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Calendar Year 2008 CAP Progress Report / Addendum

Solid Waste Management Unit 13 (Former Fire Training Area at Wright Army Airfield)

Fort Stewart, Georgia
EPA ID # GA9 210 020 872

April 22, 2009

DOCUMENT 13

ARCADIS

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Project Engineer

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Senior Project Manager

Calendar Year 2008 CAP Progress Report / Addendum

Solid Waste Management Unit 13
(Former Fire Training Area at
Wright Army Airfield)

Prepared for:
U.S. Army Environmental Command

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GP08HAFS.F13A.EHCAP

Date:
April 22, 2009

Georgia Registered Professional Engineering Certification

I certify that I am a qualified professional engineer who has received a baccalaureate or post-graduate degree in engineering and have sufficient training and experience in environmental engineering and related fields, as demonstrated by state registration and completion of accredited university courses, to enable me to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that this report was prepared by myself or by a subordinate working under my direction.

Name:	Charles A. Bertz, P.E.
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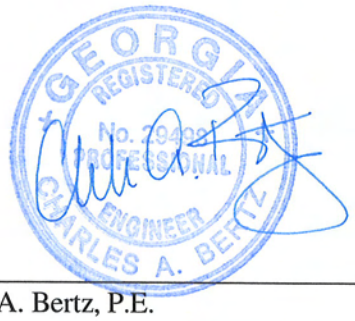

Charles A. Bertz, P.E.

04 · 22 · 2009

Date

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Appendices

Acronyms

ARCADIS	ARCADIS U.S., Inc.
AST	Aboveground Storage Tank
bgs	Below Ground Surface
BTEX	Benzene, toluene, ethylbenzene, xylene
CAP	Corrective Action Plan
CAPE	CAPE Environmental Management, Inc.
CMCOCs	Contaminant Migration Constituents of Concern
DPT	direct push technology
DRO	diesel range organics
FTA	Fire Training Area
ft	feet
Fort Stewart	Fort Stewart Military Reservation
GA EPD	Georgia Environmental Protection Division
GRO	gasoline range organics
IRA	Interim Removal Actions
HAAF	Hunter Army Airfield
MCLs	Maximum Contaminant Levels
MNA	Monitored Natural Attenuation
OWS	Oil/Water Separator
PAHs	Polynuclear Aromatic Hydrocarbons
PID	Photo-ionization detector
QAPP	Quality Assurance Project Plan
RBC	Risk Based Criteria
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation

RLs	Remedial Levels
SAP	Sampling and Analysis Plan
SVOCs	Semi-Volatile Organic Compounds
SWMU	Solid Waste Management Unit
TCLP	Toxicity Characteristic Leaching Procedure
TPH	total petroleum hydrocarbons
USAEC	U.S. Army Environmental Command

1. Introduction

ARCADIS U.S., Inc. (ARCADIS) has been contracted by the U.S. Army Environmental Command (USAEC) and Fort Stewart Military Reservation (Fort Stewart)/ Hunter Army Airfield (HAAF) to perform environmental services at Fort Stewart and the HAAF. This Corrective Action Plan (CAP) Progress Report / Addendum has been prepared to detail previously completed investigations, data analysis, and reporting activities conducted at the Former Fire Training Area (FTA) at the Wright Army Airfield, otherwise identified as Solid Waste Management Unit (SWMU) 13. The intent of this report is to document additional data collected since the submittal of the *Corrective Action Plan Progress Report for the Calendar Year 2007 for the Former Fire Training Area at Wright Army Airfield (SAIC 2008)*, to provide a response to Georgia Environmental Protection Division (GA EPD) comments dated November 17, 2008 on the 2007 CAP Progress Report (GAEPD 2008), and to provide recommendations for additional remedial actions based on the results of previous investigations completed at SWMU 13.

2. Site Background and Operational History

SWMU 13 is located in the northwest portion of the Wright Army Airfield, which is located in the southern portion of the Fort Stewart Military Reservation (See Figure 2-1 Site Location Map). SWMU 13 was previously utilized as a training area for the airfield's firefighters between the years of 1982 and 1992. The Former FTA consisted of a 5,000 square foot concrete pad with an integral berm, an oil/water separator (OWS) sump, underground piping, and an aboveground storage tank (AST) containing water contaminated jet propellant (JP)-4 fuel, diesel fuel, or waste oil (See Figure 2-2). As part of training exercises, fuel was pumped from the AST onto the surface of a simulated aircraft structure and ignited. The fires were then extinguished with water and foam. The Former FTA was designed to promote drainage of excess water, foam, and fuel to the OWS. The effluent waters were then discharged to the western drainage swale while the separated portion (fuel, oils) was removed by vacuum truck and disposed of at the Fort Stewart Industrial Wastewater Treatment Plant. All components of the Former FTA were removed during Interim Removal Actions (IRA) in 1997 by CAPE Environmental Management, Inc. (CAPE). For additional details on the IRA, see the *Final Interim Measures Report Fort Stewart Fire Training Pit Site SWMU FST-013* (CAPE 1998).

2.1 Summary of Previous Investigations

Several investigations have been completed at the Former FTA including a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI), three supplemental investigations, two IRAs and annual groundwater monitoring activities.

RCRA Facility Investigation

RFI activities were conducted at SWMU 13 in 1999 (SAIC 2000). Activities conducted included the collection of 12 soils samples that were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and RCRA Metals. Direct push groundwater screening samples were collected at 23 locations and analyzed for VOCs and SVOCs. Six permanent groundwater monitor wells (MW8-MW-13) were installed at SWMU 13 as part of the RCRA Investigation. One soil sample was also collected at each of these monitor well locations and analyzed for VOCs, SVOCs, and RCRA metals. Surface soil samples were also collected at 3 locations and analyzed for VOCs, SVOCs, and RCRA metals. A summary of historical subsurface soil samples can be seen on Figure 2-3.

Laboratory analysis of samples collected during the RFI phase identified surface soils containing polynuclear aromatic hydrocarbons (PAHs) and RCRA metals, subsurface soils containing benzene, toluene, ethylbenzene, and xylene (BTEX), PAHs, and RCRA metals, and groundwater containing BTEX compounds. The extent of the BTEX plume in groundwater was estimated to be approximately 150 feet wide and 300 feet long. It was also determined that Peacock Creek, the nearest surface water body located 2,500 feet from the leading edge of the plume, was not impacted by this groundwater plume. The RFI concluded that adequate information was available for the preparation of a CAP.

Supplemental Investigations

In December 2000, groundwater samples were collected from eight on-site monitor wells (MW-3, MW-4, MW-8 through MW-13) and analyzed for BTEX and PAHs. Laboratory analytical results for these samples showed benzene and ethylbenzene present at concentrations exceeding their respective maximum contaminant levels (MCLs) in the shallow aquifer near the source area. Results of the December 2000 sampling event were consistent with previous groundwater monitoring activities, with the estimated area of impacted groundwater slightly reduced in size compared to the 1998 monitoring. In April 2001, six additional groundwater monitor wells (MW-14 through MW-19) were installed and sampled for VOCs and SVOCs. Subsurface soil samples were collected from each of the monitor well borings Additional groundwater monitoring activities were completed in June 2002. Five (5) monitor wells (MW-13, MW-15, MW-16, MW-18, and MW-19) were sampled and analyzed for BTEX compounds.

Interim Removal Actions

In 1997, an IRA was completed to remove all components of the Former FTA. Components removed included the AST, mock aircraft, foundations, piping, concrete fire training pad, concrete OWS sump and appurtenances, sump sediment and soils that exceeded the preliminary cleanup targets established in the project specifications (CAPE 1998). Approximately 2,450 tons of contaminated soils (to a depth of approximately 4 ft below grade) were excavated as part of the IRA.

In December 2001, a second IRA was initiated. The intent of the IRA was to remove an 8-inch thick concrete pad that extended over a 20-foot by 8-foot area. In addition to

the concrete pad, 337 tons of contaminated soil was removed and disposed of during the IRA.

Corrective Action Plan

Per the recommendations of the RFI, a Corrective Action Plan (CAP) was prepared for SWMU 13 (SAIC 2006). The CAP developed remedial levels (RLs) for detected constituents and evaluated potential remedial alternatives for Human Health Constituents of Concern (COCs) in surface soils and groundwater and for Contaminant Migration COCs in subsurface soils. The CAP recommended that no remedial measures be taken to address arsenic, chromium and benzene in surface soil or for 2-methylnaphthalene in groundwater.

Remedial response objectives identified in the CAP included the reduction in concentration of COCs in groundwater (benzene, ethylbenzene, 2-methylnaphthalene, and naphthalene) to the established RLs. Five remedial alternatives were identified and evaluated in the CAP. Based on the evaluations completed, monitored natural attenuation (MNA) was selected as the remedy. MNA was selected because it would effectively achieve RLs in a reasonable time period in a cost efficient manner, based on fate and transport modeling completed. It was anticipated that RLs would be achieved within a period of 5 or 6 years from 2002.

Land use restrictions, including groundwater use restrictions, were included as part of the MNA remedy. An annual groundwater monitoring program of seven monitor wells (MW-3, MW-9, MW-10, MW15, MW-16, MW18, and MW-19) was also included. The MNA alternative was implemented by Fort Stewart in 2003, prior to GA EPD approval to ensure the protectiveness of human health in anticipation of GA EPD concurrence.

GA EPD issued comments on the CAP in February 2004. The GA EPD concurred with the MNA recommendation presented in the CAP with the exception of the exclusion of chromium as a CMCOC. In order to respond to this comment, additional soil sampling activities were conducted in July 2005. The results of the soil sampling were presented in the Revised Final CAP that was submitted to the GA EPD in February 2006 and approved in correspondence dated February 27, 2006.

2.2 Summary of CAP Progress Reports

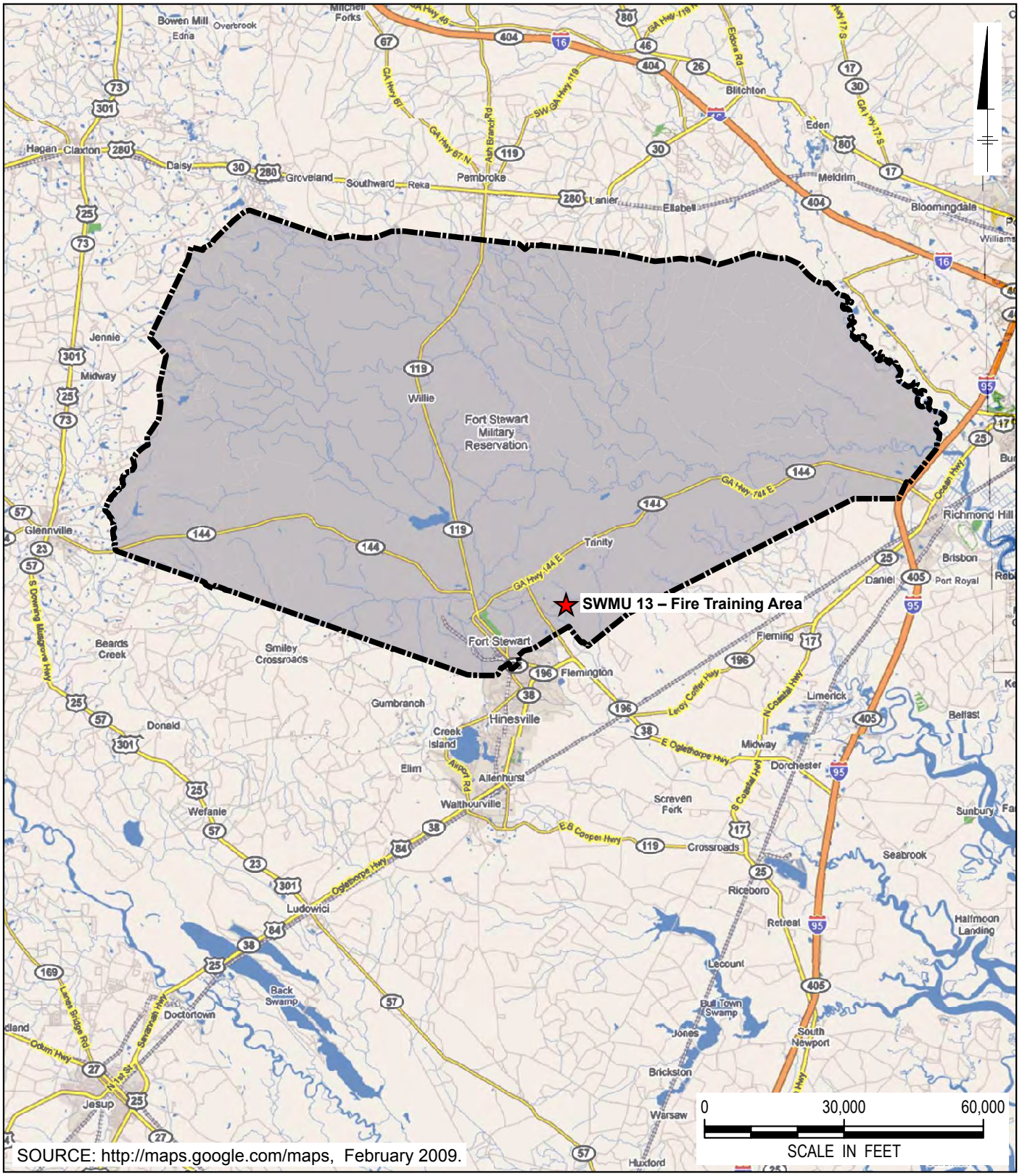
Groundwater has been monitored at the site on an annual basis for calendar years 2003, 2004, 2005, 2006, and 2007. The results of these monitoring events have been

published in annual monitoring reports (See Figure 2-4 for a summary of historical groundwater monitoring results). Details of the 2008 groundwater monitoring are included in this report.

2.3 Report Organization

The report organization presented in this section provides an outline of the information provided in this report. The report is organized as follows:

- Section 1.0: Introduction
- Section 2.0: Site Background, operational history, and summary of previous investigations and annual monitoring
- Section 3.0 2008 Investigation, remedial activity, and monitoring summary and evaluation
- Section 4.0 Conclusions
- Section 5.0 Recommendations
- Section 6.0 References



SOURCE: http://maps.google.com/maps, February 2009.

FORT STEWART MILITARY RESERVATION, GEORGIA

SWMU 13 – FIRE TRAINING AREA AT WAAF
CAP PROGRESS REPORT/ADDENDUM

Site Location Map

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FIGURE
2-1

CITY:(KNOXVILLE) DIV/GROUP:(ENV) DB:(B.ALTOM) LD:(B.ALTOM) PIC:(M.FENNER) PM:(C.BERTZ) TM:(A.DAVIS)
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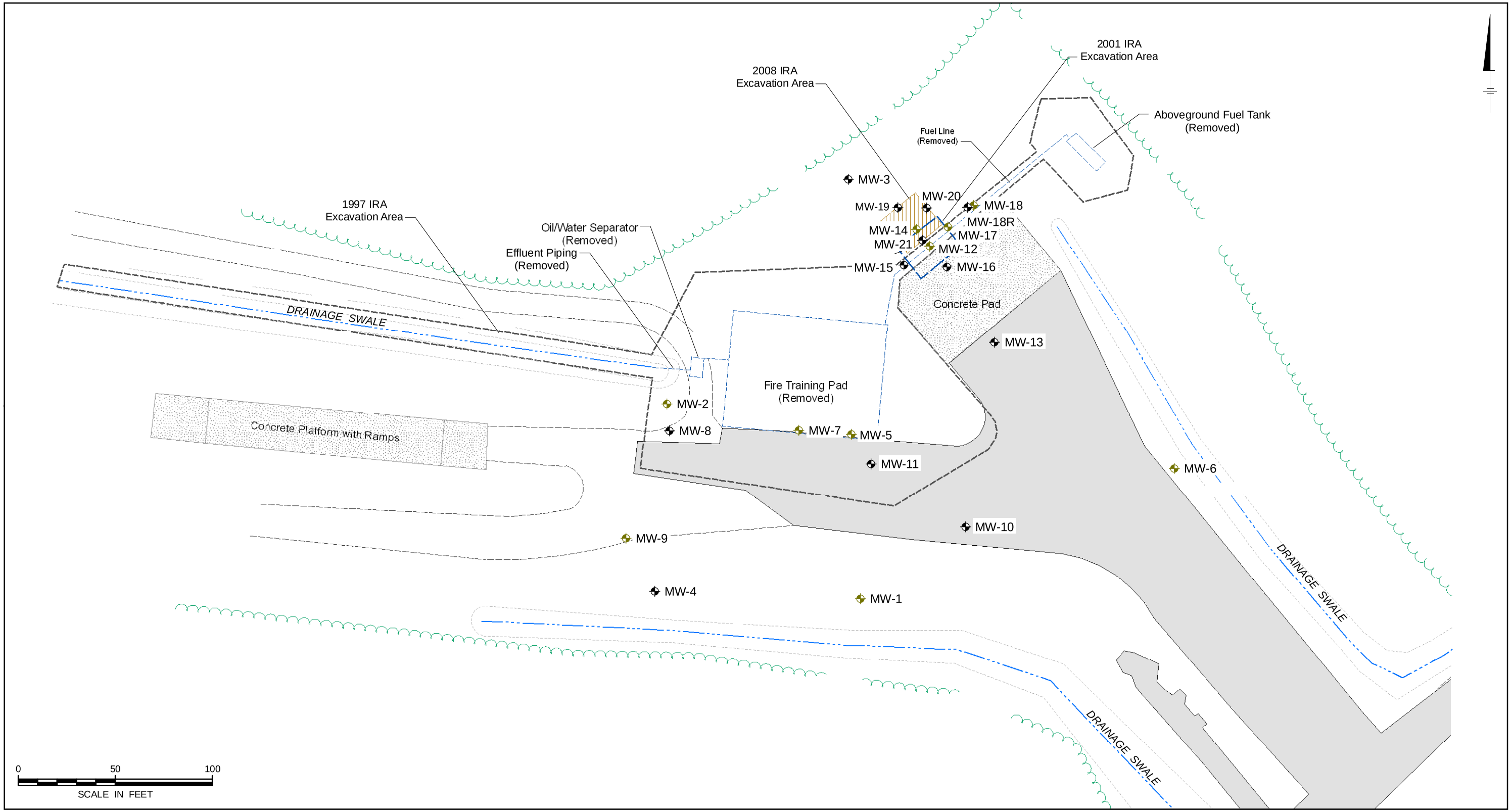


LEGEND:

- Monitor Well (shallow)
- Former Monitor Well Location

NOTES:

1) MW-1 and MW-6 were destroyed by heavy equipment backing over them.
2) MW-12 was removed, MW-14 and MW-17 were damaged during the 2001/2002 Interim Removal Action (IRA).
3) MW-2, MW-5 MW-7 and MW-9 were abandoned in 2001/2002.
4) MW-18 was abandoned as part of the IRA in 2008.

REFERENCES:

1) CORRECTIVE ACTION PLAN PROGRESS REPORT FOR THE CALENDAR YEAR 2007, FOR THE FORMER FIRE TRAINING AREA AT WRIGHT ARMY AIRFIELD - SOLID WASTE MANAGEMENT UNIT 13, (SAIC 2008).
2) FINAL INTERIM REMEDIAL ACTION AND CORRECTIVE ACTION PROGRESS REPORT AT WRIGHT ARMY AIRFIELD FIRE TRAINING AREA, SWMU 13 (SES 2008).

