~~FELL OUT~~ NOT OBTAINED; INTERPRETED TO BE SO SATURATED THAT SAMPLE COULD NOT BE PUSHED INTO TUBE; ~~SAT~~ CUTTING SHOE IS WET ALSO	WT ?			
6.0	STEEL SCREEN FOR SAMPLING OF GW 6.0 - 10.0 ft BGS		NA		
7.0				HIA2001 HIA2201	Hammer not used
8.0	Dark Brown water.		NA		START : 1010 STOP : 1015 TD = 10.0 ft BGS
9.0					
10.0	TD = 10.0				Hammer not used

installed 4/21/98

PROJECT: HAAF CAP A UST INVEST.

BOREHOLE NO.: ~~I-10~~ I-A

50

(A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	(F)	
	0	COARSE GTZ. SAND FILL	ϕ-2 HS= 22ϕ ppm	NA	HIB1ϕ1 111ϕ HIB111 111ϕ hrs	START: 11ϕ5 STOP. 111ϕ DRILLED: 4.ϕ, REC'D: 2.8
	1.ϕ	SILTY, ORGANIC RICH SAND, FINE GRAINED MOIST, VERY SOFT V. dark gray. brown (10YR 3/2)				
		- - - gradational contact				
		very fine grained sand ~~less~~ 10% silt; moist very soft; 2.5Y 5/4 (light olive brown)				
	2.ϕ		2-2.8 HS= 15ϕ ppm	NA		
	3.ϕ	NO RECOVERY 2.8-4.ϕ				
	4.ϕ	VERY FINE GRAINED SAND WELL SORTED, SUBANGULAR, SOFT MOIST INTERBEDDED (1" laminations) with silty organic sand Black. 4.6	4-4.6 HS= >2ϕϕϕ ppm.	NA	HIB1ϕ3 1125 hrs.	START: 1115 STOP: 112ϕ DRILLED: 4 ϕ' REC'D: ~~2.7'~~ 1.4
	5.ϕ	SAME AS ABOVE BUT WET				
	6.ϕ	NO RECOVERY 5.4-8.ϕ				
	7.ϕ	7.ϕ STEEL GEOPROBE SCREENED INTERVAL FOR GROUNDWATER COLLECTION, 7.ϕ - 11.ϕ BGS		NA	HIB2ϕϕ 1135 hrs.	
	8.ϕ					START: 1125 STOP: 113ϕ DRILLED TO 11.ϕ'
	9.ϕ					HAMMER WAS USED
	10.ϕ	11.ϕ				

PROJECT: HAAF - CAP A UST INVESTIGATIONS | HOLE NO: I-B

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APPENDIX V

SOIL LABORATORY REPORTS

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USTs 27 & 28, Building 8059
Hunter Army Airfield
Chatham County, Facility ID: 9-025083

TABLE V-A. SUMMARY OF SOIL ANALYTICAL RESULTS[3]

Location		I-1	I-1	I-2	I-2	I-3	I-3	I-3	I-4	I-4	I-5	I-5
Sample ID		HI1102	HI1104	HI2101	HI2103	HI3101	HI3110[4]	HI3103	HI4101	HI4103	HI5101	HI5103
Date Collected	Applicable	04/15/98	04/15/98	04/15/98	04/15/98	04/15/98	04/15/98	04/15/98	04/15/98	04/15/98	04/15/98	04/15/98
Depth (ft BGS)	Standards[1]	2.0 to 3.2	6.0 to 6.6	1.0 to 2.7	4.0 to 5.0	1.0 to 2.8	1.0 to 2.8	4.0 to 4.8	0.5 to 2.5	4.0 to 4.5	0.0 to 2.1	4.0 to 5.6
VOCs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	0.008	0.0023 U	0.0024 U	0.0023 U	0.0023 UJ	0.0024 U	0.0023 U	0.0023 U	0.0021 U	0.0022 U	0.0022 U	0.0023 U
Toluene	6.00	0.0094 =	0.0024 U	0.0023 U	0.0023 UJ	0.0024 U	0.0023 U	0.0023 U	0.0021 U	0.0042 =	0.0022 U	0.0023 U
Ethylbenzene	10.00	0.0023 U	0.0024 U	0.0023 U	0.0023 UJ	0.0024 U	0.0023 U	0.0023 U	0.0021 U	0.0022 U	0.0022 U	0.0023 U
Xylenes	700.00	0.0069 U	0.0071 U	0.0068 U	0.0069 UJ	0.007 U	0.0069 U	0.007 U	0.0064 U	0.0066 U	0.0065 U	0.0069 U
TPH-DRO	NRC	6.06 =	1.15 U	2.22 U	6.2 U	5.66 U	6.37 U	5.83 U	2.69 U	1.91 U	1.26 U	3.03 U
TPH-GRO	NRC	0.575 UJ	0.595 U	0.568 UJ	0.575 UJ	0.588 U	0.575 UJ	0.581 UJ	0.532 UJ	0.549 UJ	0.543 U	0.575 U
PAHs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
2-Chloronaphthalene	NRC	0.383 U	0.397 U	1.52 U	1.53 U	1.57 U	1.53 U	1.55 U	1.42 U	1.46 U	0.362 U	0.383 U
Acenaphthene	N/A[2]	0.383 U	0.397 U	1.52 U	1.53 U	1.57 U	1.53 U	1.55 U	1.42 U	1.46 U	0.362 U	0.383 U
Acenaphthylene	NRC	0.383 U	0.397 U	1.52 U	1.53 U	1.57 U	1.53 U	1.55 U	1.42 U	1.46 U	0.362 U	0.383 U
Anthracene	N/A[2]	0.383 U	0.397 U	1.52 U	1.53 U	1.57 U	1.53 U	1.55 U	1.42 U	1.46 U	0.362 U	0.383 U
Benzo(a)anthracene	N/A[2]	0.383 U	0.397 U	1.52 U	1.53 U	1.57 U	1.53 U	1.55 U	1.42 U	1.46 U	0.362 U	0.383 U
Benzo(a)pyrene	N/A[2]	0.383 U	0.397 U	1.52 U	1.53 U	1.57 U	1.53 U	1.55 U	1.42 U	1.46 U	0.362 U	0.383 U
Benzo(b)fluoranthene	N/A[2]	0.383 U	0.397 U	1.52 U	1.53 U	1.57 U	1.53 U	1.55 U	1.42 U	1.46 U	0.362 U	0.383 U
Benzo(g,h,i)perylene	N/A[2]	0.383 U	0.397 U	1.52 U	1.53 U	1.57 U	1.53 U	1.55 U	1.42 U	1.46 U	0.362 U	0.383 U
Benzo(k)fluoranthene	N/A[2]	0.383 U	0.397 U	1.52 U	1.53 U	1.57 U	1.53 U	0.779 J	1.42 U	1.46 U	0.362 U	0.383 U
Chrysene	N/A[2]	0.383 U	0.397 U	1.52 U	1.53 U	0.901 J	1.53 U	1.12 J	0.911 J	1.46 U	0.362 U	0.201 J
Dibenzo(a,h)anthracene	N/A[2]	0.383 U	0.397 U	1.52 U	1.53 U	1.57 U	1.53 U	1.55 U	1.42 U	1.46 U	0.362 U	0.383 U
Fluoranthene	N/A[2]	0.383 U	0.397 U	1.52 U	1.53 U	1.11 J	0.964 J	1.15 J	1.42 U	1.46 U	0.362 U	0.208 J
Fluorene	N/A[2]	0.383 U	0.397 U	1.52 U	1.53 U	1.57 U	1.53 U	1.55 U	1.42 U	1.46 U	0.362 U	0.383 U
Indeno(1,2,3-cd)pyrene	N/A[2]	0.383 U	0.397 U	1.52 U	1.53 U	1.57 U	1.53 U	1.55 U	1.42 U	1.46 U	0.362 U	0.383 U
Naphthalene	N/A[2]	0.383 U	0.397 U	1.52 U	1.53 U	1.57 U	1.53 U	1.55 U	1.42 U	1.46 U	0.362 U	0.383 U
Phenanthrene	N/A[2]	0.383 U	0.397 U	1.52 U	1.53 U	1.57 U	1.53 U	1.55 U	1.42 U	1.46 U	0.362 U	0.383 U
Pyrene	N/A[2]	0.383 U	0.397 U	1.52 U	1.53 U	1.1 J	0.794 J	1.55 U	1.01 J	1.46 U	0.362 U	0.253 J