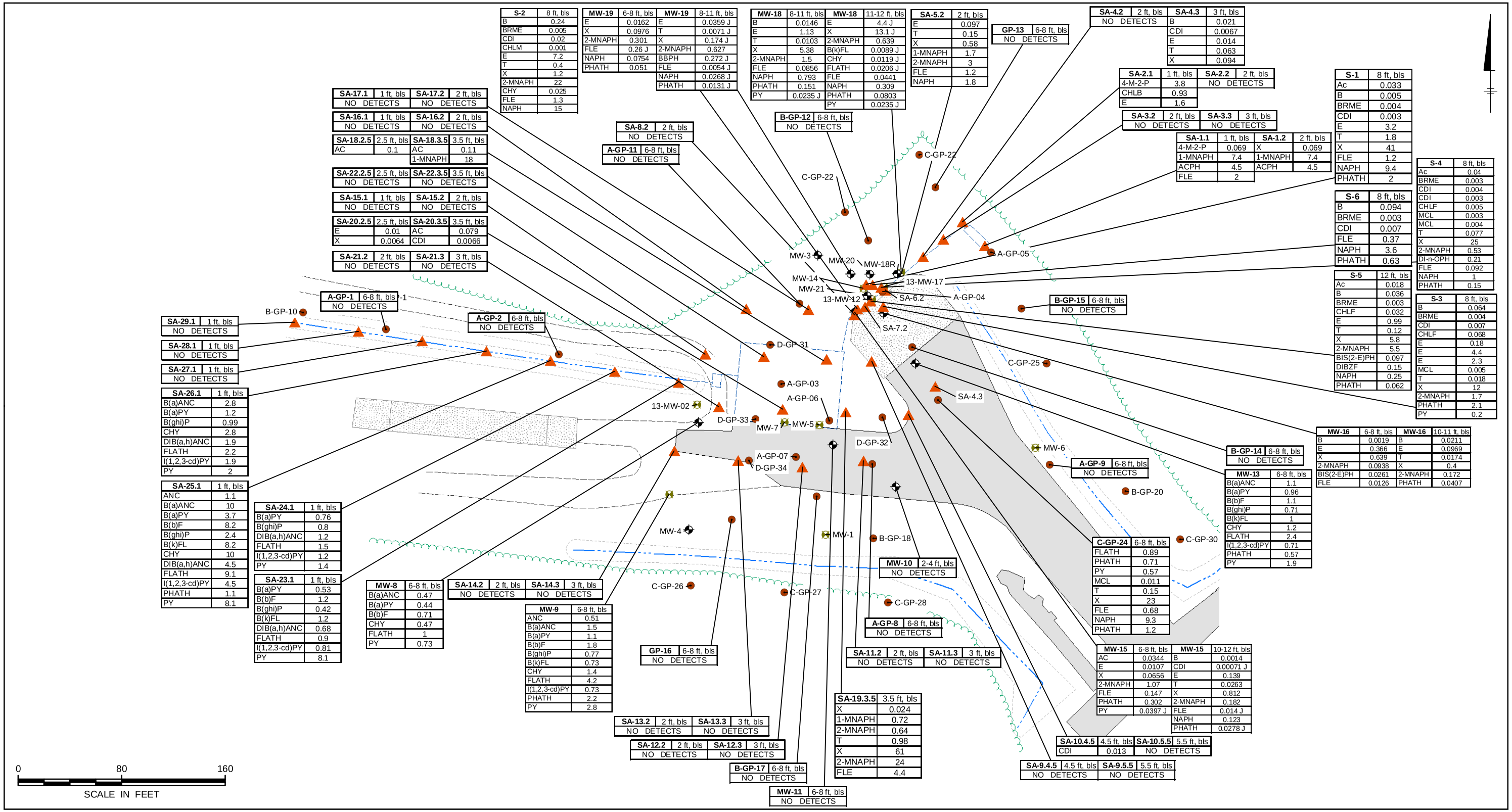
FORT STEWART MILITARY RESERVATION, GEORGIA
SWMU 13 – FIRE TRAINING AREA AT WAAF
CAP PROGRESS REPORT/ADDENDUM

Site Map

ARCADIS

FIGURE
2-2

CITY:(KNOXVILLE) DIV/GROUP:(ENV) DB:(B.ALTOM) LD:(B.ALTOM) PIC:(M.FENNER) PM:(C.BERTZ) TM:(A.DAVIS)
PROJECT: GP08HAFS.F13A.EHCAP PATH: G:\GIS\GP08HAFS\F13A\2009_F13A_PROGRESSIF2-2 F13A_CAP_site.mxd SAVED: 17MAR2009


S-2 8 ft. bls
B 0.24
BRME 0.005
CDI 0.02
CHLM 0.001
E 7.2
T 0.4
X 1.2
2-MNAPH 22
CHY 0.025
FLE 1.3
NAPH 15
MW-19 6-8 ft, bls
E 0.0162
X 0.0976
2-MNAPH 0.301
FLE 0.26 J
NAPH 0.0754
PHATH 0.051
MW-19 8-11 ft, bls
E 0.0359 J
T 0.0071 J
X 0.174 J
2-MNAPH 0.627
BBPH 0.272 J
FLE 0.0054 J
NAPH 0.0268 J
PHATH 0.0131 J
MW-18 8-11 ft, bls
B 0.0146
E 1.13
T 0.0103
X 5.38
2-MNAPH 1.5
FLE 0.0856
NAPH 0.793
PHATH 0.151
PY 0.0235 J
MW-18 11-12 ft, bls
E 4.4 J
X 13.1 J
2-MNAPH 0.639
B(k)FL 0.0089 J
CHY 0.0119 J
FLATH 0.0206 J
FLE 0.0441
NAPH 0.309
PHATH 0.0803
PY 0.0235 J
SA-5.2 2 ft, bls
E 0.097
T 0.15
X 0.58
1-MNAPH 1.7
2-MNAPH 3
FLE 1.2
NAPH 1.8
GP-13 6-8 ft, bls
NO DETECTS
SA-4.2 2 ft, bls
NO DETECTS
SA-4.3 3 ft, bls
B 0.021
CDI 0.0067
E 0.014
T 0.063
X 0.094
SA-2.1 1 ft, bls
4-M-2-P 3.8
CHLB 0.93
E 1.6
SA-2.2 2 ft, bls
NO DETECTS
SA-3.2 2 ft, bls
NO DETECTS
SA-3.3 3 ft, bls
NO DETECTS
SA-1.1 1 ft, bls
4-M-2-P 0.069
1-MNAPH 7.4
ACPH 4.5
FLE 2
SA-1.2 2 ft, bls
X 0.069
1-MNAPH 7.4
ACPH 4.5
S-1 8 ft, bls
Ac 0.033
B 0.005
BRME 0.004
CDI 0.003
E 3.2
T 1.8
X 41
FLE 1.2
NAPH 9.4
PHATH 2
S-4 8 ft, bls
Ac 0.04
BRME 0.003
CDI 0.004
CDI 0.003
CHLF 0.005
MCL 0.003
MCL 0.004
T 0.077
X 25
2-MNAPH 0.53
DI-n-OPH 0.21
FLE 0.092
NAPH 1
PHATH 0.15
S-6 8 ft, bls
B 0.094
BRME 0.003
CDI 0.007
FLE 0.37
NAPH 3.6
PHATH 0.63
S-5 12 ft, bls
Ac 0.018
B 0.036
BRME 0.003
CHLF 0.032
E 0.99
T 0.12
X 5.8
2-MNAPH 5.5
BIS(2-E)PH 0.097
DIBZF 0.15
NAPH 0.25
PHATH 0.062
S-3 8 ft, bls
B 0.064
BRME 0.004
CDI 0.007
CHLF 0.068
E 0.18
E 4.4
E 2.3
MCL 0.005
T 0.018
X 12
2-MNAPH 1.7
PHATH 2.1
PY 0.2
SA-17.1 1 ft, bls
NO DETECTS
SA-17.2 2 ft, bls
NO DETECTS
SA-16.1 1 ft, bls
NO DETECTS
SA-16.2 2 ft, bls
NO DETECTS
SA-18.2.5 2.5 ft, bls
AC 0.1
SA-18.3.5 3.5 ft, bls
AC 0.11
1-MNAPH 18
SA-22.2.5 2.5 ft, bls
NO DETECTS
SA-22.3.5 3.5 ft, bls
NO DETECTS
SA-15.1 1 ft, bls
NO DETECTS
SA-15.2 2 ft, bls
NO DETECTS
SA-20.2.5 2.5 ft, bls
E 0.01
X 0.0064
SA-20.3.5 3.5 ft, bls
AC 0.079
CDI 0.0066
SA-21.2 2 ft, bls
NO DETECTS
SA-21.3 3 ft, bls
NO DETECTS
SA-8.2 2 ft, bls
NO DETECTS
A-GP-11 6-8 ft, bls
NO DETECTS
B-GP-12 6-8 ft, bls
NO DETECTS
A-GP-1 6-8 ft, bls
NO DETECTS
A-GP-2 6-8 ft, bls
NO DETECTS
SA-29.1 1 ft, bls
NO DETECTS
SA-28.1 1 ft, bls
NO DETECTS
SA-27.1 1 ft, bls
NO DETECTS
SA-26.1 1 ft, bls
B(a)ANC 2.8
B(a)PY 1.2
B(ghi)P 0.99
CHY 2.8
DIB(a,h)ANC 1.9
FLATH 2.2
I(1,2,3-cd)PY 1.9
PY 2
SA-25.1 1 ft, bls
ANC 1.1
B(a)ANC 10
B(a)PY 3.7
B(b)F 8.2
B(ghi)P 2.4
B(k)FL 8.2
CHY 10
DIB(a,h)ANC 4.5
FLATH 9.1
I(1,2,3-cd)PY 4.5
PHATH 1.1
PY 8.1
SA-24.1 1 ft, bls
B(a)PY 0.76
B(ghi)P 0.8
DIB(a,h)ANC 1.2
FLATH 1.5
I(1,2,3-cd)PY 1.2
PY 1.4
SA-23.1 1 ft, bls
B(a)PY 0.53
B(b)F 1.2
B(ghi)P 0.42
B(k)FL 1.2
DIB(a,h)ANC 0.68
FLATH 0.9
I(1,2,3-cd)PY 0.81
PY 8.1
MW-8 6-8 ft, bls
B(a)ANC 0.47
B(a)PY 0.44
B(b)F 0.71
CHY 0.47
FLATH 1
PY 0.73
SA-14.2 2 ft, bls
NO DETECTS
SA-14.3 3 ft, bls
NO DETECTS
MW-9 6-8 ft, bls
ANC 0.51
B(a)ANC 1.5
B(a)PY 1.1
B(b)F 1.8
B(ghi)P 0.77
B(k)FL 0.73
CHY 1.4
FLATH 4.2
I(1,2,3-cd)PY 0.73
PHATH 2.2
PY 2.8
GP-16 6-8 ft, bls
NO DETECTS
SA-13.2 2 ft, bls
NO DETECTS
SA-13.3 3 ft, bls
NO DETECTS
SA-12.2 2 ft, bls
NO DETECTS
SA-12.3 3 ft, bls
NO DETECTS
B-GP-17 6-8 ft, bls
NO DETECTS
MW-11 6-8 ft, bls
NO DETECTS
SA-19.3.5 3.5 ft, bls
X 0.024
1-MNAPH 0.72
2-MNAPH 0.64
T 0.98
X 61
2-MNAPH 24
FLE 4.4
SA-11.2 2 ft, bls
NO DETECTS
SA-11.3 3 ft, bls
NO DETECTS
A-GP-8 6-8 ft, bls
NO DETECTS
MW-10 2-4 ft, bls
NO DETECTS
C-GP-24 6-8 ft, bls
FLATH 0.89
PHATH 0.71
PY 0.57
MCL 0.011
T 0.15
X 23
FLE 0.68
NAPH 9.3
PHATH 1.2
MW-15 6-8 ft, bls
AC 0.0344
E 0.0107
X 0.0656
2-MNAPH 1.07
FLE 0.147
PHATH 0.302
PY 0.0397 J
MW-15 10-12 ft, bls
B 0.0014
CDI 0.00071 J
E 0.139
T 0.0263
X 0.812
2-MNAPH 0.182
FLE 0.014 J
NAPH 0.123
PHATH 0.0278 J
SA-10.4.5 4.5 ft, bls
CDI 0.013
SA-10.5.5 5.5 ft, bls
NO DETECTS
SA-9.4.5 4.5 ft, bls
NO DETECTS
SA-9.5.5 5.5 ft, bls
NO DETECTS
B-GP-15 6-8 ft, bls
NO DETECTS
B-GP-14 6-8 ft, bls
NO DETECTS
A-GP-9 6-8 ft, bls
NO DETECTS
MW-13 6-8 ft, bls
B(a)ANC 1.1
B(a)PY 0.96
B(b)F 1.1
B(ghi)P 0.71
B(k)FL 1
CHY 1.2
FLATH 2.4
I(1,2,3-cd)PY 0.71
PHATH 0.57
PY 1.9
MW-16 6-8 ft, bls
B 0.0019
E 0.366
X 0.639
2-MNAPH 0.0938
BIS(2-E)PH 0.0261
FLE 0.0126
MW-16 10-11 ft, bls
B 0.0211
E 0.0969
T 0.0174
X 0.4
2-MNAPH 0.172
PHATH 0.0407
C-GP-22
A-GP-05
MW-3
MW-20
MW-18R
MW-14
MW-21
13-MW-17
13-MW-12
SA-6.2
A-GP-04
SA-7.2
D-GP-31
C-GP-25
A-GP-03
A-GP-06
SA-4.3
13-MW-02
D-GP-33
MW-7
MW-5
D-GP-32
MW-6
A-GP-07
D-GP-34
B-GP-20
MW-4
MW-1
B-GP-18
C-GP-30
C-GP-26
C-GP-27
C-GP-28
B-GP-10
A-GP-10
A-GP-12
A-GP-13
A-GP-14
A-GP-15
A-GP-16
A-GP-17
A-GP-18
A-GP-19
A-GP-20
A-GP-21
A-GP-22
A-GP-23
A-GP-24
A-GP-25
A-GP-26
A-GP-27
A-GP-28
A-GP-29
A-GP-30
A-GP-31
A-GP-32
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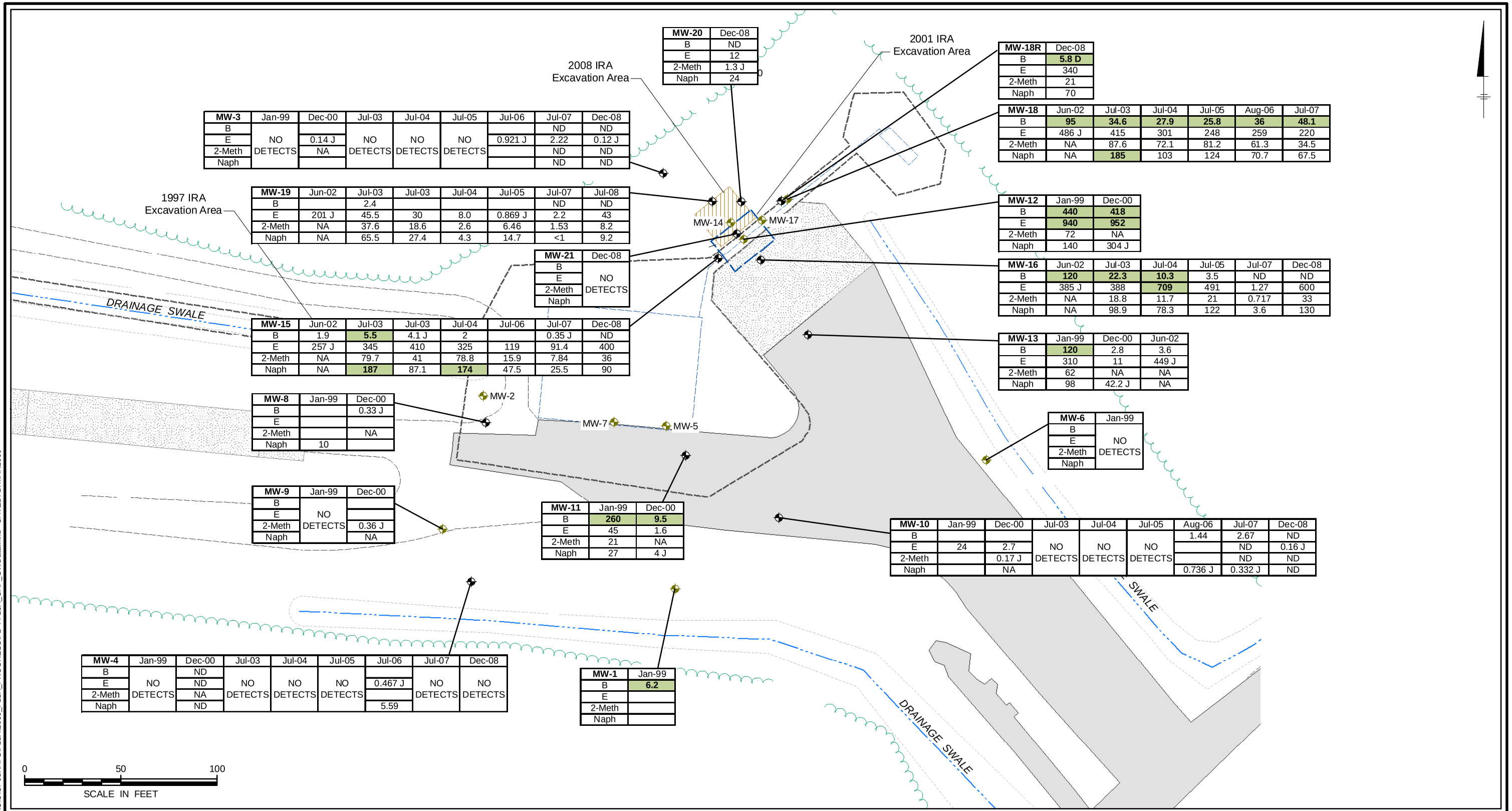


MW-20	Dec-08
B	ND
E	12
2-Meth	1.3 J
Naph	24

MW-18R	Dec-08
B	**5.8 D**
E	340
2-Meth	21
Naph	70

MW-3	Jan-99	Dec-00	Jul-03	Jul-04	Jul-05	Jul-06	Jul-07	Dec-08
B	NO DETECTS		NO DETECTS	NO DETECTS	NO DETECTS	0.921 J	ND	ND
E		0.14 J					2.22	0.12 J
2-Meth		NA					ND	ND
Naph							ND	ND

MW-18	Jun-02	Jul-03	Jul-04	Jul-05	Aug-06	Jul-07
B	**95**	**34.6**	**27.9**	**25.8**	**36**	**48.1**
E	486 J	415	301	248	259	220
2-Meth	NA	87.6	72.1	81.2	61.3	34.5
Naph	NA	**185**	103	124	70.7	67.5

MW-19	Jun-02	Jul-03	Jul-03	Jul-04	Jul-05	Jul-07	Jul-08
B		2.4				ND	ND
E	201 J	45.5	30	8.0	0.869 J	2.2	43
2-Meth	NA	37.6	18.6	2.6	6.46	1.53	8.2
Naph	NA	65.5	27.4	4.3	14.7	<1	9.2

MW-12	Jan-99	Dec-00
B	**440**	**418**
E	**940**	**952**
2-Meth	72	NA
Naph	140	304 J

MW-21	Dec-08
B	NO DETECTS
E	
2-Meth	
Naph	

MW-16	Jun-02	Jul-03	Jul-04	Jul-05	Jul-07	Dec-08
B	**120**	**22.3**	**10.3**	3.5	ND	ND
E	385 J	388	**709**	491	1.27	600
2-Meth	NA	18.8	11.7	21	0.717	33
Naph	NA	98.9	78.3	122	3.6	130

MW-15	Jun-02	Jul-03	Jul-03	Jul-04	Jul-06	Jul-07	Dec-08
B	1.9	**5.5**	4.1 J	2		0.35 J	ND
E	257 J	345	410	325	119	91.4	400
2-Meth	NA	79.7	41	78.8	15.9	7.84	36
Naph	NA	**187**	87.1	**174**	47.5	25.5	90

MW-13	Jan-99	Dec-00	Jun-02
B	**120**	2.8	3.6
E	310	11	449 J
2-Meth	62	NA	NA
Naph	98	42.2 J	NA

MW-8	Jan-99	Dec-00
B		0.33 J
E		
2-Meth		NA
Naph	10	

MW-6	Jan-99
B	NO DETECTS
E	
2-Meth	
Naph	

MW-9	Jan-99	Dec-00
B	NO DETECTS	
E		
2-Meth		0.36 J
Naph		NA

MW-11	Jan-99	Dec-00
B	**260**	**9.5**
E	45	1.6
2-Meth	21	NA
Naph	27	4 J

MW-10	Jan-99	Dec-00	Jul-03	Jul-04	Jul-05	Aug-06	Jul-07	Dec-08
B			NO DETECTS	NO DETECTS	NO DETECTS	1.44	2.67	ND
E	24	2.7					ND	0.16 J
2-Meth		0.17 J					ND	ND
Naph		NA				0.736 J	0.332 J	ND

MW-4	Jan-99	Dec-00	Jul-03	Jul-04	Jul-05	Jul-06	Jul-07	Dec-08
B	NO DETECTS	ND	NO DETECTS	NO DETECTS	NO DETECTS		NO DETECTS	NO DETECTS
E		ND				0.467 J		
2-Meth		NA						
Naph		ND				5.59		

MW-1	Jan-99
B	**6.2**
E	
2-Meth	
Naph	

LEGEND:

- Monitor Well (shallow)
- Former Monitor Well Location

NOTES:
1) MW-1 and MW-6 were destroyed by heavy equipment backing over them.
2) MW-12 was removed, MW-14 and MW-17 were damaged during the 2001/2002 Interim Removal Action (IRA).
3) MW-2, MW-5 MW-7 and MW-9 were abandoned in 2001/2002.
4) MW-18 was abandoned as part of the IRA in 2008.
5) All concentrations reported in micrograms per liter (µg/L).
6) Remedial levels were established in the Revised Final RFI (SAIC 2000).
7) **BOLD** indicates concentration above remedial level.)

MW-11	Well Number	Remedial Level
B	Benzene	5
E	Ethylbenzene	700
2-Meth	2-Methylnaphthalene	142
Naph	Naphthalene	149

NA	Not Analyzed
J	Estimated Value
D	Diluted

FORT STEWART MILITARY RESERVATION, GEORGIA
SWMU 13 – FIRE TRAINING AREA AT WAAF
CAP PROGRESS REPORT/ADDENDUM

Historical Groundwater Investigation Map (2002 – 2008)

ARCADIS

FIGURE 2-4

CITY:(KNOXVILLE) DIV/GROUP:(ENV) DB:(B.ALTOM) LD:(B.ALTOM) PIC:(M.FENNER) PM:(C.BERTZ) TM:(A.DAVIS)
PROJECT: GP08HAFS.F13A.EHCAP PATH: G:\GIS\GP08HAFS\F13A\2009_F13A_PROGRESS\F2-4 F13A_CAP_GWData.mxd SAVED: 17MAR2009

3. 2008 Investigations and Groundwater Sampling Evaluation

3.1 2008 Interim Remedial Action

In April 2006, subsurface soil samples were collected along the abandoned pipeline at SWMU 13 to determine the extent of potential remaining subsurface soil contamination that may potentially be influencing groundwater contamination. Groundwater samples were also collected in August 2006. The analytical results of these soil and groundwater samples and the resulting conclusions and recommendations are found in the report, *Final Corrective Action Plan Progress Report for Calendar Year 2006 for the Former Fire Training Area at Wright Army Airfield* (SAIC 2007). In March 2008 the *Final Work Plan for Interim Remedial Action and Corrective Action Progress Report at Wright Army Airfield Fire Training Area* (SES 2008) was prepared and submitted to the GA EPD. Details of the proposed IRA are provided below.

Monitor Well Abandonment

In March 2008, SES, mobilized to SWMU 13 and began IRA activities. Groundwater monitor well MW-18, a one-inch diameter monitor well (total depth of 13 ft) was abandoned by overdrilling the well to a depth of 13 ft. The well materials were removed and a tremie pipe was used to backfill the boring by pumping a cement/bentonite grout mixture from the bottom of the boring to ground surface. See Appendix A for a copy of the monitoring well abandonment form.

Soil Excavation and ORC® Placement

As detailed in the CAP Report, residual contaminated soils were identified in the vicinity of soil boring SB-15. An IRA targeting these soils was implemented in 2008. The area of excavation covered an approximate 20 foot by 20 foot area. Soils encountered from 0 to 6 ft below grade interval (overburden material) were deemed potentially clean and placed in a stockpile for later use as backfill. Subsequent laboratory analysis of these stockpiled soils verified their suitability as clean backfill material. Soils encountered from 6 ft to 12 ft below grade exhibited a petroleum odor which was verified using a photo-ionization detector (PID). These soils were stockpiled on plastic sheeting separate from overburden material. The depth of the excavation was stopped at 12 ft below grade where groundwater was encountered.

Upon completion of the excavation, ORC® was applied to the bottom and sidewalls of the excavation. In accordance with the approved Work Plan, 350 pounds of ORC® were applied uniformly over the sidewalls and bottom of the excavation.

Soils generated from the 6 to 12 foot interval were placed in six, lined roll off type containers for disposal. Laboratory analytical data (Toxicity Characteristic Leaching Procedure [TCLP] analysis) was utilized to develop a waste profile which was submitted to Waste Management for approval. Upon approval, the waste containers were manifested by the Directorate of Public Works and transported to Superior Landfill in Savannah, Georgia for disposal. Waste Characterization forms and Manifests have been included in Appendix B.

Potentially clean stockpiled soils were sampled and analyzed for BTEX, PAHs and total petroleum hydrocarbons (TPH) gasoline range organics (GRO) and diesel range organics (DRO). Samples were sent to Empirical Laboratory in Nashville, Tennessee for analysis. Laboratory analytical data confirmed that no constituents were present at concentrations above the laboratory reporting limit. Based on this, stockpiled clean soils were placed in the excavation as backfill material. The remainder of the excavation was backfilled with soils imported from an off-site borrow area. Results of compaction testing of the backfill material has been included as Appendix C

Monitor Well Installation

Upon completion of excavation activities, SES installed 3 monitor wells at SWMU 13. Monitor wells MW-18R (a replacement well for MW-18), MW-20 and MW-21 were installed at locations shown on Figure 3-1. Monitor wells were 2-inch diameter with flush surface completions installed by Boart Longyear drilling company under the direction of a SES Registered Georgia Professional Geologist. Copies of the boring logs and well installation diagrams has been included as Appendix D.

ORC® Advanced Injections

ORC® Advanced is a formula of calcium oxyhydroxide that is utilized to produce a controlled release of oxygen for a period of up to 12 months. In May 2008, direct push technology was utilized to apply ORC® Advanced to nine injection points at SWMU 13. Injections were completed by injecting a slurry (14 gallons water/ 50 lbs ORC) at each location. Injections were started at 20 ft below grade with 5 lbs of ORC® Advanced injected every vertical foot (10 vertical feet total) for a total of 50 lbs per injection point.

Upon completion of injections, each location was filled with bentonite and the surrounding area restored to its original condition.

3.2 2008 Groundwater Monitoring

On December 18 and 19, 2008, SAIC completed groundwater monitoring activities at SWMU 13. Activities included the sampling of monitor wells MW-3, MW-4, MW-10, MW-15, MW-16, MW-18R, MW-19, MW-20, and MW-21. One deviation from the approved monitoring program was that monitor well MW-4 was sampled in place of MW-9,which was destroyed in 2001 or 2002. Monitor well MW-4 was selected to monitor groundwater conditions cross gradient / lateral to the former FTA. Samples were collected and sent to Empirical Laboratory for analysis by EPA Method 8260 (VOCs) and EPA Method 8270 (SVOCs). A summary of the laboratory analytical data can be seen in Table 3-1. The complete laboratory analytical data package can be seen in Appendix E. A summary of the historical groundwater monitoring data can be seen on Table 3-2. Contaminant plume maps for benzene, ethylbenzene, 2-methylnaphthalene, and naphthalene have been prepared and are included as Figure 3-2 through Figure 3-5, respectively.

Table 3-1
December 2008 Groundwater Analytical Summary
SWMU 13 Former Fire Training Area
Fort Stewart, Georgia

			Location ID	MW-3	MW-4	MW-4 dup	MW-10	MW-15	MW-16	MW-18R	MW-19	MW-20	MW-21
			Sample Date	12/18/2008	12/18/2008	12/18/2008	12/18/2008	12/18/2008	12/18/2008	12/19/2008	12/18/2008	12/18/2008	12/19/2008
Chemical Name	MCL	2008 RSL	Unit										
Nitrate		58,000	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrite		3,700	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Dioxide			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorous		0.73	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxygen			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	10	0.045	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2,000	7,300	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	18	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	100		ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ferric Iron			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300	26,000	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	15		ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.63	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	50	180	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	100	180	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	200	9,100	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane		0.067	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		59,000	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
1,1,2-Trichloroethane	5	0.24	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane		2.4	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	7	340	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
1,2,4-Trichlorobenzene	70	8.2	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
1,2-Dibromo-3-chloropropane (DBCP)	.2	0.00032	ug/L	< 2 U	< 2 U	< 2 U	< 2 U	< 25 UD	< 50 UD	< 10 UD	< 2 U	< 2 U	< 2 U
1,2-Dibromoethane	.05	0.0065	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
1,2-Dichlorobenzene	600	370	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane	5	0.15	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
1,2-Dichloroethene		330	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	5	0.39	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
1,3-Dichlorobenzene			ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
1,4-Dichlorobenzene	75	0.43	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
2-Butanone		7,100	ug/L	< 10 U	< 10 U	< 10 U	< 10 U	< 120 UD	< 250 UD	< 50 UD	< 10 U	< 10 U	< 10 U
2-Hexanone			ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 62 UD	< 50 UD	< 10 UD	< 5 U	< 5 U	< 5 U
4-Methyl-2-pentanone		2,000	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 562 UD	< 50 UD	< 10 UD	< 5 U	< 5 U	< 5 U
Acetone		22,000	ug/L	< 10 U	< 10 U	< 10 U	< 10 U	< 120 UD	< 250 UD	< 50 UDJ	< 10 U	< 10 U	< 10 U
Benzene	5	0.41	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	**5.8 D**	< 1 U	< 1 U	< 1 U
Benzene, 1-methylethyl		680	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	47 D	52 D	23 D	13	2.3	< 1 U
Bromochloromethane			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane		1.1	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
Bromoform		8.5	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
Bromomethane		8.7	ug/L	< 2 U	< 2 U	< 2 U	< 2 U	< 25 UD	< 50 UD	< 10 UD	< 2 U	< 2 U	< 2 U
Carbon disulfide		1,000	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
Carbon tetrachloride	5	0.2	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
CFC-11		1,300	ug/L	< 2 U	< 2 U	< 2 U	< 2 U	< 25 UD	< 50 UD	< 10 UD	< 2 U	< 2 U	< 2 U
CFC-12		390	ug/L	< 2 U	< 2 U	< 2 U	< 2 U	< 25 UD	< 50 UD	< 10 UD	< 2 U	< 2 U	< 2 U
Chlorobenzene	100	91	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	.93 JBDU	< 1 U	< 1 U	.21 JBU
Chloroethane		21,000	ug/L	< 2 U	< 2 U	< 2 U	< 2 U	< 25 UD	< 50 UD	< 10 UD	< 2 U	< 2 U	< 2 UJ
Chloroform		0.19	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
Chloromethane		1.8	ug/L	< 2 U	< 2 U	< 2 U	< 2 U	< 25 UD	< 50 UD	< 10 UD	< 2 U	< 2 U	< 2 U
cis-1,2-Dichloroethene	70	370	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
cis-1,3-Dichloropropene			ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
Cyclohexane		13,000	ug/L	< 2 U	< 2 U	< 2 U	< 2 U	73 D	96 D	54 D	20	1.8 J	< 2 U
Dibromochloromethane		0.8	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
Ethylbenzene	700	1.5	ug/L	.12 J	< 1 U	< 1 U	.16 J	400 D	600 D	340 D	43	12	< 1 U
Methyl acetate		37,000	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
Methylcyclohexane			ug/L	< 1 U	< 1 U	< 1 U	< 1 U	73 D	54 D	42 D	11	.77 J	< 1 U
Methylene chloride	5	4.8	ug/L	< 2 U	< 2 U	< 2 U	< 2 U	< 25 UD	< 50 UD	1.3 JBDU	< 2 U	< 2 U	.3 JBU
Styrene		1,600	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	1.4 JD	< 25 UD	< 5 UD	.3 J	< 1 U	< 1 U
tert-Butyl methyl ether		12	ug/L	< 1 U	< 1 U	< 1 U	.78 J	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
Tetrachloroethene	5	0.11	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
Toluene	1,000	2,300	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	23 D	18 JD	10 D	.2 J	< 1 U	< 1 U
trans-1,2-Dichloroethene	100	110	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene			ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
Trichloroethene	5	1.7	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 12 UD	< 25 UD	< 5 UD	< 1 U	< 1 U	< 1 U
Vinyl acetate		410	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 3-1
December 2008 Groundwater Analytical Summary
SWMU 13 Former Fire Training Area
Fort Stewart, Georgia

			Location ID	MW-3	MW-4	MW-4 dup	MW-10	MW-15	MW-16	MW-18R	MW-19	MW-20	MW-21
			Sample Date	12/18/2008	12/18/2008	12/18/2008	12/18/2008	12/18/2008	12/18/2008	12/19/2008	12/18/2008	12/18/2008	12/19/2008
Chemical Name	MCL	2008 RSL	Unit										
Vinyl chloride	2	0.016	ug/L	< 2 U	< 2 U	< 2 U	< 2 U	< 25 UD	< 50 UD	< 10 UD	< 2 U	< 2 U	< 2 U
Xylenes (total)	10,000	200	ug/L	.42 J	< 1 U	< 1 U	< 1 U	1700 D	2300 D	1000 D	21	1	< 1 U
1,1'-Biphenyl		1,800	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	3.5	3.1	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
1,2,4-Trichlorobenzene	70	8.2	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	600	370	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	0.43	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol		3,700	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
2,4,6-Trichlorophenol		6.1	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
2,4-Dichlorophenol		110	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
2,4-Dimethylphenol		730	ug/L	< 9.4 UJ	< 9.4 UJ	< 10 UJ	< 9.8 UJ	< 9.3 UJ	< 10 UJ	< 19 UJ	< 10 UJ	< 9.2 UJ	< 19 UJ
2,4-Dinitrophenol		73	ug/L	< 24 UJ	< 24 UJ	< 25 UJ	< 24 UJ	< 23 UJ	< 25 U	< 47 UJ	< 25 UJ	< 23 UJ	< 48 UJ
2,4-Dinitrotoluene		73	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 UJ	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
2,6-Dinitrotoluene		37	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
2-Chloronaphthalene		2,900	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
2-Chlorophenol		180	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
2-Methyl-4,6-dinitrophenol		3.7	ug/L	< 9.4 U	< 9.4 U	< 10 U	< 9.8 U	< 9.3 U	< 10 U	< 19 U	< 10 U	< 9.2 U	< 19 U
2-Methylnaphthalene		150	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	36	33	21	8.2	1.3 J	< 4.8 U
2-Methylphenol		1,800	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
2-Nitrobenzenamine			ug/L	< 9.4 U	< 9.4 U	< 10 U	< 9.8 U	< 9.3 U	< 10 U	< 19 U	< 10 U	< 9.2 U	< 19 U
2-Nitrophenol			ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
3,3'-Dichlorobenzidine		0.15	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
3-Nitrobenzenamine		3.2	ug/L	< 9.4 U	< 9.4 U	< 10 U	< 9.8 U	< 9.3 U	< 10 U	< 19 U	< 10 U	< 9.2 U	< 19 U
4-Bromophenyl phenyl ether			ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
4-Chloro-3-methylphenol			ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
4-Chlorobenzenamine		1.2	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
4-Chlorophenyl phenyl ether			ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
4-Methylphenol		180	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
4-Nitrobenzenamine		3.2	ug/L	< 9.4 UJ	< 9.4 UJ	< 10 UJ	< 9.8 UJ	< 9.3 UJ	< 10 UJ	< 19 UJ	< 10 UJ	< 9.2 U	< 19 UJ
4-Nitrophenol			ug/L	< 9.4 U	< 9.4 U	< 10 U	< 9.8 U	< 9.3 U	< 10 U	< 19 U	< 10 U	< 9.2 U	< 19 U
Acenaphthene		2,200	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	.33 J	< 2.5 JBU	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Acenaphthylene			ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Acetophenone		3,700	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
alpha-Terpineol			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene		11,000	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Atrazine	3	0.29	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Benz(a)anthracene		0.029	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Benzaldehyde		3,700	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Benzenemethanol		18,000	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzidine		0.000094	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	.2	0.0029	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Benzo(b)fluoranthene		0.029	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Benzo(ghi)perylene			ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Benzo(k)fluoranthene		0.29	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Benzoic acid		150,000	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane		110	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Bis(2-chloroethyl) ether		0.012	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Bis(2-chloroisopropyl) ether	500	0.32	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 UJ	< 2.5 U	< 2.3 U	< 4.8 UJ
Bis(2-ethylhexyl)phthalate	6	4.8	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Butyl benzyl phthalate		35	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Caprolactam		18,000	ug/L	< 2.4 UJ	< 2.4 UJ	< 2.5 UJ	< 2.4 UJ	< 2.3 UJ	< 2.5 UJ	< 4.7 UJ	< 2.5 UJ	< 2.3 UJ	< 4.8 UJ
Carbazole			ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Chrysene		2.9	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Dibenz(a,h)anthracene		0.0029	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Dibenzofuran			ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	.47	.38 J	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Diethyl phthalate		29,000	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Dimethyl phthalate			ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Di-n-butyl phthalate		3,700	ug/L	.82 JB	.62 JBU	.67 JBU	.77 JBU	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	.82 JB	1.3 J
Di-n-octylphthalate			ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Diphenylamine		910	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene		1,500	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Fluorene		1,500	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	1.2 J	.94 J	.79 J	.3 J	< 2.3 U	< 4.8 U
Hexachlorobenzene	1	0.042	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Hexachlorobutadiene		0.86	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Hexachlorocyclopentadiene	50	220	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 UJ	< 2.5 U	< 2.3 U	< 4.8 UJ
Hexachloroethane		4.8	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Indeno(1,2,3-cd)pyrene		0.029	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Isophorone		71	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Naphthalene		0.14	ug/L	< 24 U	< 2.4 U	< 2.5 U	< 2.4 U	**76 D**	**120 D**	**70**	**9.2**	**2.4**	< 4.8 U
Nitrobenzene		3.4	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U

Table 3-1
December 2008 Groundwater Analytical Summary
SWMU 13 Former Fire Training Area
Fort Stewart, Georgia

			Location ID	MW-3	MW-4	MW-4 dup	MW-10	MW-15	MW-16	MW-18R	MW-19	MW-20	MW-21
			Sample Date	12/18/2008	12/18/2008	12/18/2008	12/18/2008	12/18/2008	12/18/2008	12/19/2008	12/18/2008	12/18/2008	12/19/2008
Chemical Name	MCL	2008 RSL	Unit										
N-Nitroso-di-n-propylamine		0.0096	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
N-Nitrosodiphenylamine		14	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Pentachlorophenol	1	0.56	ug/L	< 9.4 U	< 9.4 U	< 10 U	< 9.8 U	< 9.3 U	< 10 U	< 19 U	< 10 U	< 9.2 U	< 19 U
Phenanthrene			ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	.51 J	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Phenol		11,000	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U
Pyrene		1,100	ug/L	< 2.4 U	< 2.4 U	< 2.5 U	< 2.4 U	< 2.3 U	< 2.5 U	< 4.7 U	< 2.5 U	< 2.3 U	< 4.8 U

Notes:
Laboratory analytical data was provided by SpecPro Environmental Services, LLC
Result exceeds the MCL, or the RSL if the MCL is not established.
RSL = 2008 EPA Regional Screening Levels
MCL = EPA Maximum Contaminant Levels
J = Result is estimated
U = Result was not detected above the reporting limit
D = sample was diluted in order to complete analysis
B = Constituent was detected in a blank sample
ug/L = micrograms per liter

Table 3-2
Historical Groundwater Analytical Summary
SWMU 13 Former Fire Training Area
Fort Stewart, Georgia