NOTE: [1]Georgia Department of Natural Resources (GA DNR) Applicable Soil Threshold Levels (i.e., Table A, column 2).
[2]Not applicable; the health-based threshold level exceeds the expected soil concentration under free product conditions.
[3]All field work and analytical sampling were performed prior to the release of the new GA DNR Corrective Action Plan (CAP)-Part A Guidance (i.e., May 1998); therefore, the new analytical methods specified were not used.
[4]Duplicate sample for sample collected from location I-3 at a depth of 1.0 to 2.8 feet BGS.
BGS - Below ground surface.
NRC - No regulatory criteria.
PAHs - Polynuclear aromatic hydrocarbons.
TPH-DRO - Total petroleum hydrocarbon–diesel-range organics.
TPH-GRO - Total petroleum hydrocarbon–gasoline-range organics.
VOCs - Volatile organic compounds.

Laboratory Qualifier
U - Indicates the compound was not detected at the concentration reported.
J - Indicates the value for the compound is an estimated value.
UJ - Indicates the compound was not detected at the reported concentration and the concentration was estimated.
= - Indicates the compound was detected at the concentration reported.

TABLE V-A. SUMMARY OF SOIL ANALYTICAL RESULTS[3] (continued)

Location Sample ID Date Collected Depth (ft BGS)	Applicable Standards[1]	I-9 HI9101 04/21/98 0.0 to 2.0	I-9 HI9111 04/21/98 0.0 to 2.0	I-9 HI9103 04/21/98 4.0 to 5.5	I-A HIA101 04/21/98 0.0 to 2.0	I-A HIA103 04/21/98 4.0 to 4.8	I-B HIB101 04/21/98 0.0 to 2.0	I-B HIB111 04/21/98 0.0 to 2.0	I-B HIB103 04/21/98 4.0 to 4.6
VOCs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	0.008	0.0022 U	0.0022 U	0.0024 U	0.0022 U	0.0024 U	0.0022 U	0.0022 U	0.0025 U
Toluene	6.00	0.0037 =	0.0027 =	0.0027 =	0.015 =	0.0481 =	0.0421 =	0.0245 =	0.0237 =
Ethylbenzene	10.00	0.0022 U	0.0022 U	0.0024 U	0.0022 U	0.0024 U	0.0022 U	0.0022 U	0.0025 U
Xylenes	700.00	0.0065 U	0.0064 U	0.0072 U	0.0065 U	0.007 U	0.0066 U	0.0064 U	0.0075 U
TPH-DRO	NRC	4.4 U	3.91 U	2.08 U	12 =	2.99 U	3.71 U	6.9 =	6.79 =
TPH-GRO	NRC	0.543 U	0.538 U	0.602 U	0.543 U	0.174 J	0.549 U	0.538 U	1.25 UJ
PAHs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
2-Chloronaphthalene	NRC	1.44 U	1.43 U	1.58 U	1.42 U	1.55 U	1.46 U	1.43 U	1.65 U
Acenaphthene	N/A[2]	1.44 U	1.43 U	1.58 U	1.42 U	1.55 U	1.46 U	1.43 U	1.65 U
Acenaphthylene	NRC	1.44 U	1.43 U	1.58 U	1.42 U	1.55 U	1.46 U	1.43 U	1.65 U
Anthracene	N/A[2]	1.44 U	1.43 U	1.58 U	1.42 U	1.55 U	1.46 U	1.43 U	1.65 U
Benzo(a)anthracene	N/A[2]	0.726 J	1.43 U	1.58 U	1.42 U	1.55 U	1.46 U	0.837 J	1.65 U
Benzo(a)pyrene	N/A[2]	1.44 U	1.43 U	1.58 U	1.42 U	1.55 U	1.46 U	1.43 U	1.65 U
Benzo(b)fluoranthene	N/A[2]	0.798 J	1.43 U	1.58 U	1.42 U	1.55 U	1.46 U	1.43 U	1.65 U
Benzo(g,h,i)perylene	N/A[2]	1.44 U	1.43 U	1.58 U	1.42 U	1.55 U	1.46 U	1.43 U	1.65 U
Benzo(k)fluoranthene	N/A[2]	0.913 J	1.43 U	1.58 U	1.42 U	1.55 U	1.46 U	0.825 J	1.65 U
Chrysene	N/A[2]	1.04 J	1.43 U	1.58 U	0.957 J	1.55 U	0.77 J	1.12 J	1.65 U
Dibenzo(a,h)anthracene	N/A[2]	1.44 U	1.43 U	1.58 U	1.42 U	1.55 U	1.46 U	1.43 U	1.65 U
Fluoranthene	N/A[2]	1.26 J	1.43 U	1.58 U	0.744 J	1.55 U	1.46 U	0.920 J	1.65 U
Fluorene	N/A[2]	1.44 U	1.43 U	1.58 U	1.42 U	1.55 U	1.46 U	1.43 U	1.65 U
Indeno(1,2,3-cd)pyrene	N/A[2]	1.44 U	1.43 U	1.58 U	1.42 U	1.55 U	1.46 U	1.43 U	1.65 U
Naphthalene	N/A[2]	1.44 U	1.43 U	1.58 U	1.42 U	1.55 U	1.46 U	1.43 U	1.65 U
Phenanthrene	N/A[2]	1.44 U	1.43 U	1.58 U	1.42 U	1.55 U	1.46 U	1.43 U	1.65 U
Pyrene	N/A[2]	1.48 =	1.43 U	1.58 U	1.32 J	1.55 U	0.962 J	1.63 =	1.65 U

NOTE: [1]Georgia Department of Natural Resources (GA DNR) Applicable Soil Threshold Levels (i.e., Table A, column 2).
[2]Not applicable; the health-based threshold level exceeds the expected soil concentration under free product conditions.
[3]All field work and analytical sampling were performed prior to the release of the new GA DNR Corrective Action Plan (CAP)-Part A Guidance (i.e., May 1998); therefore, the new analytical methods specified were not used.

BGS - Below ground surface.
NRC - No regulatory criteria.
PAHs - Polynuclear aromatic hydrocarbons.
TPH-DRO - Total petroleum hydrocarbon–diesel-range organics.
TPH-GRO - Total petroleum hydrocarbon–gasoline-range organics.
VOCs - Volatile organic compounds.

Laboratory Qualifier
U - Indicates the compound was not detected at the concentration reported.
J - Indicates the value for the compound is an estimated value.
UJ - Indicates the compound was not detected at the reported concentration and the concentration was estimated.
= - Indicates the compound was detected at the concentration reported.

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800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

CHAIN OF CUSTODY RECORD

COC NO.: 4/6 D

PROJECT NAME: CAP - Hunter AFB - Part A

PROJECT NUMBER: 0019

PROJECT MANAGER: Allison Bailey

Sampler (Signature): Mitchell Hall **(Printed Name):** Mitchell Hall

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Raod, Charleston, SC 29417

PHONE NO: (803) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	DRP	GRO	TOC	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
HI11Ø2	4/15/98	Ø9Ø5	~~Soil Water~~	X	X	X	X		2	~~Ø.Ø ppm~~ NA	2.Ø - 4.Ø ft
HI11Ø4	4/15/98	Ø915	soil	X	X	X	X		2	~~Ø.Ø ppm~~ NA	6.Ø - 8.Ø ft
HI41Ø3	4/15/98	13Ø5	soil	X	X	X	X		2	NA	4.Ø - 5.Ø ft
HI41Ø1	4/15/98	1245	soil	X	X	X	X		2	NA	Ø.5 - 2.5 ft
HI311Ø	4/15/98	1125	soil	X	X	X	X		2	NA	1.Ø - 2.8 ft
HI21Ø3	4/15/98	1Ø45	soil	X	X	X	X		2	NA	4.Ø - 5.Ø ft
HI21Ø1	4/15/98	1Ø3Ø	soil	X	X	X	X		2	~~Ø.Ø ppm~~ NA	1.Ø - 2.7 ft
HI84ØØ	4/15/98	135Ø	soil					X	1	NA	2-4 ft
HI31Ø1	4/15/98	1125	soil	X	X	X	X		2	NA	1.Ø - 2.8 ft
HI31Ø3	4/15/98	1135	soil	X	X	X	X		2	NA	4.Ø - 4.8 ft
HI51Ø3	4/15/98	1415	soil	X	X	X	X		2	NA	4.Ø - 4.6 ft
HI51Ø1	4/15/98	14ØØ	soil	X	X	X	X		2	NA	Ø.Ø - 2.Ø ft
HI11Ø3	4/16/98	1Ø25	soil	X	X	X	X		2	Ø.Ø ppm	4.Ø - 5.Ø ft

	Date/Time		Date/Time		
RELINQUISHED BY: Mitchell Hall	4/16/98 1315	RECEIVED BY:		TOTAL NUMBER OF CONTAINERS: 25	Cooler Temperature: 4°C
COMPANY NAME: SAIC		COMPANY NAME:		Cooler ID: 61	FEDEX NUMBER: NA
RECEIVED BY: Peter Hawkins	4/16/98 1315	RELINQUISHED BY:	Date/Time		
COMPANY NAME: ~~SAIC~~		COMPANY NAME:			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time		
COMPANY NAME:		COMPANY NAME:			

Hunter Army Airfield UST CAP-A Report
USTs 27 & 28, Building 8059, Facility ID: 9-025083

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Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

CHAIN OF CUSTODY RECORD

COC NO.: 42898D

PROJECT NAME: CAP - Hunter AFB - Part A

PROJECT NUMBER: 0019

PROJECT MANAGER: Allison Bailey

Sampler (Signature): Mitchell H. Hall (Printed Name): Mitchell Hall

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Raod, Charleston, SC 29417

PHONE NO: (803) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	DRO	GRO	TOC	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
HJ7111	4/20/98	1505	Soil	X	X	X	X		2	42 ppm	0.0 - 2.0 ft BGS
HJ7101	4/20/98	1505	soil	X	X	X	X		2	42 ppm	0.0 - 2.0 ft BGS
HJ7103	4/20/98	1515	Soil	X	X	X	X		2	0 ppm	4.0 - 4.6 ft BGS
HI9101	4/21/98	0830	Soil	X	X	X	X		2	>2000 ppm	0.0 - 2.0 ft BGS
HI9111	4/21/98	0830	soil	X	X	X	X		2	>2000 ppm	0.0 - 2.0 ft BGS
HI9103	4/21/98	0840	Soil	X	X	X	X		2	>2000 ppm	4.0 - 5.5 ft BGS
HIA101	4/21/98	1000	soil	X	X	X	X		2	100 ppm	0.0 - 2.0 ft BGS
HIA103	4/21/98	1010	soil	X	X	X	X		2	250 ppm	4.0 - 4.8 ft BGS
HIB111	4/21/98	1110	soil	X	X	X	X		2	220 ppm	0.0 - 2.0 ft BGS
HIB103	4/21/98	1125	soil	X	X	X	X		2	>2000 ppm	4.0 - 4.6 ft BGS
HIB101	4/21/98	1110	soil	X	X	X	X		2	220 ppm	0.0 - 2.0 ft BGS
HG7101	4/22/98	0930	soil	X	X	X	X		2	>2000 ppm	0.0 - 2.3 ft BGS
HG7111	4/22/98	0930	soil	X	X	X	X		2	>2000 ppm	0.0 - 2.3 ft BGS

RELINQUISHED BY: Mitchell Hall	Date/Time 4/22/98 1350	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS: 26	Cooler Temperature: 4°C
COMPANY NAME: SAIC		COMPANY NAME:		Cooler ID: 538	FEDEX NUMBER: NA
RECEIVED BY:	Date/Time 4/22/98 1330	RELINQUISHED BY:	Date/Time		
COMPANY NAME: GEL		COMPANY NAME:			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time		
COMPANY NAME:		COMPANY NAME:			

Hunter Army Airfield UST CAP-A Report
USTs 27 & 28, Building 8059, Facility ID: 9-025083

V-7

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Science Applications International Corporation — An Employee-Owned Company