			Sample ID	MW-1(011299)	MW-3(011299)	FT0312(120300)	FT0332(072303)	FT0344(072104)	FT0342(072104)	FT0352(071405)	FT0362(072606)	FT0372(071107)	08353G02(121808)	MW-4(011299)	FT0412(120300)	FT0432(072403)	FT0442(072104)	FT0452(071405)
			Location ID	13-MW-01	13-MW-03	13-MW-03	13-MW-03	13-MW-03 (duplicate)	13-MW-03	13-MW-03	13-MW-03	13-MW-03	13-MW-03	13-MW-04	13-MW-04	13-MW-04	13-MW-04	13-MW-04
			Sample Date	1/12/1999	1/12/1999	12/3/2000	7/23/2003	7/21/2004	7/21/2004	7/14/2005	7/26/2006	7/11/2007	12/18/2008	1/12/1999	12/3/2000	7/24/2003	7/21/2004	7/14/2005
Chemical Name	MCL	2008 RSL	Unit															
Nitrate		58,000	ug/L	NA	NA	NA	< 100 U	NA	NA	100 HU	174 UJ	NA	NA	NA	NA	328	608	983 H
Nitrite		3,700	ug/L	NA	NA	NA	< 100 U	NA	NA	100 HU	NA	NA	NA	NA	NA	< 100 U	< 100 U	100 HU
Sulfate			ug/L	NA	NA	NA	2380	NA	NA	3450	NA	NA	NA	NA	NA	1560	559	894
Carbon Dioxide			ug/L	NA	NA	NA	49300	75400	81500	189000	22500	NA	NA	NA	NA	NA	71400	123000
Phosphorous		0.73	ug/L	NA	NA	NA	< 50 U	**11 J**	< 50 U	NA	< 50 U	NA	NA	NA	NA	**369**	**187**	**168**
Sulfate			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide			ug/L	NA	NA	NA	< 100 U	< 100 U	< 100 U	NA	< 30 U	NA	NA	NA	NA	< 100 U	< 100 U	< 100 U
Oxygen			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane			ug/L	NA	NA	NA	71.6	34.9	35.8	180	< 25 UJ	NA	NA	NA	NA	NA	< 14 U	18.2
Arsenic	10	0.045	ug/L	NA	NA	NA	NA	NA	NA	NA	< 4 U	< 4 U	NA	NA	NA	NA	NA	NA
Barium	2000	7,300	ug/L	19	15	NA	NA	NA	NA	NA	13.3	18.7	NA	15	NA	NA	NA	NA
Cadmium	5	18	ug/L	NA	NA	NA	NA	NA	NA	NA	< 0.3 U	< 1 U	NA	NA	NA	NA	NA	NA
Chromium	100		ug/L	NA	NA	NA	NA	NA	NA	NA	< 1 U	1.3 BJ	NA	NA	NA	NA	NA	NA
Ferric Iron			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300	26,000	ug/L	NA	NA	NA	NA	**2160**	**2130**	**2000**	**309**	NA	NA	NA	NA	**1820**	**918**	**916**
Lead	15		ug/L	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 5 U	NA	NA	NA	NA	NA	NA
Mercury	2	0.63	ug/L	NA	NA	NA	NA	NA	NA	NA	< 0.028 U	< 0.05 U	NA	NA	NA	NA	NA	NA
Selenium	50	180	ug/L	NA	NA	NA	NA	NA	NA	NA	< 7 U	< 8 U	NA	NA	NA	NA	NA	NA
Silver	100	180	ug/L	NA	NA	NA	NA	NA	NA	NA	< 1 U	< 2 U	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	200	9,100	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane		0.067	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	< 1 U	< 1 U	< 1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		59,000	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	5	0.24	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane		2.4	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	7	340	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	< 1 U	< 1 U	< 1 U
1,2,4-Trichlorobenzene	70	8.2	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	.2	0.00032	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	NA	NA	NA	NA	NA
1,2-Dibromoethane	.05	0.0065	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	600	370	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	NA	NA	NA	NA	NA
1,2-Dichloroethane	5	0.15	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	< 1 U	< 1 U	< 1 U
1,2-Dichloroethene		330	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U
1,2-Dichloropropane	5	0.39	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	< 1 U	< 1 U	< 1 U
1,3-Dichlorobenzene			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	0.43	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	NA	NA	NA	NA	NA
2-Butanone		7,100	ug/L	NA	NA	NA	NA	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 10 U	NA	NA	< 5 U	< 5 U	< 5 U
2-Hexanone			ug/L	NA	NA	NA	NA	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	< 5 U	< 5 U	< 5 U
4-Methyl-2-pentanone		2,000	ug/L	NA	NA	NA	NA	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	< 5 U	< 5 U	< 5 U
Acetone		22,000	ug/L	NA	NA	NA	NA	5 JU	< 5 UJ	5 JU	< 5 U	< 5 U	< 10 U	NA	NA	< 5 U	6.8 U	5 JU
Benzene	5	0.41	ug/L	**6.2**	NA	< 1 U	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U
Benzene, 1-methylethyl		680	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	NA	NA	NA	NA	NA
Bromochloromethane			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane		1.1	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	< 1 U	< 1 U	< 1 U
Bromoform		8.5	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	< 1 U	< 1 U	< 1 U
Bromomethane		8.7	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 2 U	NA	NA	< 1 U	< 1 U	< 1 U
Carbon disulfide		1,000	ug/L	NA	NA	NA	NA	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 1 U	NA	NA	< 5 U	< 5 U	< 5 U
Carbon tetrachloride	5	0.2	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	< 1 U	< 1 U	< 1 U
CFC-11		1,300	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	NA	NA	NA	NA	NA
CFC-12		390	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	NA	NA	NA	NA	NA
Chlorobenzene	100	91	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	< 1 U	< 1 U	< 1 U
Chloroethane		21,000	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 2 U	NA	NA	< 1 U	< 1 U	< 1 U
Chloroform		0.19	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	< 1 U	< 1 U	< 1 U
Chloromethane		1.8	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 2 U	NA	NA	< 1 U	< 1 U	< 1 U
cis-1,2-Dichloroethene	70	370	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	< 1 U	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene			ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	< 1 U	< 1 U	< 1 U
Cyclohexane		13,000	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	NA	NA	NA	NA	NA
Dibromochloromethane		0.8	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	< 1 U	< 1 U	< 1 U
Ethylbenzene	700	1.5	ug/L	< 5 U	NA	.14 J	NA	< 1 UJ	< 1 UJ	< 1 U	.921 J	2.22	.12 J	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U
Methyl acetate		37,000	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	NA	NA	NA	NA	NA
Methylcyclohexane			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	NA	NA	NA	NA	NA
Methylene chloride	5	4.8	ug/L	NA	NA	NA	NA	< 5 UJ	2.1 J	< 5 U	< 5 U	< 5 U	< 2 U	NA	NA	< 5 U	2.3 J	< 5 U
Styrene		1,600	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	< 1 U	< 1 U	< 1 U
tert-Butyl methyl ether		12	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	NA	NA	NA	NA	NA
Tetrachloroethene	5	0.11	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	< 1 U	< 1 U	< 1 U
Toluene	1000	2,300	ug/L	< 5 U	NA	< 1 U	NA	1 JBUJ	1 JBUJ	< 1 U	1.58	< 1 U	< 1 U	< 5 U	.26 J	< 1 U	1 JBU	< 1 U
trans-1,2-Dichloroethene	100	110	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	< 1 U	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene			ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	< 1 U	< 1 U	< 1 U
Trichloroethene	5	1.7	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	< 1 U	< 1 U	< 1 U
Vinyl acetate		410	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	< 5 U	NA	NA	NA	NA	NA	NA
Vinyl chloride	2	0.016	ug/L	NA	NA	NA	NA	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 2 U	NA	NA	< 1 U	< 1 U	< 1 U
Xylenes (total)	10000	200	ug/L	< 5 U	NA	.45 J	NA	< 1 UJ	< 1 UJ	< 1 U	3.45	8.14	.42 J	< 5 U	< 3 U	< 1 U	< 1 U	< 1 U

Table 3-2
Historical Groundwater Analytical Summary
SWMU 13 Former Fire Training Area
Fort Stewart, Georgia

			Sample ID	MW-1(011299)	MW-3(011299)	FT0312(120300)	FT0332(072303)	FT0344(072104)	FT0342(072104)	FT0352(071405)	FT0362(072606)	FT0372(071107)	08353G02(121808)	MW-4(011299)	FT0412(120300)	FT0432(072403)	FT0442(072104)	FT0452(071405)
			Location ID	13-MW-01	13-MW-03	13-MW-03	13-MW-03	13-MW-03 (duplicate)	13-MW-03	13-MW-03	13-MW-03	13-MW-03	13-MW-03	13-MW-04	13-MW-04	13-MW-04	13-MW-04	13-MW-04
			Sample Date	1/12/1999	1/12/1999	12/3/2000	7/23/2003	7/21/2004	7/21/2004	7/14/2005	7/26/2006	7/11/2007	12/18/2008	1/12/1999	12/3/2000	7/24/2003	7/21/2004	7/14/2005
Chemical Name	MCL	2008 RSL	Unit															
1,1'-Biphenyl		1,800	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
1,2,4-Trichlorobenzene	70	8.2	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	NA	NA	NA	< 10.5 U	NA	< 10 UJ
1,2-Dichlorobenzene	600	370	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	NA	NA	NA	< 10.5 U	NA	< 10 UJ
1,3-Dichlorobenzene			ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	NA	NA	NA	< 10.5 U	NA	< 10 UJ
1,4-Dichlorobenzene	75	0.43	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	NA	NA	NA	< 10.5 U	NA	< 10 UJ
2,4,5-Trichlorophenol		3,700	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 UR	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
2,4,6-Trichlorophenol		6.1	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 UR	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
2,4-Dichlorophenol		110	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
2,4-Dimethylphenol		730	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 UR	< 9.4 UJ	NA	NA	< 10.5 U	NA	< 10 UJ
2,4-Dinitrophenol		73	ug/L	NA	NA	NA	< 20.4 U	NA	NA	< 22.5 U	< 20.6 U	< 19.2 UR	< 24 UJ	NA	NA	< 21 U	NA	< 20 UJ
2,4-Dinitrotoluene		73	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
2,6-Dinitrotoluene		37	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
2-Chloronaphthalene		2,900	ug/L	NA	NA	< 0.95 U	< 1 U	NA	NA	< 1.1 U	< 1.03 U	< 0.962 U	< 2.4 U	NA	< 0.95 U	< 1 U	NA	< 1 UJ
2-Chlorophenol		180	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 UR	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
2-Methyl-4,6-dinitrophenol		3.7	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 UR	< 9.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
2-Methylnaphthalene		150	ug/L	< 10 U	NA	NA	< 1 U	NA	NA	< 1.1 U	< 1.03 U	< 0.962 U	< 2.4 U	< 10 U	NA	< 1 U	NA	< 1 UJ
2-Methylphenol		1,800	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 UR	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
2-Nitrobenzenamine			ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 9.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
2-Nitrophenol			ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 UR	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
3,3'-Dichlorobenzidine		0.15	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
3-Nitrobenzenamine		3.2	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 9.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
4-Bromophenyl phenyl ether			ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
4-Chloro-3-methylphenol			ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 UR	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
4-Chlorobenzenamine		1.2	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 UJ	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
4-Chlorophenyl phenyl ether			ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
4-Methylphenol		180	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 UR	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
4-Nitrobenzenamine		3.2	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 9.4 UJ	NA	NA	< 10.5 U	NA	< 10 UJ
4-Nitrophenol			ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 UR	< 9.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
Acenaphthene		2,200	ug/L	NA	NA	< 0.95 U	< 1 U	NA	NA	< 1.1 U	< 1.03 U	< 0.962 U	< 2.4 U	NA	< 0.95 U	< 1 U	NA	< 1 UJ
Acenaphthylene			ug/L	NA	NA	< 0.95 U	< 1 U	NA	NA	< 1.1 U	< 1.03 U	< 0.962 U	< 2.4 U	NA	< 0.95 U	< 1 U	NA	< 1 UJ
Acetophenone		3,700	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 2.4 U	NA	NA	NA	NA	NA
alpha-Terpineol			ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 UR	NA	NA	NA	< 10.5 U	NA	< 10 UJ
Anthracene		11,000	ug/L	NA	NA	< 0.95 U	< 1 U	NA	NA	< 1.1 U	< 1.03 U	< 0.962 U	< 2.4 U	NA	< 0.95 U	< 1 U	NA	< 1 UJ
Atrazine	3	0.29	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
Benz(a)anthracene		0.029	ug/L	NA	NA	< 0.95 U	< 1 U	NA	NA	< 1.1 U	< 1.03 U	< 0.962 U	< 2.4 U	NA	< 0.95 U	< 1 U	NA	< 1 UJ
Benzaldehyde		3,700	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
Benzenemethanol		18,000	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	< 9.62 UR	NA	NA	NA	NA	NA	NA
Benzidine		0.000094	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	< 9.62 U	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	.2	0.0029	ug/L	NA	NA	< 0.95 U	< 1 U	NA	NA	< 1.1 U	< 1.03 U	< 0.962 U	< 2.4 U	NA	< 0.95 U	< 1 U	NA	< 1 UJ
Benzo(b)fluoranthene		0.029	ug/L	NA	NA	< 0.95 U	< 1 U	NA	NA	< 1.1 U	< 1.03 U	< 0.962 U	< 2.4 U	NA	< 0.95 U	< 1 U	NA	< 1 UJ
Benzo(ghi)perylene			ug/L	NA	NA	< 0.95 U	< 1 U	NA	NA	< 1.1 U	< 1.03 U	< 0.962 U	< 2.4 U	NA	< 0.95 U	< 1 U	NA	< 1 UJ
Benzo(k)fluoranthene		0.29	ug/L	NA	NA	< 0.95 U	< 1 U	NA	NA	< 1.1 U	< 1.03 U	< 0.962 U	< 2.4 U	NA	< 0.95 U	< 1 U	NA	< 1 UJ
Benzoic acid		150,000	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	< 19.2 UR	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane		110	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
Bis(2-chloroethyl) ether		0.012	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
Bis(2-chloroisopropyl) ether	500	0.32	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
Bis(2-ethylhexyl)phthalate	6	4.8	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	**10.5 JBU**	NA	< 10 UJ
Butyl benzyl phthalate		35	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
Caprolactam		18,000	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 2.4 UJ	NA	NA	NA	NA	NA
Carbazole			ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 0.962 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
Chrysene		2.9	ug/L	NA	NA	< 0.95 U	< 1 U	NA	NA	< 1.1 U	< 1.03 U	< 0.962 U	< 2.4 U	NA	< 0.95 U	< 1 U	NA	< 1 UJ
Dibenz(a,h)anthracene		0.0029	ug/L	NA	NA	< 0.95 U	< 1 U	NA	NA	< 1.1 U	< 1.03 U	< 0.962 U	< 2.4 U	NA	< 0.95 U	< 1 U	NA	< 1 UJ
Dibenzofuran			ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
Diethyl phthalate		29,000	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
Dimethyl phthalate			ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
Di-n-butyl phthalate		3,700	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	.82 JB	NA	NA	< 10.5 U	NA	< 10 UJ
Di-n-octylphthalate			ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
Diphenylamine		910	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	NA	NA	NA	< 10.5 U	NA	< 10 UJ
Fluoranthene		1,500	ug/L	NA	NA	< 0.95 U	< 1 U	NA	NA	< 1.1 U	< 1.03 U	< 0.962 U	< 2.4 U	NA	< 0.95 U	< 1 U	NA	< 1 UJ
Fluorene		1,500	ug/L	NA	NA	< 0.95 U	< 1 U	NA	NA	< 1.1 U	< 1.03 U	< 0.962 U	< 2.4 U	NA	< 0.95 U	< 1 U	NA	< 1 UJ
Hexachlorobenzene	1	0.042	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
Hexachlorobutadiene		0.86	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
Hexachlorocyclopentadiene	50	220	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
Hexachloroethane		4.8	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
Indeno(1,2,3-cd)pyrene		0.029	ug/L	NA	NA	< 0.95 U	< 1 U	NA	NA	< 1.1 U	< 1.03 U	< 0.962 U	< 2.4 U	NA	< 0.95 U	< 1 U	NA	< 1 UJ
Isophorone		71	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
Naphthalene		0.14	ug/L	< 10 U	NA	< 0.95 U	< 1 U	NA	NA	< 1.1 U	< 1.03 U	< 0.962 U	< 24 U	< 10 U	< 0.95 U	< 1 U	NA	< 1 UJ
Nitrobenzene		3.4	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
N-Nitroso-di-n-propylamine		0.0096	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 U	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
N-Nitrosodiphenylamine		14	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 2.4 U	NA	NA	NA	NA	NA
Pentachlorophenol	1	0.56	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 UR	< 9.4 U	NA	NA	< 10.5 U	NA	< 10 UJ

Table 3-2
Historical Groundwater Analytical Summary
SWMU 13 Former Fire Training Area
Fort Stewart, Georgia

			Sample ID	MW-1(011299)	MW-3(011299)	FT0312(120300)	FT0332(072303)	FT0344(072104)	FT0342(072104)	FT0352(071405)	FT0362(072606)	FT0372(071107)	08353G02(121808)	MW-4(011299)	FT0412(120300)	FT0432(072403)	FT0442(072104)	FT0452(071405)
			Location ID	13-MW-01	13-MW-03	13-MW-03	13-MW-03	13-MW-03 (duplicate)	13-MW-03	13-MW-03	13-MW-03	13-MW-03	13-MW-03	13-MW-04	13-MW-04	13-MW-04	13-MW-04	13-MW-04
			Sample Date	1/12/1999	1/12/1999	12/3/2000	7/23/2003	7/21/2004	7/21/2004	7/14/2005	7/26/2006	7/11/2007	12/18/2008	1/12/1999	12/3/2000	7/24/2003	7/21/2004	7/14/2005
Chemical Name	MCL	2008 RSL	Unit															
Phenanthrene			ug/L	NA	NA	< 0.95 U	< 1 U	NA	NA	< 1.1 U	< 1.03 U	< 0.962 U	< 2.4 U	NA	< 0.95 U	< 1 U	NA	< 1 UJ
Phenol		11,000	ug/L	NA	NA	NA	< 10.2 U	NA	NA	< 11.2 U	< 10.3 U	< 9.62 UR	< 2.4 U	NA	NA	< 10.5 U	NA	< 10 UJ
Pyrene		1,100	ug/L	NA	NA	< 0.95 U	< 1 U	NA	NA	< 1.1 U	< 1.03 U	< 0.962 U	< 2.4 U	NA	< 0.95 U	< 1 U	NA	< 1 UJ

Notes:
Laboratory analytical data was provided by SpecPro Environmental Services, LLC
Result exceeds the MCL, or the RSL if the MCL is not established.
RSL 2008 EPA Regional Screening Levels
MCL EPA Maximum Contaminant Levels
J Result is estimated
U Result was not detected above the reporting limit
D sample was diluted in order to complete analysis
B Constituent was detected in a blank sample
ug/L micrograms per liter

Table 3-2
Historical Groundwater Analytical Summary
SWMU 13 Former Fire Training Area
Fort Stewart, Georgia

			Sample ID	FT0454(071405)	FT0462(072606)	FT0472(071107)	08353907(121808) 13-MW-04 (duplicate)	08353G07(121808)	MW-6(011299)	MW-8(011299)	FT0812(120300)	MW-9(011299)	FT0912(120300)	MW-10(011299)	FT1012(120300)	FT1032(072203)	FT1042(072104)	FT1052(071405)
			Location ID	13-MW-04	13-MW-04	13-MW-04		13-MW-04	13-MW-06	13-MW-08	13-MW-08	13-MW-09	13-MW-09	13-MW-10	13-MW-10	13-MW-10	13-MW-10	13-MW-10
			Sample Date	7/14/2005	7/26/2006	7/11/2007	12/18/2008	12/18/2008	1/12/1999	1/12/1999	12/3/2000	1/12/1999	12/3/2000	1/12/1999	12/3/2000	7/22/2003	7/21/2004	7/14/2005
Chemical Name	MCL	2008 RSL	Unit															
Nitrate		58,000	ug/L	974 H	NA	733	NA	NA	NA	NA	NA	NA	NA	NA	NA	5660 J	5060	NA
Nitrite		3,700	ug/L	100 HU	NA	< 100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 100 UJ	< 100 U	NA
Sulfate			ug/L	904	NA	501	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 400 U	491	NA
Carbon Dioxide			ug/L	184000	31000	72800	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 2000 U	114000	< 2000 U
Phosphorous		0.73	ug/L	**148**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**35.2 J**	< 50 U	**50 JU**
Sulfate			ug/L	NA	NA	NA	NA	NA	NA	< 5000 U	NA	< 5000 U	NA	< 5000 U	NA	NA	NA	NA
Sulfide			ug/L	31.2 J	< 30 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 100 U	< 100 U	< 100 U
Oxygen			ug/L	NA	NA	NA	NA	NA	NA	5700	NA	5300	NA	6000	NA	NA	NA	NA
Methane			ug/L	21.3	< 25 UJ	< 25 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 25 U	< 14 U	< 14 U
Arsenic	10	0.045	ug/L	NA	< 4 U	< 4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	7,300	ug/L	NA	10.1	13.7	NA	NA	NA	19	NA	NA	NA	24	NA	NA	NA	NA
Cadmium	5	18	ug/L	NA	< 0.3 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	100		ug/L	NA	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ferric Iron			ug/L	NA	NA	NA	NA	NA	NA	220	NA	NA	NA	< 100 U	NA	NA	NA	NA
Iron	300	26,000	ug/L	NA	263	NA	NA	NA	NA	220	NA	NA	NA	52	NA	NA	165	108
Lead	15		ug/L	NA	< 2 U	< 5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.63	ug/L	NA	< 0.028 U	< 0.05 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	50	180	ug/L	NA	< 7 U	< 8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	100	180	ug/L	NA	< 1 U	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	200	9,100	ug/L	NA	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
1,1,2,2-Tetrachloroethane		0.067	ug/L	NA	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		59,000	ug/L	NA	NA	NA	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	5	0.24	ug/L	NA	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
1,1-Dichloroethane		2.4	ug/L	NA	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
1,1-Dichloroethene	7	340	ug/L	NA	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
1,2,4-Trichlorobenzene	70	8.2	ug/L	NA	NA	NA	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	.2	0.00032	ug/L	NA	NA	NA	< 2 U	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	.05	0.0065	ug/L	NA	NA	NA	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	600	370	ug/L	NA	NA	NA	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	5	0.15	ug/L	NA	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
1,2-Dichloroethene		330	ug/L	NA	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
1,2-Dichloropropane	5	0.39	ug/L	NA	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
1,3-Dichlorobenzene			ug/L	NA	NA	NA	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	0.43	ug/L	NA	NA	NA	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone		7,100	ug/L	NA	< 5 U	< 5 U	< 10 U	< 10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 5 U
2-Hexanone			ug/L	NA	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 5 U
4-Methyl-2-pentanone		2,000	ug/L	NA	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 5 U
Acetone		22,000	ug/L	NA	< 5 U	< 5 U	< 10 U	< 10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 JU
Benzene	5	0.41	ug/L	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 5 U	NA	< 5 U	NA	**24**	2.7	NA	NA	< 1 U
Benzene, 1-methylethyl		680	ug/L	NA	NA	NA	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromochloromethane			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane		1.1	ug/L	NA	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
Bromoform		8.5	ug/L	NA	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
Bromomethane		8.7	ug/L	NA	< 1 U	< 1 U	< 2 U	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
Carbon disulfide		1,000	ug/L	NA	< 5 U	< 5 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 5 U
Carbon tetrachloride	5	0.2	ug/L	NA	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
CFC-11		1,300	ug/L	NA	NA	NA	< 2 U	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CFC-12		390	ug/L	NA	NA	NA	< 2 U	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	100	91	ug/L	NA	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
Chloroethane		21,000	ug/L	NA	< 1 U	< 1 U	< 2 U	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
Chloroform		0.19	ug/L	NA	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
Chloromethane		1.8	ug/L	NA	< 1 U	< 1 U	< 2 U	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
cis-1,2-Dichloroethene	70	370	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene			ug/L	NA	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
Cyclohexane		13,000	ug/L	NA	NA	NA	< 2 U	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane		0.8	ug/L	NA	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
Ethylbenzene	700	1.5	ug/L	NA	.467 J	< 1 U	< 1 U	< 1 U	< 5 U	< 5 U	NA	< 5 U	NA	< 5 U	.17 J	NA	NA	< 1 U
Methyl acetate		37,000	ug/L	NA	NA	NA	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylcyclohexane			ug/L	NA	NA	NA	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene chloride	5	4.8	ug/L	NA	< 5 U	< 5 U	< 2 U	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 5 U
Styrene		1,600	ug/L	NA	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
tert-Butyl methyl ether		12	ug/L	NA	NA	NA	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	5	0.11	ug/L	NA	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
Toluene	1000	2,300	ug/L	NA	.268 J	< 1 U	< 1 U	< 1 U	< 5 U	< 5 U	NA	< 5 U	NA	< 5 U	< 1 U	NA	NA	< 1 U
trans-1,2-Dichloroethene	100	110	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene			ug/L	NA	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
Trichloroethene	5	1.7	ug/L	NA	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
Vinyl acetate		410	ug/L	NA	NA	< 5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	2	0.016	ug/L	NA	< 1 U	< 1 U	< 2 U	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U
Xylenes (total)	10000	200	ug/L	NA	1.65	< 1 U	< 1 U	< 1 U	< 5 U	< 5 U	NA	< 5 U	NA	< 5 U	.4 J	NA	NA	< 1 U