800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

CHAIN OF CUSTODY RECORD

COC NO.: 42518A

PROJECT NAME: CAP - Hunter AFB - Part A

PROJECT NUMBER: 0019

PROJECT MANAGER: Allison Bailey

Sampler (Signature): Mitchell Hall (Printed Name): Mitchell Hall

LABORATORY NAME: Catlin Laboratories

LABORATORY ADDRESS: 1051 Johnnie Dodds Blvd. Suite C Mt. Pleasant, SC 29464

PHONE NO: (803)881-6000

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	GRAIN SIZE	MOISTURE CONTENT	PERMEABILITY	SPECIFIC GRAVITY	POROSITY	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
HL240ϕ	4/18/98	1500	soil	X	X	X	X	X	1	NA	2.ϕ - 4.ϕ ft
HD840ϕ	4/19/98	1020	soil	X	X	X	X	X	1	NA	4.ϕ - 6.ϕ ft
HJ640ϕ	4/16/98	1315	soil	X	X	X	X	X	1	NA	2.ϕ - 4.ϕ ft
HO540ϕ	4/18/98	1020	soil	X	X	X	X	X	1	NA	2.ϕ - 4.ϕ ft
HP540ϕ	4/10/98	ϕ945	soil	X	X	X	X	X	1	NA	4.ϕ - 6.ϕ ft
HI840ϕ	4/15/98	1350	soil	X	X	X	X	X	1	NA	2.ϕ - 4.ϕ ft
HH640ϕ	4/14/98	1535	soil	X	X	X	X	X	1	NA	ϕ.ϕ - 2.ϕ ft
HG640ϕ	4/7/98	1115	soil	X	X	X	X	X	1	NA	ϕ.ϕ - 2.ϕ ft

5/23/98

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS: 8	Cooler Temperature:
COMPANY NAME: SAIC	4/23/98 1120	COMPANY NAME:		Cooler ID:	FEDEX NUMBER:
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time		
COMPANY NAME: CAT LIN	4/23/98 11:25	COMPANY NAME:			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time		
COMPANY NAME:		COMPANY NAME:			

Hunter Army Airfield UST CAP-A Report
USTs 27 & 28, Building 8059, Facility ID: 9-025083

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI1102

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-06

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 2F609

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 13 Date Analyzed: 04/25/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	Benzene	2.3	U	U
108-88-3	Toluene	9.4		=
100-41-4	Ethylbenzene	2.3	U	U
1330-20-7	Xylenes (total)	6.9	U	U

Blank Verification
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FORM I VOA

FORM 1 Science Applications16-APR-1998 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HI1102

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-06

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 4E30033

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 13 decanted: (Y/N) N Date Extracted:04/23/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/29/98

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	6.06	B	= F01, F08

FORM I SV

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI1102

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA0158

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-06

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 1F4019

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 13 Date Analyzed: 04/23/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	575	U	UJ G-02

USE

FORM I VOA

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI1102

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-06

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4Q414

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 13 decanted: (Y/N) N Date Extracted: 04/21/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/23/98

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	383	U
91-58-7	2-chloronaphthalene	383	U
208-96-8	acenaphthylene	383	U
83-32-9	acenaphthene	383	U
86-73-7	fluorene	383	U
85-01-8	phenanthrene	383	U
120-12-7	anthracene	383	U
206-44-0	fluoranthene	383	U
129-00-0	pyrene	383	U
56-55-3	benzo(a)anthracene	383	U
218-01-9	chrysene	383	U
205-99-2	benzo(b)fluoranthene	383	U
207-08-9	benzo(k)fluoranthene	383	U
50-32-8	benzo(a)pyrene	383	U
193-39-5	indeno(1,2,3-cd)pyrene	383	U
53-70-3	dibenz(a,h)anthracene	383	U
191-24-2	benzo(g,h,i)perylene	383	U

V

FORM I SV-1 OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI1104

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-07

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 2F6010

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 16 Date Analyzed: 04/25/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	Benzene	2.4	U
108-88-3	Toluene	2.4	U
100-41-4	Ethylbenzene	2.4	U
1330-20-7	Xylenes (total)	7.1	U

FORM I VOA

FORM I Science Applications16-APR-1998 SA

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HI1104

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-07

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 4E30043

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 16 decanted: (Y/N) N Date Extracted: 04/23/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/29/98

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	1.15	J	U FØ1, FØ6

FORM I SV

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI1104

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-07

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 1F507

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 16 Date Analyzed: 04/24/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	595	U	V

FORM I VOA

13

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI1104

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-07

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4Q408

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 16 decanted: (Y/N) N Date Extracted: 04/21/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/23/98

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	397	U
91-58-7	2-chloronaphthalene	397	U
208-96-8	acenaphthylene	397	U
83-32-9	acenaphthene	397	U
86-73-7	fluorene	397	U
85-01-8	phenanthrene	397	U
120-12-7	anthracene	397	U
206-44-0	fluoranthene	397	U
129-00-0	pyrene	397	U
56-55-3	benzo(a)anthracene	397	U
218-01-9	chrysene	397	U
205-99-2	benzo(b)fluoranthene	397	U
207-08-9	benzo(k)fluoranthene	397	U
50-32-8	benzo(a)pyrene	397	U
193-39-5	indeno(1,2,3-cd)pyrene	397	U
53-70-3	dibenz(a,h)anthracene	397	U
191-24-2	benzo(g,h,i)perylene	397	U

FORM I SV-1 OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI2101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-12

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 2G209

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 12 Date Analyzed: 04/28/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	Benzene	2.3	U	U
108-88-3	Toluene	2.3	U	
100-41-4	Ethylbenzene	2.3	U	
1330-20-7	Xylenes (total)	6.8	U	

FORM I VOA

FORM 1 Science Applications16-APR-1998 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HI2101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-12

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 4E30063

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 12 decanted: (Y/N) N Date Extracted:04/23/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/30/98

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG		Q	
	Diesel Range Organics	2.22	B	U	FØ1, FØ7

FORM I SV

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI2101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-12

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 1F5014

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 12 Date Analyzed: 04/24/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	568	U	VJ G02

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FORM I VOA

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI2101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-12

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4Q419

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 12 decanted: (Y/N) N Date Extracted: 04/21/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/23/98

Injection Volume: 1.0(uL) Dilution Factor: 4.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	1520	U
91-58-7	2-chloronaphthalene	1520	U
208-96-8	acenaphthylene	1520	U
83-32-9	acenaphthene	1520	U
86-73-7	fluorene	1520	U
85-01-8	phenanthrene	1520	U
120-12-7	anthracene	1520	U
206-44-0	fluoranthene	1520	U
129-00-0	pyrene	1520	U
56-55-3	benzo(a)anthracene	1520	U
218-01-9	chrysene	1520	U
205-99-2	benzo(b)fluoranthene	1520	U
207-08-9	benzo(k)fluoranthene	1520	U
50-32-8	benzo(a)pyrene	1520	U
193-39-5	indeno(1,2,3-cd)pyrene	1520	U
53-70-3	dibenz(a,h)anthracene	1520	U
191-24-2	benzo(g,h,i)perylene	1520	U

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FORM I SV-1 OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI2103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-11

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 2G208

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 13 Date Analyzed: 04/28/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	Benzene	2.3	U
108-88-3	Toluene	2.3	U
100-41-4	Ethylbenzene	2.3	U
1330-20-7	Xylenes (total)	6.9	U

VJ G02

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FORM I VOA

FORM 1 Science Applications16-APR-1998 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HI2103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-11

Sample wt/vol: 30.2 (g/mL) G Lab File ID: 4E30062

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 13 decanted: (Y/N) N Date Extracted: 04/23/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/30/98

Injection Volume: 1.0(uL) Dilution Factor: 5.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	6.2	JB	U

F01, F06

MP 6/17/98

FORM I SV

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI2103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-11

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 1F5011

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 13 Date Analyzed: 04/24/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	575	U	UJ 6ϕ2

USE

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI2103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-11

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4Q418

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 13 decanted: (Y/N) N Date Extracted: 04/21/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/23/98

Injection Volume: 1.0(uL) Dilution Factor: 4.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	1530	U
91-58-7	2-chloronaphthalene	1530	U
208-96-8	acenaphthylene	1530	U
83-32-9	acenaphthene	1530	U
86-73-7	fluorene	1530	U
85-01-8	phenanthrene	1530	U
120-12-7	anthracene	1530	U
206-44-0	fluoranthene	1530	U
129-00-0	pyrene	1530	U
56-55-3	benzo(a)anthracene	1530	U
218-01-9	chrysene	1530	U
205-99-2	benzo(b)fluoranthene	1530	U
207-08-9	benzo(k)fluoranthene	1530	U
50-32-8	benzo(a)pyrene	1530	U
193-39-5	indeno(1,2,3-cd)pyrene	1530	U
53-70-3	dibenz(a,h)anthracene	1530	U
191-24-2	benzo(g,h,i)perylene	1530	U

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FORM I SV-1 OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI3101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-13

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 2G2017

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 15 Date Analyzed: 04/28/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	Benzene	2.4	U
108-88-3	Toluene	2.4	U
100-41-4	Ethylbenzene	2.4	U
1330-20-7	Xylenes (total)	7.0	U

FORM I VOA

FORM 1 Science Applications16-APR-1998 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HI3101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-13

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 4E30064

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 15 decanted: (Y/N) N Date Extracted:04/23/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/30/98

Injection Volume: 1.0(uL) Dilution Factor: 2.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	Diesel Range Organics	5.66	B	U

F01, F08

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FORM I SV

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI3101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-13

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 1F5015

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 15 Date Analyzed: 04/24/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	588	U	V

FORM I VOA

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI3101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-13

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4Q420

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 15 decanted: (Y/N) N Date Extracted: 04/21/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/24/98

Injection Volume: 1.0(uL) Dilution Factor: 4.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	1570	U
91-58-7	2-chloronaphthalene	1570	U
208-96-8	acenaphthylene	1570	U
83-32-9	acenaphthene	1570	U
86-73-7	fluorene	1570	U
85-01-8	phenanthrene	1570	U
120-12-7	anthracene	1570	U
206-44-0	fluoranthene	1110	J
129-00-0	pyrene	1100	J
56-55-3	benzo(a)anthracene	1570	U
218-01-9	chrysene	901	J
205-99-2	benzo(b)fluoranthene	1570	U
207-08-9	benzo(k)fluoranthene	1570	U
50-32-8	benzo(a)pyrene	1570	U
193-39-5	indeno(1,2,3-cd)pyrene	1570	U
53-70-3	dibenz(a,h)anthracene	1570	U
191-24-2	benzo(g,h,i)perylene	1570	U

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FORM I SV-1 OLM03.0

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI3103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-14

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 2G2011

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 14 Date Analyzed: 04/28/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	Benzene	2.3	U
108-88-3	Toluene	2.3	U
100-41-4	Ethylbenzene	2.3	U
1330-20-7	Xylenes (total)	7.0	U

FORM I VOA

FORM 1 Science Applications16-APR-1998 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HI3103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-14

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 4E30065

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 14 decanted: (Y/N) N Date Extracted:04/23/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/30/98

Injection Volume: 1.0(uL) Dilution Factor: 2.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	Diesel Range Organics	5.83	B	U FΦ1 FΦ1

FORM I SV

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI3103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-14

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 1F5016

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 14 Date Analyzed: 04/24/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	581	U	UJ 6Ø2

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FORM I VOA

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI3103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-14

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4Q421

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 14 decanted: (Y/N) N Date Extracted: 04/21/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/24/98

Injection Volume: 1.0(uL) Dilution Factor: 4.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	1550	U
91-58-7	2-chloronaphthalene	1550	U
208-96-8	acenaphthylene	1550	U
83-32-9	acenaphthene	1550	U
86-73-7	fluorene	1550	U
85-01-8	phenanthrene	1550	U
120-12-7	anthracene	1550	U
206-44-0	fluoranthene	1150	J
129-00-0	pyrene	1550	J
56-55-3	benzo(a)anthracene	1550	U
218-01-9	chrysene	1120	J
205-99-2	benzo(b)fluoranthene	1550	U
207-08-9	benzo(k)fluoranthene	779	J
50-32-8	benzo(a)pyrene	1550	U
193-39-5	indeno(1,2,3-cd)pyrene	1550	U
53-70-3	dibenz(a,h)anthracene	1550	U
191-24-2	benzo(g,h,i)perylene	1550	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI3110

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-10

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 2G207

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 13 Date Analyzed: 04/28/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	Benzene	2.3	U
108-88-3	Toluene	2.3	U
100-41-4	Ethylbenzene	2.3	U
1330-20-7	Xylenes (total)	6.9	U

FORM I VOA

FORM 1 Science Applications16-APR-1998 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HI3110

Lab Name: GENERAL ENGINEERING LABOR Contract: NA
Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S
Matrix: (soil/water) SOIL Lab Sample ID: 9804404-10
Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4E30046
Level: (low/med) LOW Date Received: 04/16/98
% Moisture: 13 decanted: (Y/N) N Date Extracted: 04/23/98
Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/30/98
Injection Volume: 1.0(uL) Dilution Factor: 2.0
GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	6.37	B	FØ1, FØ8

FORM I SV

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI3110

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-10

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 1F4023

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 13 Date Analyzed: 04/24/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	575	U	UJ 6Φ2

USQ

FORM I VOA

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI3110

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-10

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4Q417

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 13 decanted: (Y/N) N Date Extracted: 04/21/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/23/98

Injection Volume: 1.0(uL) Dilution Factor: 4.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	1530	U
91-58-7	2-chloronaphthalene	1530	U
208-96-8	acenaphthylene	1530	U
83-32-9	acenaphthene	1530	U
86-73-7	fluorene	1530	U
85-01-8	phenanthrene	1530	U
120-12-7	anthracene	1530	U
206-44-0	fluoranthene	964	J
129-00-0	pyrene	794	J
56-55-3	benzo(a)anthracene	1530	U
218-01-9	chrysene	1530	U
205-99-2	benzo(b)fluoranthene	1530	U
207-08-9	benzo(k)fluoranthene	1530	U
50-32-8	benzo(a)pyrene	1530	U
193-39-5	indeno(1,2,3-cd)pyrene	1530	U
53-70-3	dibenz(a,h)anthracene	1530	U
191-24-2	benzo(g,h,i)perylene	1530	U