Table 3-2
Historical Groundwater Analytical Summary
SWMU 13 Former Fire Training Area
Fort Stewart, Georgia

			Sample ID	FT0454(071405)	FT0462(072606)	FT0472(071107)	08353907(121808)	08353G07(121808)	MW-6(011299)	MW-8(011299)	FT0812(120300)	MW-9(011299)	FT0912(120300)	MW-10(011299)	FT1012(120300)	FT1032(072203)	FT1042(072104)	FT1052(071405)
			Location ID	13-MW-04	13-MW-04	13-MW-04	13-MW-04 (duplicate)	13-MW-04	13-MW-06	13-MW-08	13-MW-08	13-MW-09	13-MW-09	13-MW-10	13-MW-10	13-MW-10	13-MW-10	13-MW-10
			Sample Date	7/14/2005	7/26/2006	7/11/2007	12/18/2008	12/18/2008	1/12/1999	1/12/1999	12/3/2000	1/12/1999	12/3/2000	1/12/1999	12/3/2000	7/22/2003	7/21/2004	7/14/2005
Chemical Name	MCL	2008 RSL	Unit															
1,1'-Biphenyl		1,800	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
1,2,4-Trichlorobenzene	70	8.2	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
1,2-Dichlorobenzene	600	370	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
1,3-Dichlorobenzene			ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
1,4-Dichlorobenzene	75	0.43	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
2,4,5-Trichlorophenol		3,700	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 UR	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 UR	NA	< 10.6 U
2,4,6-Trichlorophenol		6.1	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 UR	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 UR	NA	< 10.6 U
2,4-Dichlorophenol		110	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 UR	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 UR	NA	< 10.6 U
2,4-Dimethylphenol		730	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 UR	< 9.4 UJ	< 10 UJ	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
2,4-Dinitrophenol		73	ug/L	< 20.4 UJ	< 19.2 U	< 19.2 UR	< 24 UJ	< 25 UJ	NA	NA	NA	NA	NA	NA	NA	< 20.4 UR	NA	< 21.3 U
2,4-Dinitrotoluene		73	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
2,6-Dinitrotoluene		37	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
2-Chloronaphthalene		2,900	ug/L	< 1 UJ	< 0.962 U	< 0.962 U	< 2.4 U	< 2.5 U	NA	NA	< 0.95 U	NA	< 0.95 U	NA	< 0.95 U	< 1 U	NA	< 1.1 U
2-Chlorophenol		180	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 UR	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 UR	NA	< 10.6 U
2-Methyl-4,6-dinitrophenol		3.7	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 UR	< 9.4 U	< 10 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 UR	NA	< 10.6 U
2-Methylnaphthalene		150	ug/L	< 1 UJ	< 0.962 U	< 0.962 U	< 2.4 U	< 2.5 U	NA	< 10 U	NA	NA	NA	< 10 U	NA	< 1 U	NA	< 1.1 U
2-Methylphenol		1,800	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 UR	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 UR	NA	< 10.6 U
2-Nitrobenzenamine			ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 9.4 U	< 10 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
2-Nitrophenol			ug/L	< 10.2 UJ	< 9.62 U	< 9.62 UR	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 UR	NA	< 10.6 U
3,3'-Dichlorobenzidine		0.15	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
3-Nitrobenzenamine		3.2	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 9.4 U	< 10 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
4-Bromophenyl phenyl ether			ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
4-Chloro-3-methylphenol			ug/L	< 10.2 UJ	< 9.62 U	< 9.62 UR	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 UR	NA	< 10.6 U
4-Chlorobenzenamine		1.2	ug/L	< 10.2 UJ	< 9.62 UJ	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
4-Chlorophenyl phenyl ether			ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
4-Methylphenol		180	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 UR	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 UR	NA	< 10.6 U
4-Nitrobenzenamine		3.2	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 9.4 UJ	< 10 UJ	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
4-Nitrophenol			ug/L	< 10.2 UJ	< 9.62 U	< 9.62 UR	< 9.4 U	< 10 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 UR	NA	< 10.6 U
Acenaphthene		2,200	ug/L	< 1 UJ	< 0.962 U	< 0.962 U	< 2.4 U	< 2.5 U	NA	NA	< 0.95 U	NA	< 0.95 U	NA	< 0.95 U	< 1 U	NA	< 1.1 U
Acenaphthylene			ug/L	< 1 UJ	< 0.962 U	< 0.962 U	< 2.4 U	< 2.5 U	NA	NA	< 0.95 U	NA	< 0.95 U	NA	< 0.95 U	< 1 U	NA	< 1.1 U
Acetophenone		3,700	ug/L	NA	NA	NA	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
alpha-Terpineol			ug/L	< 10.2 UJ	< 9.62 U	< 9.62 UR	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 10.2 UR	NA	< 10.6 U
Anthracene		11,000	ug/L	< 1 UJ	< 0.962 U	< 0.962 U	< 2.4 U	< 2.5 U	NA	NA	< 0.95 U	NA	< 0.95 U	NA	< 0.95 U	< 1 U	NA	< 1.1 U
Atrazine	3	0.29	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
Benz(a)anthracene		0.029	ug/L	< 1 UJ	< 0.962 U	< 0.962 U	< 2.4 U	< 2.5 U	NA	NA	< 0.95 U	NA	< 0.95 U	NA	< 0.95 U	< 1 U	NA	< 1.1 U
Benzaldehyde		3,700	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
Benzenemethanol		18,000	ug/L	NA	NA	< 9.62 UR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzidine		0.000094	ug/L	NA	NA	< 9.62 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	.2	0.0029	ug/L	< 1 UJ	< 0.962 U	< 0.962 U	< 2.4 U	< 2.5 U	NA	NA	< 0.95 U	NA	< 0.95 U	NA	< 0.95 U	< 1 U	NA	< 1.1 U
Benzo(b)fluoranthene		0.029	ug/L	< 1 UJ	< 0.962 U	< 0.962 U	< 2.4 U	< 2.5 U	NA	NA	< 0.95 U	NA	< 0.95 U	NA	< 0.95 U	< 1 U	NA	< 1.1 U
Benzo(ghi)perylene			ug/L	< 1 UJ	< 0.962 U	< 0.962 U	< 2.4 U	< 2.5 U	NA	NA	< 0.95 U	NA	< 0.95 U	NA	< 0.95 U	< 1 U	NA	< 1.1 U
Benzo(k)fluoranthene		0.29	ug/L	< 1 UJ	< 0.962 U	< 0.962 U	< 2.4 U	< 2.5 U	NA	NA	< 0.95 U	NA	< 0.95 U	NA	< 0.95 U	< 1 U	NA	< 1.1 U
Benzoic acid		150,000	ug/L	NA	NA	< 19.2 UR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane		110	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
Bis(2-chloroethyl) ether		0.012	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
Bis(2-chloroisopropyl) ether	500	0.32	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
Bis(2-ethylhexyl)phthalate	6	4.8	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
Butyl benzyl phthalate		35	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
Caprolactam		18,000	ug/L	NA	NA	NA	< 2.4 UJ	< 2.5 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole			ug/L	< 10.2 UJ	< 9.62 U	< 0.962 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
Chrysene		2.9	ug/L	< 1 UJ	< 0.962 U	< 0.962 U	< 2.4 U	< 2.5 U	NA	NA	< 0.95 U	NA	< 0.95 U	NA	< 0.95 U	< 1 U	NA	< 1.1 U
Dibenz(a,h)anthracene		0.0029	ug/L	< 1 UJ	< 0.962 U	< 0.962 U	< 2.4 U	< 2.5 U	NA	NA	< 0.95 U	NA	< 0.95 U	NA	< 0.95 U	< 1 U	NA	< 1.1 U
Dibenzofuran			ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
Diethyl phthalate		29,000	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
Dimethyl phthalate			ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
Di-n-butyl phthalate		3,700	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	.62 JBU	.67 JBU	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
Di-n-octylphthalate			ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
Diphenylamine		910	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
Fluoranthene		1,500	ug/L	< 1 UJ	< 0.962 U	< 0.962 U	< 2.4 U	< 2.5 U	NA	NA	< 0.95 U	NA	< 0.95 U	NA	< 0.95 U	< 1 U	NA	< 1.1 U
Fluorene		1,500	ug/L	< 1 UJ	< 0.962 U	< 0.962 U	< 2.4 U	< 2.5 U	NA	NA	< 0.95 U	NA	< 0.95 U	NA	< 0.95 U	< 1 U	NA	< 1.1 U
Hexachlorobenzene	1	0.042	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
Hexachlorobutadiene		0.86	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
Hexachlorocyclopentadiene	50	220	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
Hexachloroethane		4.8	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
Indeno(1,2,3-cd)pyrene		0.029	ug/L	< 1 UJ	< 0.962 U	< 0.962 U	< 2.4 U	< 2.5 U	NA	NA	< 0.95 U	NA	< 0.95 U	NA	< 0.95 U	< 1 U	NA	< 1.1 U
Isophorone		71	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
Naphthalene		0.14	ug/L	< 1 UJ	**5.59**	< 0.962 U	< 2.4 U	< 2.5 U	NA	< 10 U	< 0.95 U	NA	< 0.95 U	< 10 U	**.95 JBU**	< 1 U	NA	< 1.1 U
Nitrobenzene		3.4	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
N-Nitroso-di-n-propylamine		0.0096	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 U	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 U	NA	< 10.6 U
N-Nitrosodiphenylamine		14	ug/L	NA	NA	NA	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	1	0.56	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 UR	< 9.4 U	< 10 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 UR	NA	< 10.6 U

Table 3-2
Historical Groundwater Analytical Summary
SWMU 13 Former Fire Training Area
Fort Stewart, Georgia

			Sample ID	FT0454(071405)	FT0462(072606)	FT0472(071107)	08353907(121808)	08353G07(121808)	MW-6(011299)	MW-8(011299)	FT0812(120300)	MW-9(011299)	FT0912(120300)	MW-10(011299)	FT1012(120300)	FT1032(072203)	FT1042(072104)	FT1052(071405)
			Location ID	13-MW-04	13-MW-04	13-MW-04	13-MW-04 (duplicate)	13-MW-04	13-MW-06	13-MW-08	13-MW-08	13-MW-09	13-MW-09	13-MW-10	13-MW-10	13-MW-10	13-MW-10	13-MW-10
			Sample Date	7/14/2005	7/26/2006	7/11/2007	12/18/2008	12/18/2008	1/12/1999	1/12/1999	12/3/2000	1/12/1999	12/3/2000	1/12/1999	12/3/2000	7/22/2003	7/21/2004	7/14/2005
Chemical Name	MCL	2008 RSL	Unit															
Phenanthrene			ug/L	< 1 UJ	< 0.962 U	< 0.962 U	< 2.4 U	< 2.5 U	NA	NA	< 0.95 U	NA	< 0.95 U	NA	< 0.95 U	< 1 U	NA	< 1.1 U
Phenol		11,000	ug/L	< 10.2 UJ	< 9.62 U	< 9.62 UR	< 2.4 U	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 10.2 UR	NA	< 10.6 U
Pyrene		1,100	ug/L	< 1 UJ	< 0.962 U	< 0.962 U	< 2.4 U	< 2.5 U	NA	NA	< 0.95 U	NA	< 0.95 U	NA	< 0.95 U	< 1 U	NA	< 1.1 U

Notes:
Laboratory analytical data was provided by SpecPro Environmental Services, LLC
Result exceeds the MCL, or the RSL if the MCL is not established.
RSL 2008 EPA Regional Screening Levels
MCL EPA Maximum Contaminant Levels
J Result is estimated
U Result was not detected above the reporting limit
D sample was diluted in order to complete analysis
B Constituent was detected in a blank sample
ug/L micrograms per liter

Table 3-2
Historical Groundwater Analytical Summary
SWMU 13 Former Fire Training Area
Fort Stewart, Georgia

			Sample ID	FT1062(080306)	FT1072(071107)	08353G06(121808)	MW-11(011399)	FT1112(120300)	MW-12(011299)	FT1212(120300)	MW-13(011299)	FT1312(120300)	FT1532(072403)	FT1542(072104)	FT1552(071405)	FT1562(072606)	FT1572(071207)	08353G01(121808)
			Location ID	13-MW-10	13-MW-10	13-MW-10	13-MW-11	13-MW-11	13-MW-12	13-MW-12	13-MW-13	13-MW-13	13-MW-15	13-MW-15	13-MW-15	13-MW-15	13-MW-15	13-MW-15
			Sample Date	8/3/2006	7/11/2007	12/18/2008	1/13/1999	12/3/2000	1/12/1999	12/3/2000	1/12/1999	12/3/2000	7/24/2003	7/21/2004	7/14/2005	7/26/2006	7/12/2007	12/18/2008
Chemical Name	MCL	2008 RSL	Unit															
Nitrate		58,000	ug/L	2880	1180	NA	NA	NA	NA	NA	NA	NA	NA	< 100 U	100 HU	115 UJ	NA	NA
Nitrite		3,700	ug/L	< 100 U	< 100 U	NA	NA	NA	NA	NA	NA	NA	NA	< 100 U	100 HU	NA	NA	NA
Sulfate			ug/L	515	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 400 U	2070	NA	NA	NA
Carbon Dioxide			ug/L	133000	64900	NA	NA	NA	NA	NA	NA	NA	162000	44300	138000	39000	NA	NA
Phosphorous		0.73	ug/L	**50 JU**	**50 JU**	NA	NA	NA	NA	NA	NA	NA	< 50 U	**22 J**	**149**	< 50 U	NA	NA
Sulfate			ug/L	NA	NA	NA	< 5000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide			ug/L	< 100 U	< 100 U	NA	NA	NA	NA	NA	NA	NA	< 100 U	< 100 U	< 100 U	< 60 U	NA	NA
Oxygen			ug/L	NA	NA	NA	1800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane			ug/L	11.8 J	< 25 UJ	NA	NA	NA	NA	NA	NA	NA	18.6 J	93.2	141	< 25 UJ	NA	NA
Arsenic	10	0.045	ug/L	< 4 U	< 4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 4 U	< 4 U	NA
Barium	2000	7,300	ug/L	13.1	17.7	NA	NA	NA	20	NA	NA	NA	NA	NA	NA	7.8	7.5	NA
Cadmium	5	18	ug/L	< 0.3 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.3 U	< 1 U	NA
Chromium	100		ug/L	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	< 1 U	NA
Ferric Iron			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300	26,000	ug/L	**6900**	NA	NA	NA	NA	NA	NA	NA	NA	**2240**	**2250**	**7800**	**2620**	NA	NA
Lead	15		ug/L	< 2 U	< 5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 5 U	NA
Mercury	2	0.63	ug/L	< 0.028 U	< 0.05 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.05 U	NA
Selenium	50	180	ug/L	7.8 BJ	< 8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 7 U	< 8 U	NA
Silver	100	180	ug/L	< 1 U	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	< 2 U	NA
1,1,1-Trichloroethane	200	9,100	ug/L	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 12 UD
1,1,2,2-Tetrachloroethane		0.067	ug/L	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 12 UD
1,1,2-Trichloro-1,2,2-Trifluoroethane		59,000	ug/L	NA	NA	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 12 UD
1,1,2-Trichloroethane	5	0.24	ug/L	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 12 UD
1,1-Dichloroethane		2.4	ug/L	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 12 UD
1,1-Dichloroethene	7	340	ug/L	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 12 UD
1,2,4-Trichlorobenzene	70	8.2	ug/L	NA	NA	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 12 UD
1,2-Dibromo-3-chloropropane (DBCP)	.2	0.00032	ug/L	NA	NA	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 25 UD
1,2-Dibromoethane	.05	0.0065	ug/L	NA	NA	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 12 UD
1,2-Dichlorobenzene	600	370	ug/L	NA	NA	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 12 UD
1,2-Dichloroethane	5	0.15	ug/L	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 12 UD
1,2-Dichloroethene		330	ug/L	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	NA
1,2-Dichloropropane	5	0.39	ug/L	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 12 UD
1,3-Dichlorobenzene			ug/L	NA	NA	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 12 UD
1,4-Dichlorobenzene	75	0.43	ug/L	NA	NA	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 12 UD
2-Butanone		7,100	ug/L	< 5 U	< 5 U	< 10 U	NA	NA	NA	NA	NA	NA	NA	NA	< 10 U	< 5 U	NA	< 120 UD
2-Hexanone			ug/L	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	NA	NA	NA	NA	< 10 U	< 5 U	NA	< 62 UD
4-Methyl-2-pentanone		2,000	ug/L	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	NA	NA	NA	NA	< 10 U	< 5 U	NA	< 562 UD
Acetone		22,000	ug/L	< 5 U	< 5 U	< 10 U	NA	NA	NA	NA	NA	NA	NA	NA	10 JU	< 5 U	NA	< 120 UD
Benzene	5	0.41	ug/L	1.44	2.67	< 1 U	**260**	**9.5**	**440**	**418**	**120**	2.8	NA	NA	2	< 1 U	NA	< 12 UD
Benzene, 1-methylethyl		680	ug/L	NA	NA	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	47 D
Bromochloromethane			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane		1.1	ug/L	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 12 UD
Bromoform		8.5	ug/L	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 12 UD
Bromomethane		8.7	ug/L	< 1 U	< 1 U	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 25 UD
Carbon disulfide		1,000	ug/L	< 5 U	< 5 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	< 10 U	< 5 U	NA	< 12 UD
Carbon tetrachloride	5	0.2	ug/L	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 12 UD
CFC-11		1,300	ug/L	NA	NA	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 25 UD
CFC-12		390	ug/L	NA	NA	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 25 UD
Chlorobenzene	100	91	ug/L	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 12 UD
Chloroethane		21,000	ug/L	< 1 U	< 1 U	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 25 UD
Chloroform		0.19	ug/L	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 12 UD
Chloromethane		1.8	ug/L	< 1 U	< 1 U	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 25 UD
cis-1,2-Dichloroethene	70	370	ug/L	NA	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 12 UD
cis-1,3-Dichloropropene			ug/L	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 12 UD
Cyclohexane		13,000	ug/L	NA	NA	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	73 D
Dibromochloromethane		0.8	ug/L	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 12 UD
Ethylbenzene	700	1.5	ug/L	< 1 U	< 1 U	.16 J	45	1.6	**940**	**952**	310	11	NA	NA	325 D	119 D	NA	400 D
Methyl acetate		37,000	ug/L	NA	NA	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 12 UD
Methylcyclohexane			ug/L	NA	NA	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	73 D
Methylene chloride	5	4.8	ug/L	< 5 U	< 5 U	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	< 10 U	< 5 U	NA	< 25 UD
Styrene		1,600	ug/L	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	1.4 JD
tert-Butyl methyl ether		12	ug/L	NA	NA	.78 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 12 UD
Tetrachloroethene	5	0.11	ug/L	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 12 UD
Toluene	1000	2,300	ug/L	< 1 U	< 1 U	< 1 U	< 25 U	< 1 U	520	391	< 25 U	.42 J	NA	NA	29.1	6.65	NA	23 D
trans-1,2-Dichloroethene	100	110	ug/L	NA	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 12 UD
trans-1,3-Dichloropropene			ug/L	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 12 UD
Trichloroethene	5	1.7	ug/L	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 12 UD
Vinyl acetate		410	ug/L	NA	< 5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	2	0.016	ug/L	< 1 U	< 1 U	< 2 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2 U	< 1 U	NA	< 25 UD
Xylenes (total)	10000	200	ug/L	< 1 U	< 1 U	< 1 U	< 25 U	1.4 J	5300	4930	350	11.4	NA	NA	1620 D	440 D	NA	1700 D