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FORM I SV-1 OLM03.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI4101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-09

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 2G206

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 6 Date Analyzed: 04/28/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	Benzene	2.1	U
108-88-3	Toluene	2.1	U
100-41-4	Ethylbenzene	2.1	U
1330-20-7	Xylenes (total)	6.4	U

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FORM I VOA

FORM 1 Science Applications16-APR-1998 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HI4101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-09

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4E30061

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 6 decanted: (Y/N) N Date Extracted:04/23/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/30/98

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG		Q
	----------Diesel Range Organics	2.69	B	V FΦ1, FΦ7

FORM I SV

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI4101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-09

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 1F4022

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 6 Date Analyzed: 04/24/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	532	U	UJ GΦ2

USQ

FORM I VOA

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI4101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-09

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4Q416

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 6 decanted: (Y/N) N Date Extracted: 04/21/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/23/98

Injection Volume: 1.0(uL) Dilution Factor: 4.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	1420	U
91-58-7	2-chloronaphthalene	1420	U
208-96-8	acenaphthylene	1420	U
83-32-9	acenaphthene	1420	U
86-73-7	fluorene	1420	U
85-01-8	phenanthrene	1420	U
120-12-7	anthracene	1420	U
206-44-0	fluoranthene	1420	U
129-00-0	pyrene	1010	J
56-55-3	benzo(a)anthracene	1420	U
218-01-9	chrysene	911	J
205-99-2	benzo(b)fluoranthene	1420	U
207-08-9	benzo(k)fluoranthene	1420	U
50-32-8	benzo(a)pyrene	1420	U
193-39-5	indeno(1,2,3-cd)pyrene	1420	U
53-70-3	dibenz(a,h)anthracene	1420	U
191-24-2	benzo(g,h,i)perylene	1420	U

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FORM I SV-1 OLM03.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
HI4103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA
Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S
Matrix: (soil/water) SOIL Lab Sample ID: 9804404-08
Sample wt/vol: 10.0 (g/mL) G Lab File ID: 2F6011
Level: (low/med) LOW Date Received: 04/16/98
% Moisture: not dec. 9 Date Analyzed: 04/25/98
GC Column: J&W DB-624(PID) ID: 0.53 (mm) Dilution Factor: 1.0
Soil Extract Volume:_____(ml) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	Benzene	2.2	U	V
108-88-3	Toluene	4.2		=
100-41-4	Ethylbenzene	2.2	U	V
1330-20-7	Xylenes (total)	6.6	U	V

DATA VALIDATION
COPY

FORM I VOA

FORM 1 Science Applications16-APR-1998 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HI4103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-08

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 4E30050

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 9 decanted: (Y/N) N Date Extracted:04/23/98

Concentrated Extract Volume: 1.0C(mL) Date Analyzed: 04/30/98

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	1.91	B	U F01, F07

FORM I SV

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI4103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-08

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 1F4021

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 9 Date Analyzed: 04/24/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	549	U	UJ 6-02

USE

FORM I VOA

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI4103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-08

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4Q415

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 9 decanted: (Y/N) N Date Extracted: 04/21/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/23/98

Injection Volume: 1.0(uL) Dilution Factor: 4.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	1460	U
91-58-7	2-chloronaphthalene	1460	U
208-96-8	acenaphthylene	1460	U
83-32-9	acenaphthene	1460	U
86-73-7	fluorene	1460	U
85-01-8	phenanthrene	1460	U
120-12-7	anthracene	1460	U
206-44-0	fluoranthene	1460	U
129-00-0	pyrene	1460	U
56-55-3	benzo(a)anthracene	1460	U
218-01-9	chrysene	1460	U
205-99-2	benzo(b)fluoranthene	1460	U
207-08-9	benzo(k)fluoranthene	1460	U
50-32-8	benzo(a)pyrene	1460	U
193-39-5	indeno(1,2,3-cd)pyrene	1460	U
53-70-3	dibenz(a,h)anthracene	1460	U
191-24-2	benzo(g,h,i)perylene	1460	U

V

FORM I SV-1 OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI5101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-16

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 2G2014

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 8 Date Analyzed: 04/28/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	Benzene	2.2	U
108-88-3	Toluene	2.2	U
100-41-4	Ethylbenzene	2.2	U
1330-20-7	Xylenes (total)	6.5	U

V ↓

FORM I VOA

FORM 1 Science Applications16-APR-1998 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HI5101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-16

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 4E30054

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 8 decanted: (Y/N) N Date Extracted:04/23/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/30/98

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	1.26	JB	V FΦ1, FΦ6

FORM I SV

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI5101RE

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-16

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 1F5021

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 8 Date Analyzed: 04/24/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	543	U	U

USE

FORM I VOA

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI5101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-16

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4R104

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 8 decanted: (Y/N) N Date Extracted: 04/21/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/27/98

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

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

FORM I SV-1 OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI5103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL

Lab Sample ID: 9804404-15

Sample wt/vol: 10.0 (g/mL) G

Lab File ID: 2G2012

Level: (low/med) LOW

Date Received: 04/16/98

% Moisture: not dec. 13

Date Analyzed: 04/28/98

GC Column: J&W DB-624(PID) ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____(ml)

Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	Benzene	2.3	U	V
108-88-3	Toluene	2.3	U	
100-41-4	Ethylbenzene	2.3	U	
1330-20-7	Xylenes (total)	6.9	U	

FORM I VOA

FORM 1 Science Applications16-APR-1998 SA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HI5103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-15

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 4E30066

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 13 decanted: (Y/N) N Date Extracted:04/23/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/30/98

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	3.03	B	V FØ1, FØ7

FORM I SV

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI5103RE

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA025S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-15

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 1F5020

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: not dec. 13 Date Analyzed: 04/24/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics____	575	U	U

USQ

FORM I VOA

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI5103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA015S

Matrix: (soil/water) SOIL Lab Sample ID: 9804404-15

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4R103

Level: (low/med) LOW Date Received: 04/16/98

% Moisture: 13 decanted: (Y/N) N Date Extracted: 04/21/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/27/98

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	383	U
91-58-7	2-chloronaphthalene	383	U
208-96-8	acenaphthylene	383	U
83-32-9	acenaphthene	383	U
86-73-7	fluorene	383	U
85-01-8	phenanthrene	383	U
120-12-7	anthracene	383	U
206-44-0	fluoranthene	208	J
129-00-0	pyrene	253	J
56-55-3	benzo(a)anthracene	383	U
218-01-9	chrysene	201	J
205-99-2	benzo(b)fluoranthene	383	U
207-08-9	benzo(k)fluoranthene	383	U
50-32-8	benzo(a)pyrene	383	U
193-39-5	indeno(1,2,3-cd)pyrene	383	U
53-70-3	dibenz(a,h)anthracene	383	U
191-24-2	benzo(g,h,i)perylene	383	U