Table 3-2
Historical Groundwater Analytical Summary
SWMU 13 Former Fire Training Area
Fort Stewart, Georgia

			Sample ID	FT1062(080306)	FT1072(071107)	08353G06(121808)	MW-11(011399)	FT1112(120300)	MW-12(011299)	FT1212(120300)	MW-13(011299)	FT1312(120300)	FT1532(072403)	FT1542(072104)	FT1552(071405)	FT1562(072606)	FT1572(071207)	08353G01(121808)
			Location ID	13-MW-10	13-MW-10	13-MW-10	13-MW-11	13-MW-11	13-MW-12	13-MW-12	13-MW-13	13-MW-13	13-MW-15	13-MW-15	13-MW-15	13-MW-15	13-MW-15	13-MW-15
			Sample Date	8/3/2006	7/11/2007	12/18/2008	1/13/1999	12/3/2000	1/12/1999	12/3/2000	1/12/1999	12/3/2000	7/24/2003	7/21/2004	7/14/2005	7/26/2006	7/12/2007	12/18/2008
Chemical Name	MCL	2008 RSL	Unit															
1,1'-Biphenyl		1,800	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	7.5 J	NA	< 41 U	NA	NA	3.5
1,2,4-Trichlorobenzene	70	8.2	ug/L	< 9.71 U	< 9.8 U	NA	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	NA
1,2-Dichlorobenzene	600	370	ug/L	< 9.71 U	< 9.8 U	NA	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	NA
1,3-Dichlorobenzene			ug/L	< 9.71 U	< 9.8 U	NA	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	NA
1,4-Dichlorobenzene	75	0.43	ug/L	< 9.71 U	< 9.8 U	NA	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	NA
2,4,5-Trichlorophenol		3,700	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
2,4,6-Trichlorophenol		6.1	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
2,4-Dichlorophenol		110	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
2,4-Dimethylphenol		730	ug/L	< 9.71 U	< 9.8 U	< 9.8 UJ	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 9.3 UJ
2,4-Dinitrophenol		73	ug/L	< 19.4 U	< 19.6 U	< 24 UJ	NA	NA	NA	NA	NA	NA	< 19.2 U	NA	< 82 U	NA	NA	< 23 UJ
2,4-Dinitrotoluene		73	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
2,6-Dinitrotoluene		37	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
2-Chloronaphthalene		2,900	ug/L	< 0.971 U	< 0.98 U	< 2.4 U	NA	< 0.96 UJ	NA	< 0.96 UJ	NA	NA	< 0.96 U	NA	< 4.1 U	NA	NA	< 2.3 U
2-Chlorophenol		180	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
2-Methyl-4,6-dinitrophenol		3.7	ug/L	< 9.71 U	< 9.8 U	< 9.8 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 9.3 U
2-Methylnaphthalene		150	ug/L	< 0.971 U	< 0.98 U	< 2.4 U	NA	NA	72	NA	NA	NA	79.7	NA	78.8	NA	NA	36
2-Methylphenol		1,800	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
2-Nitrobenzenamine			ug/L	< 9.71 U	< 9.8 U	< 9.8 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 9.3 U
2-Nitrophenol			ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
3,3'-Dichlorobenzidine		0.15	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
3-Nitrobenzenamine		3.2	ug/L	< 9.71 U	< 9.8 U	< 9.8 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 9.3 U
4-Bromophenyl phenyl ether			ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
4-Chloro-3-methylphenol			ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
4-Chlorobenzenamine		1.2	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
4-Chlorophenyl phenyl ether			ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
4-Methylphenol		180	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
4-Nitrobenzenamine		3.2	ug/L	< 9.71 U	< 9.8 U	< 9.8 UJ	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 9.3 UJ
4-Nitrophenol			ug/L	< 9.71 U	< 9.8 U	< 9.8 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 9.3 U
Acenaphthene		2,200	ug/L	< 0.971 U	< 0.98 U	< 2.4 U	NA	< 0.96 UJ	NA	< 0.96 UJ	NA	NA	< 0.96 U	NA	< 4.1 U	NA	NA	.33 J
Acenaphthylene			ug/L	< 0.971 U	< 0.98 U	< 2.4 U	NA	< 0.96 UJ	NA	< 0.96 UJ	NA	NA	< 0.96 U	NA	< 4.1 U	NA	NA	< 2.3 U
Acetophenone		3,700	ug/L	NA	NA	< 2.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 2.3 U
alpha-Terpineol			ug/L	< 9.71 U	< 9.8 U	NA	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	NA
Anthracene		11,000	ug/L	< 0.971 U	< 0.98 U	< 2.4 U	NA	< 0.96 UJ	NA	< 0.96 UJ	NA	NA	< 0.96 U	NA	< 4.1 U	NA	NA	< 2.3 U
Atrazine	3	0.29	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
Benz(a)anthracene		0.029	ug/L	< 0.971 U	< 0.98 U	< 2.4 U	NA	< 0.96 UJ	NA	< 0.96 UJ	NA	NA	< 0.96 U	NA	< 4.1 U	NA	NA	< 2.3 U
Benzaldehyde		3,700	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
Benzenemethanol		18,000	ug/L	NA	< 9.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzidine		0.000094	ug/L	NA	< 9.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	.2	0.0029	ug/L	< 0.971 U	< 0.98 U	< 2.4 U	NA	< 0.96 UJ	NA	< 0.96 UJ	NA	NA	< 0.96 U	NA	< 4.1 U	NA	NA	< 2.3 U
Benzo(b)fluoranthene		0.029	ug/L	< 0.971 U	< 0.98 U	< 2.4 U	NA	< 0.96 UJ	NA	< 0.96 UJ	NA	NA	< 0.96 U	NA	< 4.1 U	NA	NA	< 2.3 U
Benzo(ghi)perylene			ug/L	< 0.971 U	< 0.98 U	< 2.4 U	NA	< 0.96 UJ	NA	< 0.96 UJ	NA	NA	< 0.96 U	NA	< 4.1 U	NA	NA	< 2.3 U
Benzo(k)fluoranthene		0.29	ug/L	< 0.971 U	< 0.98 U	< 2.4 U	NA	< 0.96 UJ	NA	< 0.96 UJ	NA	NA	< 0.96 U	NA	< 4.1 U	NA	NA	< 2.3 U
Benzoic acid		150,000	ug/L	NA	< 19.6 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane		110	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
Bis(2-chloroethyl) ether		0.012	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
Bis(2-chloroisopropyl) ether	500	0.32	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
Bis(2-ethylhexyl)phthalate	6	4.8	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	**9.6 JBU**	NA	< 41 U	NA	NA	< 2.3 U
Butyl benzyl phthalate		35	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
Caprolactam		18,000	ug/L	NA	NA	< 2.4 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 2.3 UJ
Carbazole			ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
Chrysene		2.9	ug/L	< 0.971 U	< 0.98 U	< 2.4 U	NA	< 0.96 UJ	NA	< 0.96 UJ	NA	NA	< 0.96 U	NA	< 4.1 U	NA	NA	< 2.3 U
Dibenz(a,h)anthracene		0.0029	ug/L	< 0.971 U	< 0.98 U	< 2.4 U	NA	< 0.96 UJ	NA	< 0.96 UJ	NA	NA	< 0.96 U	NA	< 4.1 U	NA	NA	< 2.3 U
Dibenzofuran			ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	.47
Diethyl phthalate		29,000	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
Dimethyl phthalate			ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
Di-n-butyl phthalate		3,700	ug/L	< 9.71 U	< 9.8 U	.77 JBU	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
Di-n-octylphthalate			ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
Diphenylamine		910	ug/L	< 9.71 U	< 9.8 U	NA	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	NA
Fluoranthene		1,500	ug/L	< 0.971 U	< 0.98 U	< 2.4 U	NA	< 0.96 UJ	NA	< 0.96 UJ	NA	NA	< 0.96 U	NA	< 4.1 U	NA	NA	< 2.3 U
Fluorene		1,500	ug/L	< 0.971 U	< 0.98 U	< 2.4 U	NA	< 0.96 UJ	NA	2.6 J	NA	NA	2.2	NA	2.1 J	NA	NA	1.2 J
Hexachlorobenzene	1	0.042	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
Hexachlorobutadiene		0.86	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
Hexachlorocyclopentadiene	50	220	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
Hexachloroethane		4.8	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
Indeno(1,2,3-cd)pyrene		0.029	ug/L	< 0.971 U	< 0.98 U	< 2.4 U	NA	< 0.96 UJ	NA	< 0.96 UJ	NA	NA	< 0.96 U	NA	< 4.1 U	NA	NA	< 2.3 U
Isophorone		71	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
Naphthalene		0.14	ug/L	**.736 J**	**.332 J**	< 2.4 U	NA	**4 J**	**140**	**304 DJ**	NA	NA	**187 D**	NA	**174**	NA	NA	**76 D**
Nitrobenzene		3.4	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
N-Nitroso-di-n-propylamine		0.0096	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
N-Nitrosodiphenylamine		14	ug/L	NA	NA	< 2.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 2.3 U
Pentachlorophenol	1	0.56	ug/L	< 9.71 U	< 9.8 U	< 9.8 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 9.3 U

Table 3-2
Historical Groundwater Analytical Summary
SWMU 13 Former Fire Training Area
Fort Stewart, Georgia

			Sample ID	FT1062(080306)	FT1072(071107)	08353G06(121808)	MW-11(011399)	FT1112(120300)	MW-12(011299)	FT1212(120300)	MW-13(011299)	FT1312(120300)	FT1532(072403)	FT1542(072104)	FT1552(071405)	FT1562(072606)	FT1572(071207)	08353G01(121808)
			Location ID	13-MW-10	13-MW-10	13-MW-10	13-MW-11	13-MW-11	13-MW-12	13-MW-12	13-MW-13	13-MW-13	13-MW-15	13-MW-15	13-MW-15	13-MW-15	13-MW-15	13-MW-15
			Sample Date	8/3/2006	7/11/2007	12/18/2008	1/13/1999	12/3/2000	1/12/1999	12/3/2000	1/12/1999	12/3/2000	7/24/2003	7/21/2004	7/14/2005	7/26/2006	7/12/2007	12/18/2008
Chemical Name	MCL	2008 RSL	Unit															
Phenanthrene			ug/L	< 0.971 U	< 0.98 U	< 2.4 U	NA	< 0.96 UJ	NA	1.8 J	NA	NA	2	NA	1.9 J	NA	NA	.51 J
Phenol		11,000	ug/L	< 9.71 U	< 9.8 U	< 2.4 U	NA	NA	NA	NA	NA	NA	< 9.6 U	NA	< 41 U	NA	NA	< 2.3 U
Pyrene		1,100	ug/L	< 0.971 U	< 0.98 U	< 2.4 U	NA	< 0.96 UJ	NA	< 0.96 UJ	NA	NA	< 0.96 U	NA	< 4.1 U	NA	NA	< 2.3 U

Notes:
Laboratory analytical data was provided by SpecPro Environmental Services, LLC
Result exceeds the MCL, or the RSL if the MCL is not established.
RSL 2008 EPA Regional Screening Levels
MCL EPA Maximum Contaminant Levels
J Result is estimated
U Result was not detected above the reporting limit
D sample was diluted in order to complete analysis
B Constituent was detected in a blank sample
ug/L micrograms per liter

Table 3-2
Historical Groundwater Analytical Summary
SWMU 13 Former Fire Training Area
Fort Stewart, Georgia

			Sample ID	FT1622(060502)	FT1632(072403)	FT1642(072104)	FT1652(071405)	FT1672(071207)	08353G03(121808)	FT1822(060502)	FT1832(072403)	FT1842(072104)	FT1852(071405)	FT1862(080306)	FT1864(080306)	FT1872(071307)	08354G01(121908)	FT1922(060502)
			Location ID	13-MW-16	13-MW-16	13-MW-16	13-MW-16	13-MW-16	13-MW-16	13-MW-18	13-MW-18	13-MW-18	13-MW-18	13-MW-18	13-MW-18 (duplicate)	13-MW-18	13-MW-18R	13-MW-19
			Sample Date	6/5/2002	7/24/2003	7/21/2004	7/14/2005	7/12/2007	12/18/2008	6/5/2002	7/24/2003	7/21/2004	7/14/2005	8/3/2006	8/3/2006	7/13/2007	12/19/2008	6/5/2002
Chemical Name	MCL	2008 RSL	Unit															
Nitrate		58,000	ug/L	NA	< 100 U	NA	100 HU	NA	NA	NA	< 100 U	NA	NA	< 100 U	< 100 U	NA	NA	NA
Nitrite		3,700	ug/L	NA	< 100 U	NA	100 HU	NA	NA	NA	< 100 U	NA	NA	< 100 U	< 100 U	NA	NA	NA
Sulfate			ug/L	NA	991	NA	1060	NA	NA	NA	< 400 U	NA	NA	< 400 U	510	NA	NA	NA
Carbon Dioxide			ug/L	NA	31300	27400	119000	NA	NA	NA	NA	83100	170000	85800	47900	NA	NA	NA
Phosphorous		0.73	ug/L	NA	NA	**11 J**	**50 JU**	NA	NA	NA	< 50 U	NA	**70**	**50 JU**	**50 JU**	NA	NA	NA
Sulfate			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide			ug/L	NA	NA	738	< 100 U	NA	NA	NA	115	40.2 J	< 100 U	< 500 U	< 500 U	NA	NA	NA
Oxygen			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane			ug/L	NA	242	986	NA	NA	NA	NA	NA	244	135	347	332	NA	NA	NA
Arsenic	10	0.045	ug/L	NA	NA	NA	NA	< 4 U	NA	NA	NA	NA	NA	< 4 U	NA	< 4 U	NA	NA
Barium	2000	7,300	ug/L	NA	NA	NA	NA	9.7	NA	NA	NA	NA	NA	24.2	NA	16.5	NA	NA
Cadmium	5	18	ug/L	NA	NA	NA	NA	< 1 U	NA	NA	NA	NA	NA	< 0.3 U	NA	< 1 U	NA	NA
Chromium	100		ug/L	NA	NA	NA	NA	< 1 U	NA	NA	NA	NA	NA	< 1 U	NA	< 1 U	NA	NA
Ferric Iron			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300	26,000	ug/L	NA	**2090**	**2940**	NA	NA	NA	NA	**5100**	**5950**	**9410**	100 BU	NA	NA	NA	NA
Lead	15		ug/L	NA	NA	NA	NA	< 5 U	NA	NA	NA	NA	NA	< 2 U	NA	< 5 U	NA	NA
Mercury	2	0.63	ug/L	NA	NA	NA	NA	< 0.05 U	NA	NA	NA	NA	NA	< 0.028 U	NA	< 0.05 U	NA	NA
Selenium	50	180	ug/L	NA	NA	NA	NA	< 8 U	NA	NA	NA	NA	NA	< 7 U	NA	< 8 U	NA	NA
Silver	100	180	ug/L	NA	NA	NA	NA	< 2 U	NA	NA	NA	NA	NA	< 1 U	NA	< 2 U	NA	NA
1,1,1-Trichloroethane	200	9,100	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 25 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 5 UD	NA
1,1,2,2-Tetrachloroethane		0.067	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 25 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 5 UD	NA
1,1,2-Trichloro-1,2,2-Trifluoroethane		59,000	ug/L	NA	NA	NA	NA	NA	< 25 UD	NA	NA	NA	NA	NA	NA	NA	< 5 UD	NA
1,1,2-Trichloroethane	5	0.24	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 25 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 5 UD	NA
1,1-Dichloroethane		2.4	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 25 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 5 UD	NA
1,1-Dichloroethene	7	340	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 25 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 5 UD	NA
1,2,4-Trichlorobenzene	70	8.2	ug/L	NA	NA	NA	NA	NA	< 25 UD	NA	NA	NA	NA	NA	NA	NA	< 5 UD	NA
1,2-Dibromo-3-chloropropane (DBCP)	.2	0.00032	ug/L	NA	NA	NA	NA	NA	< 50 UD	NA	NA	NA	NA	NA	NA	NA	< 10 UD	NA
1,2-Dibromoethane	.05	0.0065	ug/L	NA	NA	NA	NA	NA	< 25 UD	NA	NA	NA	NA	NA	NA	< 1 U	< 5 UD	NA
1,2-Dichlorobenzene	600	370	ug/L	NA	NA	NA	NA	NA	< 25 UD	NA	NA	NA	NA	NA	NA	NA	< 5 UD	NA
1,2-Dichloroethane	5	0.15	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 25 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 5 UD	NA
1,2-Dichloroethene		330	ug/L	NA	< 5 U	NA	< 2 U	NA	NA	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	NA	NA
1,2-Dichloropropane	5	0.39	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 25 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 5 UD	NA
1,3-Dichlorobenzene			ug/L	NA	NA	NA	NA	NA	< 25 UD	NA	NA	NA	NA	NA	NA	NA	< 5 UD	NA
1,4-Dichlorobenzene	75	0.43	ug/L	NA	NA	NA	NA	NA	< 25 UD	NA	NA	NA	NA	NA	NA	NA	< 5 UD	NA
2-Butanone		7,100	ug/L	NA	< 25 U	NA	< 10 U	< 5 U	< 250 UD	NA	< 25 U	< 25 U	< 5 U	NA	< 5 U	< 5 U	< 50 UD	NA
2-Hexanone			ug/L	NA	< 25 U	NA	< 10 U	< 5 U	< 50 UD	NA	< 25 U	< 25 U	< 5 U	NA	< 5 U	< 5 U	< 10 UD	NA
4-Methyl-2-pentanone		2,000	ug/L	NA	< 25 U	NA	< 10 U	< 5 U	< 50 UD	NA	< 25 U	< 25 U	< 5 U	NA	< 5 U	< 5 U	< 10 UD	NA
Acetone		22,000	ug/L	NA	< 25 U	NA	< 10 U	7.91 U	< 250 UD	NA	< 25 U	25 JU	< 5 U	NA	< 5 U	< 5 U	< 50 UDJ	NA
Benzene	5	0.41	ug/L	**120**	**22.3**	NA	3.5	< 1 U	< 25 UD	**95**	**34.6**	**27.9**	**25.8**	NA	**35.5**	**48.1**	**5.8 D**	< 1 U
Benzene, 1-methylethyl		680	ug/L	NA	NA	NA	NA	NA	52 D	NA	NA	NA	NA	NA	NA	NA	23 D	NA
Bromochloromethane			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	NA	NA
Bromodichloromethane		1.1	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 25 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 5 UD	NA
Bromoform		8.5	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 25 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 5 UD	NA
Bromomethane		8.7	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 50 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 10 UD	NA
Carbon disulfide		1,000	ug/L	NA	< 25 U	NA	< 10 U	< 5 U	< 25 UD	NA	< 25 U	< 25 U	< 5 U	NA	< 5 U	< 5 U	< 5 UD	NA
Carbon tetrachloride	5	0.2	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 25 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 5 UD	NA
CFC-11		1,300	ug/L	NA	NA	NA	NA	NA	< 50 UD	NA	NA	NA	NA	NA	NA	NA	< 10 UD	NA
CFC-12		390	ug/L	NA	NA	NA	NA	NA	< 50 UD	NA	NA	NA	NA	NA	NA	NA	< 10 UD	NA
Chlorobenzene	100	91	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 25 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	.93 JBDU	NA
Chloroethane		21,000	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 50 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 10 UD	NA
Chloroform		0.19	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 25 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 5 UD	NA
Chloromethane		1.8	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 50 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 10 UD	NA
cis-1,2-Dichloroethene	70	370	ug/L	NA	NA	NA	NA	< 1 U	< 25 UD	NA	NA	NA	NA	NA	NA	NA	< 5 UD	NA
cis-1,3-Dichloropropene			ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 25 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 5 UD	NA
Cyclohexane		13,000	ug/L	NA	NA	NA	NA	NA	96 D	NA	NA	NA	NA	NA	NA	NA	54 D	NA
Dibromochloromethane		0.8	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 25 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 5 UD	NA
Ethylbenzene	700	1.5	ug/L	385 J	388	**709 D**	494 D	1.27	600 D	486 DJ	415	301	248 D	259 D	246 D	220 D	340 D	201 DJ
Methyl acetate		37,000	ug/L	NA	NA	NA	NA	NA	< 25 UD	NA	NA	NA	NA	NA	NA	NA	< 5 UD	NA
Methylcyclohexane			ug/L	NA	NA	NA	NA	NA	54 D	NA	NA	NA	NA	NA	NA	NA	42 D	NA
Methylene chloride	5	4.8	ug/L	NA	< 25 U	NA	< 10 U	< 5 U	< 50 UD	NA	< 25 U	< 25 U	< 5 U	NA	< 5 U	< 5 U	1.3 JBDU	NA
Styrene		1,600	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 25 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 5 UD	NA
tert-Butyl methyl ether		12	ug/L	NA	NA	NA	NA	NA	< 25 UD	NA	NA	NA	NA	NA	NA	NA	< 5 UD	NA
Tetrachloroethene	5	0.11	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 25 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 5 UD	NA
Toluene	1000	2,300	ug/L	78.3	55	NA	34.9	< 1 U	18 JD	49.7	31.6	17.1 BU	14.6	NA	13.9	18.4	10 D	6.4
trans-1,2-Dichloroethene	100	110	ug/L	NA	NA	NA	NA	< 1 U	< 25 UD	NA	NA	NA	NA	NA	NA	NA	< 5 UD	NA
trans-1,3-Dichloropropene			ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 25 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 5 UD	NA
Trichloroethene	5	1.7	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 25 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 5 UD	NA
Vinyl acetate		410	ug/L	NA	NA	NA	NA	< 5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	2	0.016	ug/L	NA	< 5 U	NA	< 2 U	< 1 U	< 50 UD	NA	< 5 U	< 5 U	< 1 U	NA	< 1 U	< 1 U	< 10 UD	NA
Xylenes (total)	10000	200	ug/L	2170 D	2120 D	3240 D	2060 D	5.93	2300 D	1840 D	982 D	1250	907 D	NA	1090	720 D	1000 D	1040 D