FORM I SV-1 OLM03.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI9101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-09

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 2H107

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: not dec. 8 Date Analyzed: 05/04/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	Benzene	2.2	U	V
108-88-3	Toluene	3.7		=
100-41-4	Ethylbenzene	2.2	U	V
1330-20-7	Xylenes (total)	6.5	U	V

FORM I VOA

FORM 1 Science Applications22-APR-1998 SAMPLE NO.
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HI9101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-09

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 5A70014

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: 8 decanted: (Y/N) N Date Extracted:04/29/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/03/98

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	4.4	B	U F01, F07

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI9101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-09

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 1G6037

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: not dec. 8 Date Analyzed: 05/03/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	543	U	V

FORM I VOA

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI9101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-09

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 4R117

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: 8 decanted: (Y/N) N Date Extracted: 04/24/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/27/98

Injection Volume: 1.0(uL) Dilution Factor: 4.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	1440	U
91-58-7	2-chloronaphthalene	1440	U
208-96-8	acenaphthylene	1440	U
83-32-9	acenaphthene	1440	U
86-73-7	fluorene	1440	U
85-01-8	phenanthrene	1440	U
120-12-7	anthracene	1440	U
206-44-0	fluoranthene	1260	J
129-00-0	pyrene	1480	
56-55-3	benzo(a)anthracene	726	J
218-01-9	chrysene	1040	J
205-99-2	benzo(b)fluoranthene	798	J
207-08-9	benzo(k)fluoranthene	913	J
50-32-8	benzo(a)pyrene	1440	U
193-39-5	indeno(1,2,3-cd)pyrene	1440	U
53-70-3	dibenz(a,h)anthracene	1440	U
191-24-2	benzo(g,h,i)perylene	1440	U

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FORM I SV-1 OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI9111

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-10

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 2H108

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: not dec. 7 Date Analyzed: 05/04/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	Benzene	2.2	U	U
108-88-3	Toluene	2.7		=
100-41-4	Ethylbenzene	2.2	U	U
1330-20-7	Xylenes (total)	6.4	U	U

FORM I VOA

FORM 1 Science Applications22-APR-1998 SAMPLE NO.
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HI9111

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-10

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 5A70015

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: 7 decanted: (Y/N) N Date Extracted:04/29/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/03/98

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	Diesel Range Organics	3.91	B	U F01, F07

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI9111

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-10

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 1G7019

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: not dec. 7 Date Analyzed: 05/03/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	538	U	V

FORM I VOA

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
HI9111

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-10

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4R118

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: 7 decanted: (Y/N) N Date Extracted: 04/24/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/28/98

Injection Volume: 1.0(uL) Dilution Factor: 4.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	1430	U
91-58-7	2-chloronaphthalene	1430	U
208-96-8	acenaphthylene	1430	U
83-32-9	acenaphthene	1430	U
86-73-7	fluorene	1430	U
85-01-8	phenanthrene	1430	U
120-12-7	anthracene	1430	U
206-44-0	fluoranthene	1430	U
129-00-0	pyrene	1430	U
56-55-3	benzo(a)anthracene	1430	U
218-01-9	chrysene	1430	U
205-99-2	benzo(b)fluoranthene	1430	U
207-08-9	benzo(k)fluoranthene	1430	U
50-32-8	benzo(a)pyrene	1430	U
193-39-5	indeno(1,2,3-cd)pyrene	1430	U
53-70-3	dibenz(a,h)anthracene	1430	U
191-24-2	benzo(g,h,i)perylene	1430	U

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FORM I SV-1 OLM03.0

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI9103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-11

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 2G7019

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: not dec. 17 Date Analyzed: 05/03/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	Benzene	2.4	U	U
108-88-3	Toluene	2.7		=
100-41-4	Ethylbenzene	2.4	U	U
1330-20-7	Xylenes (total)	7.2	U	U

FORM I VOA

FORM 1 Science Applications22-APR-1998 SAMPLE NO.
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HI9103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-11

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 5A70016

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: 17 decanted: (Y/N) N Date Extracted:04/29/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/03/98

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	2.08	B	U F01, F07

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HI9103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-11

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 1H106

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: not dec. 17 Date Analyzed: 05/04/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	602	U	V

FORM I VOA

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
HI9103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-11

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 4R119

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: 17 decanted: (Y/N) N Date Extracted:04/24/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/28/98

Injection Volume: 1.0(uL) Dilution Factor: 4.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	1580	U
91-58-7	2-chloronaphthalene	1580	U
208-96-8	acenaphthylene	1580	U
83-32-9	acenaphthene	1580	U
86-73-7	fluorene	1580	U
85-01-8	phenanthrene	1580	U
120-12-7	anthracene	1580	U
206-44-0	fluoranthene	1580	U
129-00-0	pyrene	1580	U
56-55-3	benzo(a)anthracene	1580	U
218-01-9	chrysene	1580	U
205-99-2	benzo(b)fluoranthene	1580	U
207-08-9	benzo(k)fluoranthene	1580	U
50-32-8	benzo(a)pyrene	1580	U
193-39-5	indeno(1,2,3-cd)pyrene	1580	U
53-70-3	dibenz(a,h)anthracene	1580	U
191-24-2	benzo(g,h,i)perylene	1580	U

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FORM I SV-1 OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIA101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-12

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 2G7020

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: not dec. 8 Date Analyzed: 05/03/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	Benzene	2.2	U	V
108-88-3	Toluene	15.0		=
100-41-4	Ethylbenzene	2.2	U	U
1330-20-7	Xylenes (total)	6.5	U	U

FORM I VOA

FORM 1 Science Applications22-APR-1998 SAMPLE NO.
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIA101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-12

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 5A70029

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: 8 decanted: (Y/N) N Date Extracted:04/29/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/04/98

Injection Volume: 1.0(uL) Dilution Factor: 4.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	Diesel Range Organics	12.0	B	= FØ1, FØ8

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIA101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-12

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 1H107

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: not dec. 8 Date Analyzed: 05/04/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	543	U	V

FORM I VOA

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIA101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-12

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 4R120

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: 8 decanted: (Y/N) N Date Extracted: 04/24/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/28/98

Injection Volume: 1.0(uL) Dilution Factor: 4.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	1420	U
91-58-7	2-chloronaphthalene	1420	U
208-96-8	acenaphthylene	1420	U
83-32-9	acenaphthene	1420	U
86-73-7	fluorene	1420	U
85-01-8	phenanthrene	1420	U
120-12-7	anthracene	1420	U
206-44-0	fluoranthene	1420	U
129-00-0	pyrene	744	J
56-55-3	benzo(a)anthracene	1320	J
218-01-9	chrysene	1420	U
205-99-2	benzo(b)fluoranthene	957	J
207-08-9	benzo(k)fluoranthene	1420	U
50-32-8	benzo(a)pyrene	1420	U
193-39-5	indeno(1,2,3-cd)pyrene	1420	U
53-70-3	dibenz(a,h)anthracene	1420	U
191-24-2	benzo(g,h,i)perylene	1420	U