Table 3-2
Historical Groundwater Analytical Summary
SWMU 13 Former Fire Training Area
Fort Stewart, Georgia

			Sample ID	FT1622(060502)	FT1632(072403)	FT1642(072104)	FT1652(071405)	FT1672(071207)	08353G03(121808)	FT1822(060502)	FT1832(072403)	FT1842(072104)	FT1852(071405)	FT1862(080306)	FT1864(080306) 13-MW-18 (duplicate)	FT1872(071307)	08354G01(121908)	FT1922(060502)
			Location ID	13-MW-16	13-MW-16	13-MW-16	13-MW-16	13-MW-16	13-MW-16	13-MW-18	13-MW-18	13-MW-18	13-MW-18	13-MW-18	8/3/2006	13-MW-18	13-MW-18R	13-MW-19
			Sample Date	6/5/2002	7/24/2003	7/21/2004	7/14/2005	7/12/2007	12/18/2008	6/5/2002	7/24/2003	7/21/2004	7/14/2005	8/3/2006		7/13/2007	12/19/2008	6/5/2002
Chemical Name	MCL	2008 RSL	Unit															
1,1'-Biphenyl		1,800	ug/L	NA	NA	NA	< 10 U	< 8.91 U	3.1	NA	8.2 J	NA	< 42.6 U	5.58 J	4.86 J	NA	< 4.7 U	NA
1,2,4-Trichlorobenzene	70	8.2	ug/L	NA	NA	NA	< 10 U	< 8.91 U	NA	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	NA	NA
1,2-Dichlorobenzene	600	370	ug/L	NA	NA	NA	< 10 U	< 8.91 U	NA	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	NA	NA
1,3-Dichlorobenzene			ug/L	NA	NA	NA	< 10 U	< 8.91 U	NA	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	NA	NA
1,4-Dichlorobenzene	75	0.43	ug/L	NA	NA	NA	< 10 U	< 8.91 U	NA	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	NA	NA
2,4,5-Trichlorophenol		3,700	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
2,4,6-Trichlorophenol		6.1	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
2,4-Dichlorophenol		110	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
2,4-Dimethylphenol		730	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 10 UJ	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 19 UJ	NA
2,4-Dinitrophenol		73	ug/L	NA	NA	NA	< 20 U	< 17.8 U	< 25 U	NA	< 19.2 U	NA	< 85.1 U	< 19 U	< 18.7 U	< 19.4 U	< 47 UJ	NA
2,4-Dinitrotoluene		73	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 UJ	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
2,6-Dinitrotoluene		37	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
2-Chloronaphthalene		2,900	ug/L	NA	NA	NA	< 1 U	< 0.891 U	< 2.5 U	NA	< 0.96 U	NA	< 4.2 U	< 0.952 U	< 0.935 U	< 0.969 U	< 4.7 U	NA
2-Chlorophenol		180	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 UR	< 9.69 U	< 4.7 U	NA
2-Methyl-4,6-dinitrophenol		3.7	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 10 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 19 U	NA
2-Methylnaphthalene		150	ug/L	NA	NA	NA	21	.717 J	33	NA	87.6 D	NA	81.2	61.3	51.4	34.5	21	NA
2-Methylphenol		1,800	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
2-Nitrobenzenamine			ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 10 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 19 U	NA
2-Nitrophenol			ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
3,3'-Dichlorobenzidine		0.15	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
3-Nitrobenzenamine		3.2	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 10 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 19 U	NA
4-Bromophenyl phenyl ether			ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
4-Chloro-3-methylphenol			ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 UR	< 9.69 U	< 4.7 U	NA
4-Chlorobenzenamine		1.2	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
4-Chlorophenyl phenyl ether			ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
4-Methylphenol		180	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
4-Nitrobenzenamine		3.2	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 10 UJ	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 19 UJ	NA
4-Nitrophenol			ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 10 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 UR	< 9.69 U	< 19 U	NA
Acenaphthene		2,200	ug/L	NA	NA	NA	< 1 U	< 0.891 U	< 2.5 JBU	NA	.9 J	NA	< 4.2 U	< 0.952 U	< 0.935 U	< 0.969 U	< 4.7 U	NA
Acenaphthylene			ug/L	NA	NA	NA	< 1 U	< 0.891 U	< 2.5 U	NA	< 0.96 U	NA	< 4.2 U	< 0.952 U	< 0.935 U	< 0.969 U	< 4.7 U	NA
Acetophenone		3,700	ug/L	NA	NA	NA	NA	NA	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 4.7 U	NA
alpha-Terpineol			ug/L	NA	NA	NA	< 10 U	< 8.91 U	NA	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	NA	NA	NA
Anthracene		11,000	ug/L	NA	NA	NA	< 1 U	< 0.891 U	< 2.5 U	NA	< 0.96 U	NA	< 4.2 U	< 0.952 U	< 0.935 U	< 0.969 U	< 4.7 U	NA
Atrazine	3	0.29	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	NA	< 4.7 U	NA
Benz(a)anthracene		0.029	ug/L	NA	NA	NA	< 1 U	< 0.891 U	< 2.5 U	NA	< 0.96 U	NA	< 4.2 U	< 0.952 U	< 0.935 U	< 0.969 U	< 4.7 U	NA
Benzaldehyde		3,700	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	NA	< 4.7 U	NA
Benzenemethanol		18,000	ug/L	NA	NA	NA	NA	< 8.91 U	NA	NA	NA	NA	NA	NA	NA	< 9.69 U	NA	NA
Benzidine		0.000094	ug/L	NA	NA	NA	NA	< 8.91 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	.2	0.0029	ug/L	NA	NA	NA	< 1 U	< 0.891 U	< 2.5 U	NA	< 0.96 U	NA	< 4.2 U	< 0.952 U	< 0.935 U	< 0.969 U	< 4.7 U	NA
Benzo(b)fluoranthene		0.029	ug/L	NA	NA	NA	< 1 U	**.269 J**	< 2.5 U	NA	< 0.96 U	NA	< 4.2 U	< 0.952 U	< 0.935 U	< 0.969 U	< 4.7 U	NA
Benzo(ghi)perylene			ug/L	NA	NA	NA	< 1 U	< 0.891 U	< 2.5 U	NA	< 0.96 U	NA	< 4.2 U	< 0.952 U	< 0.935 U	< 0.969 U	< 4.7 U	NA
Benzo(k)fluoranthene		0.29	ug/L	NA	NA	NA	< 1 U	< 0.891 U	< 2.5 U	NA	< 0.96 U	NA	< 4.2 U	< 0.952 U	< 0.935 U	< 0.969 U	< 4.7 U	NA
Benzoic acid		150,000	ug/L	NA	NA	NA	NA	< 17.8 U	NA	NA	NA	NA	NA	NA	NA	< 19.4 U	NA	NA
Bis(2-chloroethoxy)methane		110	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
Bis(2-chloroethyl) ether		0.012	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
Bis(2-chloroisopropyl) ether	500	0.32	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 UJ	NA
Bis(2-ethylhexyl)phthalate	6	4.8	ug/L	NA	NA	NA	< 10 U	**20.8**	< 2.5 U	NA	**9.6 JBU**	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
Butyl benzyl phthalate		35	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
Caprolactam		18,000	ug/L	NA	NA	NA	NA	NA	< 2.5 UJ	NA	NA	NA	NA	NA	NA	NA	< 4.7 UJ	NA
Carbazole			ug/L	NA	NA	NA	< 10 U	< 0.891 U	< 2.5 U	NA	.66 J	NA	< 42.6 U	.748 J	< 9.35 U	< 0.969 U	< 4.7 U	NA
Chrysene		2.9	ug/L	NA	NA	NA	< 1 U	.182 J	< 2.5 U	NA	< 0.96 U	NA	< 4.2 U	< 0.952 U	< 0.935 U	< 0.969 U	< 4.7 U	NA
Dibenz(a,h)anthracene		0.0029	ug/L	NA	NA	NA	< 1 U	< 0.891 U	< 2.5 U	NA	< 0.96 U	NA	< 4.2 U	< 0.952 U	< 0.935 U	< 0.969 U	< 4.7 U	NA
Dibenzofuran			ug/L	NA	NA	NA	< 10 U	< 8.91 U	.38 J	NA	1.4 J	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
Diethyl phthalate		29,000	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
Dimethyl phthalate			ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
Di-n-butyl phthalate		3,700	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
Di-n-octylphthalate			ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
Diphenylamine		910	ug/L	NA	NA	NA	< 10 U	< 8.91 U	NA	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	NA	NA
Fluoranthene		1,500	ug/L	NA	NA	NA	< 1 U	.315 J	< 2.5 U	NA	< 0.96 U	NA	< 4.2 U	< 0.952 U	< 0.935 U	< 0.969 U	< 4.7 U	NA
Fluorene		1,500	ug/L	NA	NA	NA	< 1 U	< 0.891 U	.94 J	NA	2.5	NA	2.9 J	2.06	< 0.935 U	0.992	.79 J	NA
Hexachlorobenzene	1	0.042	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
Hexachlorobutadiene		0.86	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
Hexachlorocyclopentadiene	50	220	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 UJ	NA
Hexachloroethane		4.8	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
Indeno(1,2,3-cd)pyrene		0.029	ug/L	NA	NA	NA	< 1 U	< 0.891 U	< 2.5 U	NA	< 0.96 U	NA	< 4.2 U	< 0.952 U	< 0.935 U	< 0.969 U	< 4.7 U	NA
Isophorone		71	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
Naphthalene		0.14	ug/L	NA	NA	NA	**122 D**	**3.6**	**120 D**	NA	**185 D**	NA	**124**	NA	**67.9 D**	**67.5**	**70**	NA
Nitrobenzene		3.4	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
N-Nitroso-di-n-propylamine		0.0096	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 U	< 9.69 U	< 4.7 U	NA
N-Nitrosodiphenylamine		14	ug/L	NA	NA	NA	NA	NA	< 2.5 U	NA	NA	NA	NA	NA	NA	NA	< 4.7 U	NA
Pentachlorophenol	1	0.56	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 10 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 UR	< 9.69 U	< 19 U	NA

Table 3-2
Historical Groundwater Analytical Summary
SWMU 13 Former Fire Training Area
Fort Stewart, Georgia

			Sample ID	FT1622(060502)	FT1632(072403)	FT1642(072104)	FT1652(071405)	FT1672(071207)	08353G03(121808)	FT1822(060502)	FT1832(072403)	FT1842(072104)	FT1852(071405)	FT1862(080306)	FT1864(080306)	FT1872(071307)	08354G01(121908)	FT1922(060502)
			Location ID	13-MW-16	13-MW-16	13-MW-16	13-MW-16	13-MW-16	13-MW-16	13-MW-18	13-MW-18	13-MW-18	13-MW-18	13-MW-18	13-MW-18 (duplicate)	13-MW-18	13-MW-18R	13-MW-19
			Sample Date	6/5/2002	7/24/2003	7/21/2004	7/14/2005	7/12/2007	12/18/2008	6/5/2002	7/24/2003	7/21/2004	7/14/2005	8/3/2006	8/3/2006	7/13/2007	12/19/2008	6/5/2002
Chemical Name	MCL	2008 RSL	Unit															
Phenanthrene			ug/L	NA	NA	NA	< 1 U	< 0.891 U	< 2.5 U	NA	2.3	NA	3 J	2.43	1.81	1.12	< 4.7 U	NA
Phenol		11,000	ug/L	NA	NA	NA	< 10 U	< 8.91 U	< 2.5 U	NA	< 9.6 U	NA	< 42.6 U	< 9.52 U	< 9.35 UR	< 9.69 U	< 4.7 U	NA
Pyrene		1,100	ug/L	NA	NA	NA	< 1 U	< 0.891 U	< 2.5 U	NA	< 0.96 U	NA	< 4.2 U	< 0.952 U	< 0.935 U	< 0.969 U	< 4.7 U	NA

Notes:
Laboratory analytical data was provided by SpecPro Environmental Services, LLC
Result exceeds the MCL, or the RSL if the MCL is not established.
RSL 2008 EPA Regional Screening Levels
MCL EPA Maximum Contaminant Levels
J Result is estimated
U Result was not detected above the reporting limit
D sample was diluted in order to complete analysis
B Constituent was detected in a blank sample
ug/L micrograms per liter

Table 3-2
Historical Groundwater Analytical Summary
SWMU 13 Former Fire Training Area
Fort Stewart, Georgia

			Sample ID	FT1932(072303)	FT1934(072303)	FT1942(072104)	FT1952(071405)	FT1962(072606)	FT1972(071207)	08353G05(121808)	08353G04(121808)	08354G02(121908)
			Location ID	13-MW-19	13-MW-19 (duplicate)	13-MW-19	13-MW-19	13-MW-19	13-MW-19	13-MW-19	13-MW-20	13-MW-21
Chemical Name	MCL	2008 RSL	Sample Date Unit	7/23/2003	7/23/2003	7/21/2004	7/14/2005	7/26/2006	7/12/2007	12/18/2008	12/18/2008	12/19/2008
Nitrate		58,000	ug/L	< 100 U	< 100 U	NA	100 HU	106 UJ	NA	NA	NA	NA
Nitrite		3,700	ug/L	< 100 U	< 100 U	NA	100 HU	NA	NA	NA	NA	NA
Sulfate			ug/L	4550	4080	NA	5810	NA	NA	NA	NA	NA
Carbon Dioxide			ug/L	33200	52200	59600	151000	33400	NA	NA	NA	NA
Phosphorous		0.73	ug/L	**25 J**	**32.8 J**	NA	**50 JU**	< 50 U	NA	NA	NA	NA
Sulfate			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide			ug/L	< 100 U	< 100 U	91.1 J	< 100 U	< 30 U	NA	NA	NA	NA
Oxygen			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane			ug/L	21 J	< 25 U	21.8	17.7	< 25 UJ	NA	NA	NA	NA
Arsenic	10	0.045	ug/L	NA	NA	NA	NA	< 4 U	< 4 U	NA	NA	NA
Barium	2000	7,300	ug/L	NA	NA	NA	NA	13.9	8.6	NA	NA	NA
Cadmium	5	18	ug/L	NA	NA	NA	NA	NA	< 1 U	NA	NA	NA
Chromium	100		ug/L	NA	NA	NA	NA	< 1 U	< 1 U	NA	NA	NA
Ferric Iron			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300	26,000	ug/L	NA	**4600**	**6040**	**4940**	NA	NA	NA	NA	NA
Lead	15		ug/L	NA	NA	NA	NA	< 2 U	< 5 U	NA	NA	NA
Mercury	2	0.63	ug/L	NA	NA	NA	NA	NA	< 0.05 U	NA	NA	NA
Selenium	50	180	ug/L	NA	NA	NA	NA	< 7 U	< 8 U	NA	NA	NA
Silver	100	180	ug/L	NA	NA	NA	NA	NA	< 2 U	NA	NA	NA
1,1,1-Trichloroethane	200	9,100	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane		0.067	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane		59,000	ug/L	NA	NA	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U
1,1,2-Trichloroethane	5	0.24	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane		2.4	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	7	340	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2,4-Trichlorobenzene	70	8.2	ug/L	NA	NA	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U
1,2-Dibromo-3-chloropropane (DBCP)	.2	0.00032	ug/L	NA	NA	NA	NA	NA	NA	< 2 U	< 2 U	< 2 U
1,2-Dibromoethane	.05	0.0065	ug/L	NA	NA	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U
1,2-Dichlorobenzene	600	370	ug/L	NA	NA	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane	5	0.15	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethene		330	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
1,2-Dichloropropane	5	0.39	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,3-Dichlorobenzene			ug/L	NA	NA	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U
1,4-Dichlorobenzene	75	0.43	ug/L	NA	NA	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U
2-Butanone		7,100	ug/L	NA	NA	< 5 U	< 5 U	2.72 J	< 5 U	< 10 U	< 10 U	< 10 U
2-Hexanone			ug/L	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
4-Methyl-2-pentanone		2,000	ug/L	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Acetone		22,000	ug/L	NA	NA	5 JU	5 JU	< 5 U	8.4 U	< 10 U	< 10 U	< 10 U
Benzene	5	0.41	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Benzene, 1-methylethyl		680	ug/L	NA	NA	NA	NA	NA	NA	13	2.3	< 1 U
Bromochloromethane			ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane		1.1	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromoform		8.5	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromomethane		8.7	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U
Carbon disulfide		1,000	ug/L	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 1 U	< 1 U
Carbon tetrachloride	5	0.2	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
CFC-11		1,300	ug/L	NA	NA	NA	NA	NA	NA	< 2 U	< 2 U	< 2 U
CFC-12		390	ug/L	NA	NA	NA	NA	NA	NA	< 2 U	< 2 U	< 2 U
Chlorobenzene	100	91	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	.21 JBU
Chloroethane		21,000	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 UJ
Chloroform		0.19	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloromethane		1.8	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U
cis-1,2-Dichloroethene	70	370	ug/L	NA	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,3-Dichloropropene			ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Cyclohexane		13,000	ug/L	NA	NA	NA	NA	NA	NA	20	1.8 J	< 2 U
Dibromochloromethane		0.8	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Ethylbenzene	700	1.5	ug/L	NA	NA	30	8	.869 J	2.2	43	12	< 1 U
Methyl acetate		37,000	ug/L	NA	NA	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U
Methylcyclohexane			ug/L	NA	NA	NA	NA	NA	NA	11	.77 J	< 1 U
Methylene chloride	5	4.8	ug/L	NA	NA	2.5 J	< 5 U	< 5 U	< 5 U	< 2 U	< 2 U	.3 JBU
Styrene		1,600	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	.3 J	< 1 U	< 1 U
tert-Butyl methyl ether		12	ug/L	NA	NA	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U
Tetrachloroethene	5	0.11	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Toluene	1000	2,300	ug/L	NA	NA	1 BJU	1 JU	< 1 U	1.07	.2 J	< 1 U	< 1 U
trans-1,2-Dichloroethene	100	110	ug/L	NA	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene			ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trichloroethene	5	1.7	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Vinyl acetate		410	ug/L	NA	NA	NA	NA	NA	< 5 U	NA	NA	NA
Vinyl chloride	2	0.016	ug/L	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U
Xylenes (total)	10000	200	ug/L	NA	NA	21.4	19.6	.567 J	.291 J	21	1	< 1 U