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FORM I SV-1 OLM03.0

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIA103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-13

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 2G7021

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: not dec. 15 Date Analyzed: 05/03/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	Benzene	2.4	U	U
108-88-3	Toluene	48.1		=
100-41-4	Ethylbenzene	2.4	U	U
1330-20-7	Xylenes (total)	7.0	U	U

FORM I VOA

FORM 1 Science Applications22-APR-1998 SAMPLE NO.
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIA103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-13

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 5A30010

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: 15 decanted: (Y/N) N Date Extracted:04/29/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/05/98

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	2.99	B	U F01, F07

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIA103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-13

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 1G7025

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: not dec. 15 Date Analyzed: 05/04/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	----------Gasoline Range Organics	174	J	J

FORM I VOA

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIA103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-13

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 4R403

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: 15 decanted: (Y/N) N Date Extracted: 04/24/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/30/98

Injection Volume: 1.0(uL) Dilution Factor: 4.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	1550	U
91-58-7	2-chloronaphthalene	1550	U
208-96-8	acenaphthylene	1550	U
83-32-9	acenaphthene	1550	U
86-73-7	fluorene	1550	U
85-01-8	phenanthrene	1550	U
120-12-7	anthracene	1550	U
206-44-0	fluoranthene	1550	U
129-00-0	pyrene	1550	U
56-55-3	benzo(a)anthracene	1550	U
218-01-9	chrysene	1550	U
205-99-2	benzo(b)fluoranthene	1550	U
207-08-9	benzo(k)fluoranthene	1550	U
50-32-8	benzo(a)pyrene	1550	U
193-39-5	indeno(1,2,3-cd)pyrene	1550	U
53-70-3	dibenz(a,h)anthracene	1550	U
191-24-2	benzo(g,h,i)perylene	1550	U

FORM I SV-1 OLM03.0

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIB101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-16

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 2G7025

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: not dec. 9 Date Analyzed: 05/04/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	Benzene	2.2	U	V
108-88-3	Toluene	42.1		=
100-41-4	Ethylbenzene	2.2	U	V
1330-20-7	Xylenes (total)	6.6	U	V

FORM I VOA

FORM 1 Science Applications22-APR-1998 SAMPLE NO.
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIB101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-16

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 5A70021

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: 9 decanted: (Y/N) N Date Extracted:04/29/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/04/98

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	Diesel Range Organics	3.71	B	U F01, F07

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIB101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-16

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 1H1010

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: not dec. 9 Date Analyzed: 05/04/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	Gasoline Range Organics	549	U	U

FORM I VOA

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIB101

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-16

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4R406

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: 9 decanted: (Y/N) N Date Extracted: 04/24/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/30/98

Injection Volume: 1.0(uL) Dilution Factor: 4.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	1460	U
91-58-7	2-chloronaphthalene	1460	U
208-96-8	acenaphthylene	1460	U
83-32-9	acenaphthene	1460	U
86-73-7	fluorene	1460	U
85-01-8	phenanthrene	1460	U
120-12-7	anthracene	1460	U
206-44-0	fluoranthene	1460	U
129-00-0	pyrene	962	J
56-55-3	benzo(a)anthracene	1460	U
218-01-9	chrysene	777	J
205-99-2	benzo(b)fluoranthene	1460	U
207-08-9	benzo(k)fluoranthene	1460	U
50-32-8	benzo(a)pyrene	1460	U
193-39-5	indeno(1,2,3-cd)pyrene	1460	U
53-70-3	dibenz(a,h)anthracene	1460	U
191-24-2	benzo(g,h,i)perylene	1460	U

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FORM I SV-1 OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIB111

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-14

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 2G7023

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: not dec. 7 Date Analyzed: 05/04/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	Benzene	2.2	U	U
108-88-3	Toluene	24.5		=
100-41-4	Ethylbenzene	2.2	U	U
1330-20-7	Xylenes (total)	6.4	U	U

FORM I VOA

FORM 1 Science Applications22-APR-1998 SAMPLE NO.
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIB111

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-14

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 5A70030

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: 7 decanted: (Y/N) N Date Extracted:04/29/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/04/98

Injection Volume: 1.0(uL) Dilution Factor: 2.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
	Diesel Range Organics	6.9	B

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIB111

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-14

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 1H1019

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: not dec. 7 Date Analyzed: 05/04/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
	Gasoline Range Organics	538	U	V

FORM I VOA

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
HIB111

Lab Name: GENERAL ENGINEERING LABOR Contract: NA
Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S
Matrix: (soil/water) SOIL Lab Sample ID: 9804494-14
Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4R404
Level: (low/med) LOW Date Received: 04/22/98
% Moisture: 7 decanted: (Y/N) N Date Extracted: 04/24/98
Concentrated Extract Volume: 1.00(mL) Date Analyzed: 04/30/98
Injection Volume: 1.0(uL) Dilution Factor: 4.0
GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	naphthalene	1430	U
91-58-7	2-chloronaphthalene	1430	U
208-96-8	acenaphthylene	1430	U
83-32-9	acenaphthene	1430	U
86-73-7	fluorene	1430	U
85-01-8	phenanthrene	1430	U
120-12-7	anthracene	1430	U
206-44-0	fluoranthene	920	J
129-00-0	pyrene	1630	
56-55-3	benzo(a)anthracene	837	J
218-01-9	chrysene	1120	J
205-99-2	benzo(b)fluoranthene	1430	U
207-08-9	benzo(k)fluoranthene	825	J
50-32-8	benzo(a)pyrene	1430	U
193-39-5	indeno(1,2,3-cd)pyrene	1430	U
53-70-3	dibenz(a,h)anthracene	1430	U
191-24-2	benzo(g,h,i)perylene	1430	U

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FORM I SV-1 OLM03.0

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIB103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-15

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 2G7024

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: not dec. 20 Date Analyzed: 05/04/98

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
71-43-2	Benzene	2.5	U	V
108-88-3	Toluene	23.7		=
100-41-4	Ethylbenzene	2.5	U	V
1330-20-7	Xylenes (total)	7.5	U	V

FORM I VOA

FORM 1 Science Applications22-APR-1998 SAMPLE NO.
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIB103

Lab Name: GENERAL ENGINEERING LABOR Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: HA022S

Matrix: (soil/water) SOIL Lab Sample ID: 9804494-15

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 5A70020

Level: (low/med) LOW Date Received: 04/22/98

% Moisture: 20 decanted: (Y/N) N Date Extracted:04/29/98

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 05/04/98

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q	
	----------Diesel Range Organics	6.79	B	= FØ1, FØ8