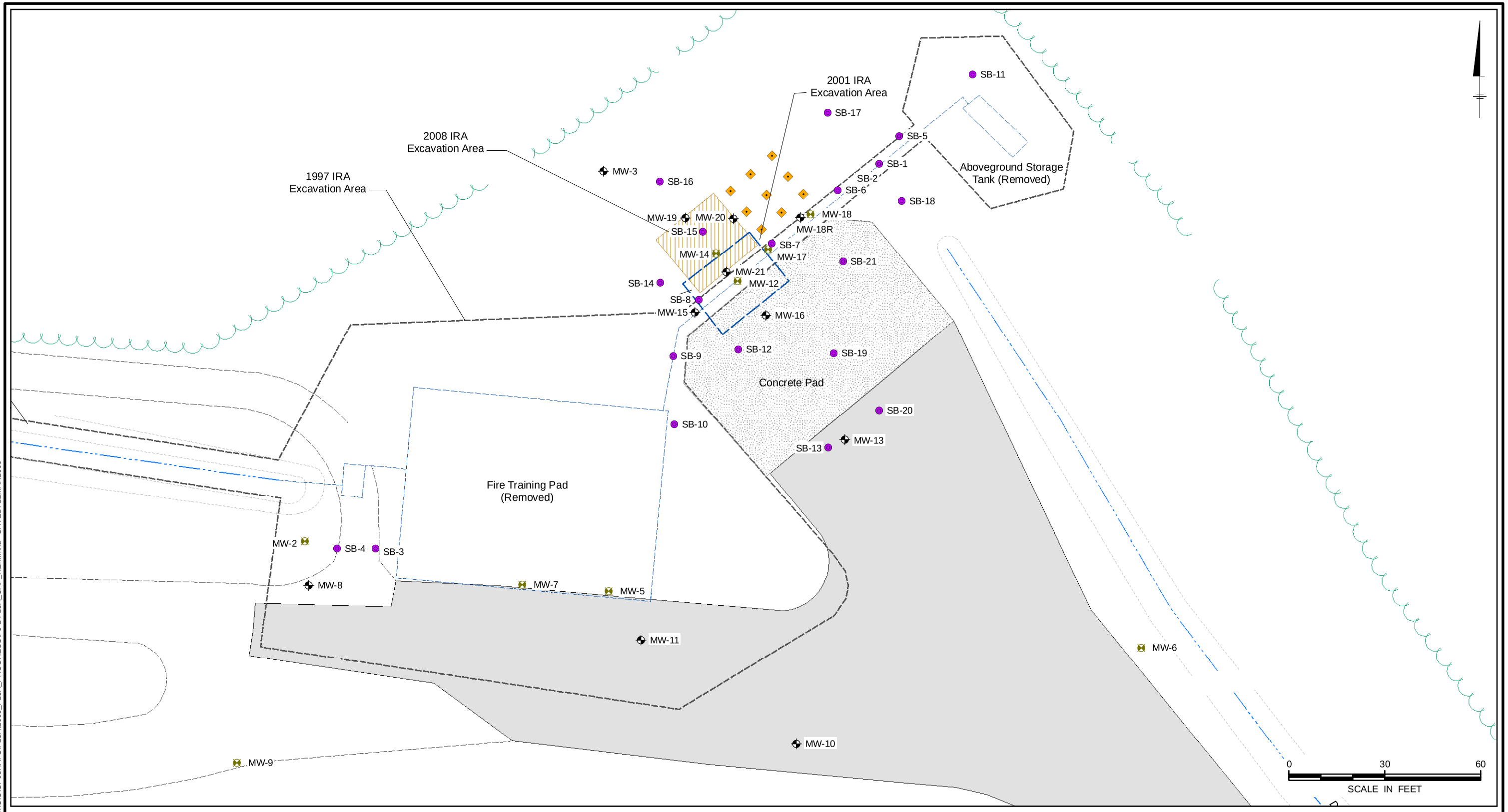
Table 3-2
Historical Groundwater Analytical Summary
SWMU 13 Former Fire Training Area
Fort Stewart, Georgia

			Sample ID	FT1932(072303)	FT1934(072303)	FT1942(072104)	FT1952(071405)	FT1962(072606)	FT1972(071207)	08353G05(121808)	08353G04(121808)	08354G02(121908)
			Location ID	13-MW-19	13-MW-19 (duplicate)	13-MW-19	13-MW-19	13-MW-19	13-MW-19	13-MW-19	13-MW-20	13-MW-21
			Sample Date	7/23/2003	7/23/2003	7/21/2004	7/14/2005	7/26/2006	7/12/2007	12/18/2008	12/18/2008	12/19/2008
Chemical Name	MCL	2008 RSL	Unit									
1,1'-Biphenyl		1,800	ug/L	3.8 J	NA	2 J	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
1,2,4-Trichlorobenzene	70	8.2	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	NA	NA	NA
1,2-Dichlorobenzene	600	370	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	NA	NA	NA
1,3-Dichlorobenzene			ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	NA	NA	NA
1,4-Dichlorobenzene	75	0.43	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	NA	NA	NA
2,4,5-Trichlorophenol		3,700	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
2,4,6-Trichlorophenol		6.1	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
2,4-Dichlorophenol		110	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
2,4-Dimethylphenol		730	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 10 UJ	< 9.2 UJ	< 19 UJ
2,4-Dinitrophenol		73	ug/L	< 21 U	NA	< 19.6 U	< 20.6 U	< 19.2 U	< 19 U	< 25 UJ	< 23 UJ	< 48 UJ
2,4-Dinitrotoluene		73	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
2,6-Dinitrotoluene		37	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
2-Chloronaphthalene		2,900	ug/L	< 1 U	NA	< 0.98 U	< 1 U	< 0.962 U	< 0.948 U	< 2.5 U	< 2.3 U	< 4.8 U
2-Chlorophenol		180	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
2-Methyl-4,6-dinitrophenol		3.7	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 10 U	< 9.2 U	< 19 U
2-Methylnaphthalene		150	ug/L	37.6	NA	18.6	2.6	6.46	1.53	8.2	1.3 J	< 4.8 U
2-Methylphenol		1,800	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
2-Nitrobenzenamine			ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 10 U	< 9.2 U	< 19 U
2-Nitrophenol			ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
3,3'-Dichlorobenzidine		0.15	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
3-Nitrobenzenamine		3.2	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 10 U	< 9.2 U	< 19 U
4-Bromophenyl phenyl ether			ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
4-Chloro-3-methylphenol			ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
4-Chlorobenzenamine		1.2	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 UJ	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
4-Chlorophenyl phenyl ether			ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
4-Methylphenol		180	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
4-Nitrobenzenamine		3.2	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 10 UJ	< 9.2 U	< 19 UJ
4-Nitrophenol			ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 10 U	< 9.2 U	< 19 U
Acenaphthene		2,200	ug/L	< 1 U	NA	< 0.98 U	< 1 U	< 0.962 U	< 0.948 U	< 2.5 U	< 2.3 U	< 4.8 U
Acenaphthylene			ug/L	< 1 U	NA	< 0.98 U	< 1 U	< 0.962 U	< 0.948 U	< 2.5 U	< 2.3 U	< 4.8 U
Acetophenone		3,700	ug/L	NA	NA	NA	NA	NA	NA	< 2.5 U	< 2.3 U	< 4.8 U
alpha-Terpineol			ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	NA	NA	NA
Anthracene		11,000	ug/L	< 1 U	NA	< 0.98 U	< 1 U	< 0.962 U	< 0.948 U	< 2.5 U	< 2.3 U	< 4.8 U
Atrazine	3	0.29	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
Benz(a)anthracene		0.029	ug/L	< 1 U	NA	< 0.98 U	< 1 U	< 0.962 U	< 0.948 U	< 2.5 U	< 2.3 U	< 4.8 U
Benzaldehyde		3,700	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
Benzenemethanol		18,000	ug/L	NA	NA	NA	NA	NA	< 9.48 U	NA	NA	NA
Benzidine		0.000094	ug/L	NA	NA	NA	NA	NA	< 9.48 U	NA	NA	NA
Benzo(a)pyrene	.2	0.0029	ug/L	< 1 U	NA	< 0.98 U	< 1 U	< 0.962 U	< 0.948 U	< 2.5 U	< 2.3 U	< 4.8 U
Benzo(b)fluoranthene		0.029	ug/L	< 1 U	NA	< 0.98 U	< 1 U	< 0.962 U	< 0.948 U	< 2.5 U	< 2.3 U	< 4.8 U
Benzo(ghi)perylene			ug/L	< 1 U	NA	< 0.98 U	< 1 U	< 0.962 U	< 0.948 U	< 2.5 U	< 2.3 U	< 4.8 U
Benzo(k)fluoranthene		0.29	ug/L	< 1 U	NA	< 0.98 U	< 1 U	< 0.962 U	< 0.948 U	< 2.5 U	< 2.3 U	< 4.8 U
Benzoic acid		150,000	ug/L	NA	NA	NA	NA	NA	< 19 U	NA	NA	NA
Bis(2-chloroethoxy)methane		110	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
Bis(2-chloroethyl) ether		0.012	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
Bis(2-chloroisopropyl) ether	500	0.32	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 UJ
Bis(2-ethylhexyl)phthalate	6	4.8	ug/L	**10.5 JBU**	NA	3.8 J	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
Butyl benzyl phthalate		35	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
Caprolactam		18,000	ug/L	NA	NA	NA	NA	NA	NA	< 2.5 UJ	< 2.3 UJ	< 4.8 UJ
Carbazole			ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 0.948 U	< 2.5 U	< 2.3 U	< 4.8 U
Chrysene		2.9	ug/L	< 1 U	NA	< 0.98 U	< 1 U	< 0.962 U	< 0.948 U	< 2.5 U	< 2.3 U	< 4.8 U
Dibenz(a,h)anthracene		0.0029	ug/L	< 1 U	NA	< 0.98 U	< 1 U	< 0.962 U	< 0.948 U	< 2.5 U	< 2.3 U	< 4.8 U
Dibenzofuran			ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
Diethyl phthalate		29,000	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
Dimethyl phthalate			ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
Di-n-butyl phthalate		3,700	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	.82 JB	1.3 J
Di-n-octylphthalate			ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
Diphenylamine		910	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	NA	NA	NA
Fluoranthene		1,500	ug/L	< 1 U	NA	< 0.98 U	< 1 U	< 0.962 U	< 0.948 U	< 2.5 U	< 2.3 U	< 4.8 U
Fluorene		1,500	ug/L	1.1	NA	.53 J	< 1 U	< 0.962 U	< 0.948 U	.3 J	< 2.3 U	< 4.8 U
Hexachlorobenzene	1	0.042	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
Hexachlorobutadiene		0.86	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
Hexachlorocyclopentadiene	50	220	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 UJ
Hexachloroethane		4.8	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
Indeno(1,2,3-cd)pyrene		0.029	ug/L	< 1 U	NA	< 0.98 U	< 1 U	< 0.962 U	< 0.948 U	< 2.5 U	< 2.3 U	< 4.8 U
Isophorone		71	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
Naphthalene		0.14	ug/L	**65.5**	NA	**27.4**	**4.3**	**14.7**	< 0.948 U	**9.2**	**2.4**	< 4.8 U
Nitrobenzene		3.4	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
N-Nitroso-di-n-propylamine		0.0096	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
N-Nitrosodiphenylamine		14	ug/L	NA	NA	NA	NA	NA	NA	< 2.5 U	< 2.3 U	< 4.8 U
Pentachlorophenol	1	0.56	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 10 U	< 9.2 U	< 19 U

Table 3-2
Historical Groundwater Analytical Summary
SWMU 13 Former Fire Training Area
Fort Stewart, Georgia

			Sample ID	FT1932(072303)	FT1934(072303)	FT1942(072104)	FT1952(071405)	FT1962(072606)	FT1972(071207)	08353G05(121808)	08353G04(121808)	08354G02(121908)
			Location ID	13-MW-19	13-MW-19 (duplicate)	13-MW-19	13-MW-19	13-MW-19	13-MW-19	13-MW-19	13-MW-20	13-MW-21
			Sample Date	7/23/2003	7/23/2003	7/21/2004	7/14/2005	7/26/2006	7/12/2007	12/18/2008	12/18/2008	12/19/2008
Chemical Name	MCL	2008 RSL	Unit									
Phenanthrene			ug/L	.78 J	NA	< 0.98 U	< 1 U	< 0.962 U	< 0.948 U	< 2.5 U	< 2.3 U	< 4.8 U
Phenol		11,000	ug/L	< 10.5 U	NA	< 9.8 U	< 10.3 U	< 9.62 U	< 9.48 U	< 2.5 U	< 2.3 U	< 4.8 U
Pyrene		1,100	ug/L	< 1 U	NA	< 0.98 U	< 1 U	< 0.962 U	< 0.948 U	< 2.5 U	< 2.3 U	< 4.8 U

Notes:
Laboratory analytical data was provided by SpecPro Environmental Services, LLC
Result exceeds the MCL, or the RSL if the MCL is not established.
RSL 2008 EPA Regional Screening Levels
MCL EPA Maximum Contaminant Levels
J Result is estimated
U Result was not detected above the reporting limit
D sample was diluted in order to complete analysis
B Constituent was detected in a blank sample
ug/L micrograms per liter



LEGEND:

- Monitor Well (shallow)
- Monitor Well (abandoned)
- Soil Boring
- ORC Injection Point

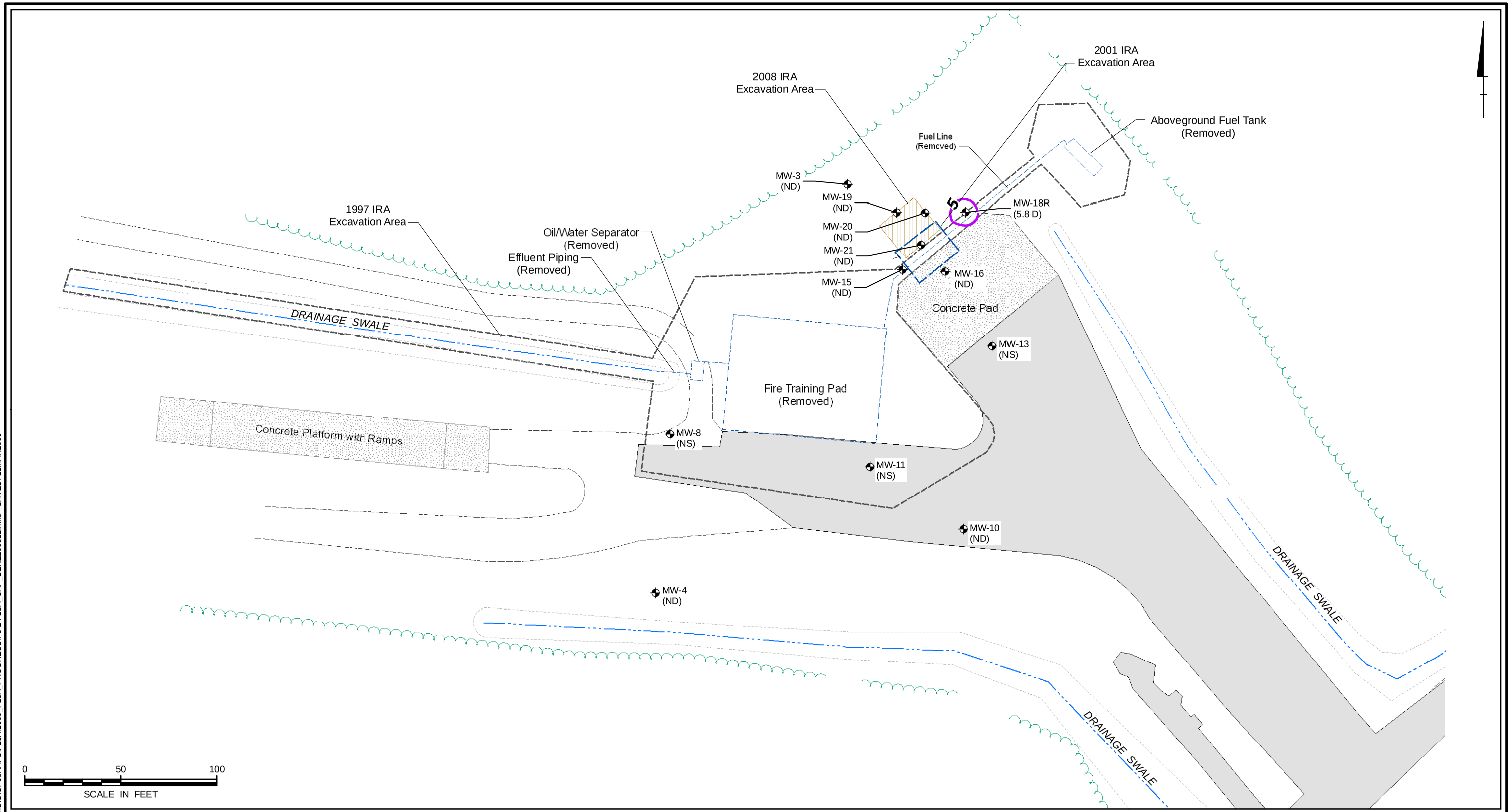
FORT STEWART MILITARY RESERVATION, GEORGIA
SWMU 13 – FIRE TRAINING AREA AT WAAF
CAP PROGRESS REPORT/ADDENDUM

2008 Interim Removal Action Map

ARCADIS

FIGURE
3-1

CITY:(KNOXVILLE) DIV/GROUP:(ENV) DB:(B.ALTOM) LD:(B.ALTOM) PIC:(M.FENNER) PM:(C.BERTZ) TM:(A.DAVIS)
PROJECT: GP08HAFS-F13A.EHCAP PATH: G:\GIS\GP08HAFS\F13A\2009_F13A_PROGRESSF3-1 F13A_CAP_REM.mxd SAVED: 11MAR2009



LEGEND:

- Monitor Well (shallow)
- Benzene Isoconcentration (µg/L)

(NS) Not Sampled
(ND) Not Detected
(D) Diluted

NOTES:
1) All concentrations reported in micrograms per liter (µg/L).
2) Remedial levels were established in the Revised Final RFI (SAIC 2000).
3) Benene Remedial Level = 5 µg/L

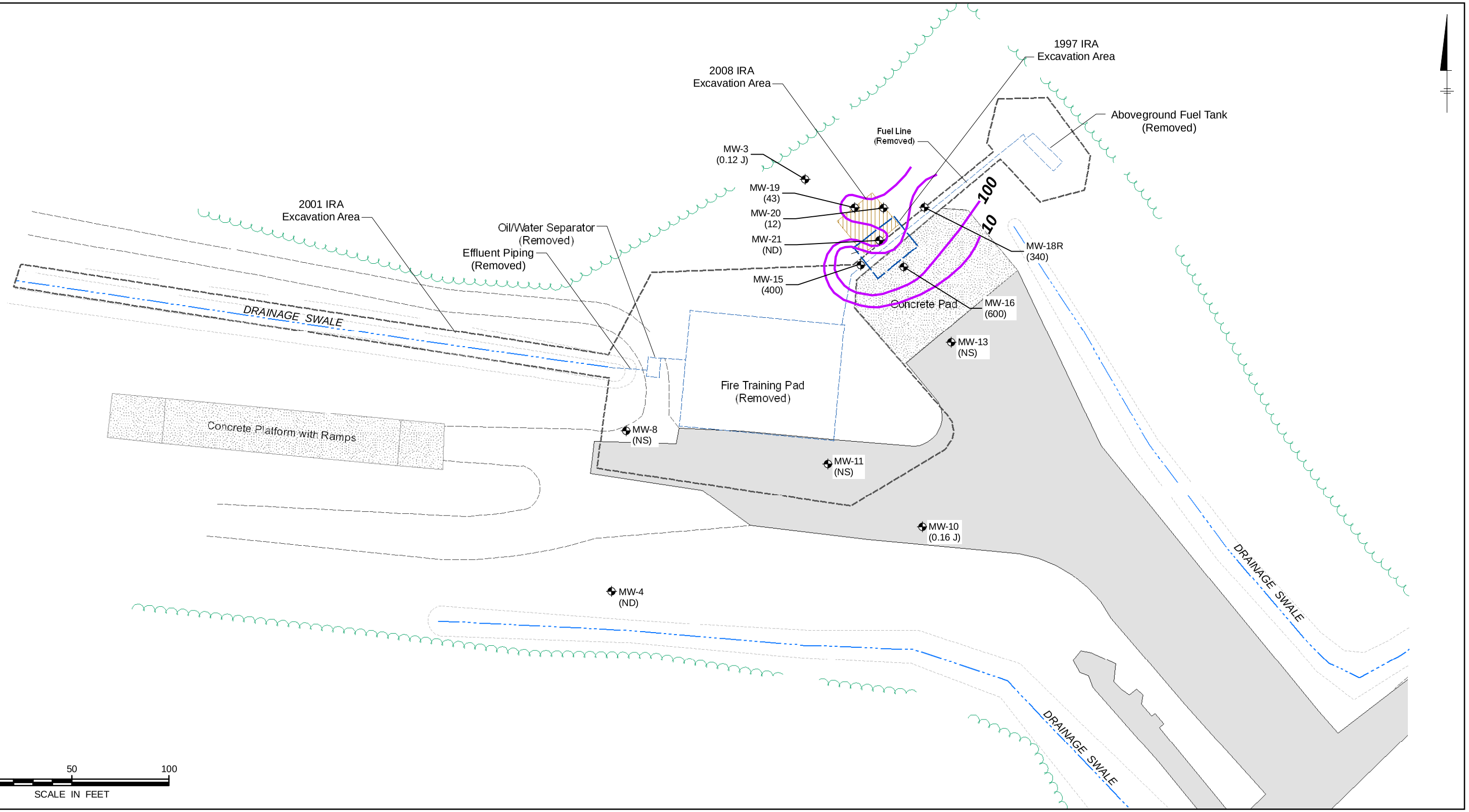
FORT STEWART MILITARY RESERVATION, GEORGIA
SWMU 13 – FIRE TRAINING AREA AT WAAF
CAP PROGRESS REPORT/ADDENDUM

Benzene Isoconcentration Map
(December 2008)

ARCADIS

FIGURE
3-2

CITY:(KNOXVILLE) DIV/GROUP:(ENV) DB:(B.ALTOM) LD:(B.ALTOM) PIC:(M.FENNER) PM:(C.BERTZ) TM:(A.DAVIS)
PROJECT: GP08HAFS.F13A.EHCAP PATH: G:\GIS\GP08HAFS\F13A\2009_F13A_PROGRESS\F3-2 F13A_CAP_BENZ200812.mxd SAVED: 11MAR2009



LEGEND:

- Monitor Well (shallow)
- Ethylbenzene Isoconcentration (µg/L)

(NS) Not Sampled
(ND) Not Detected

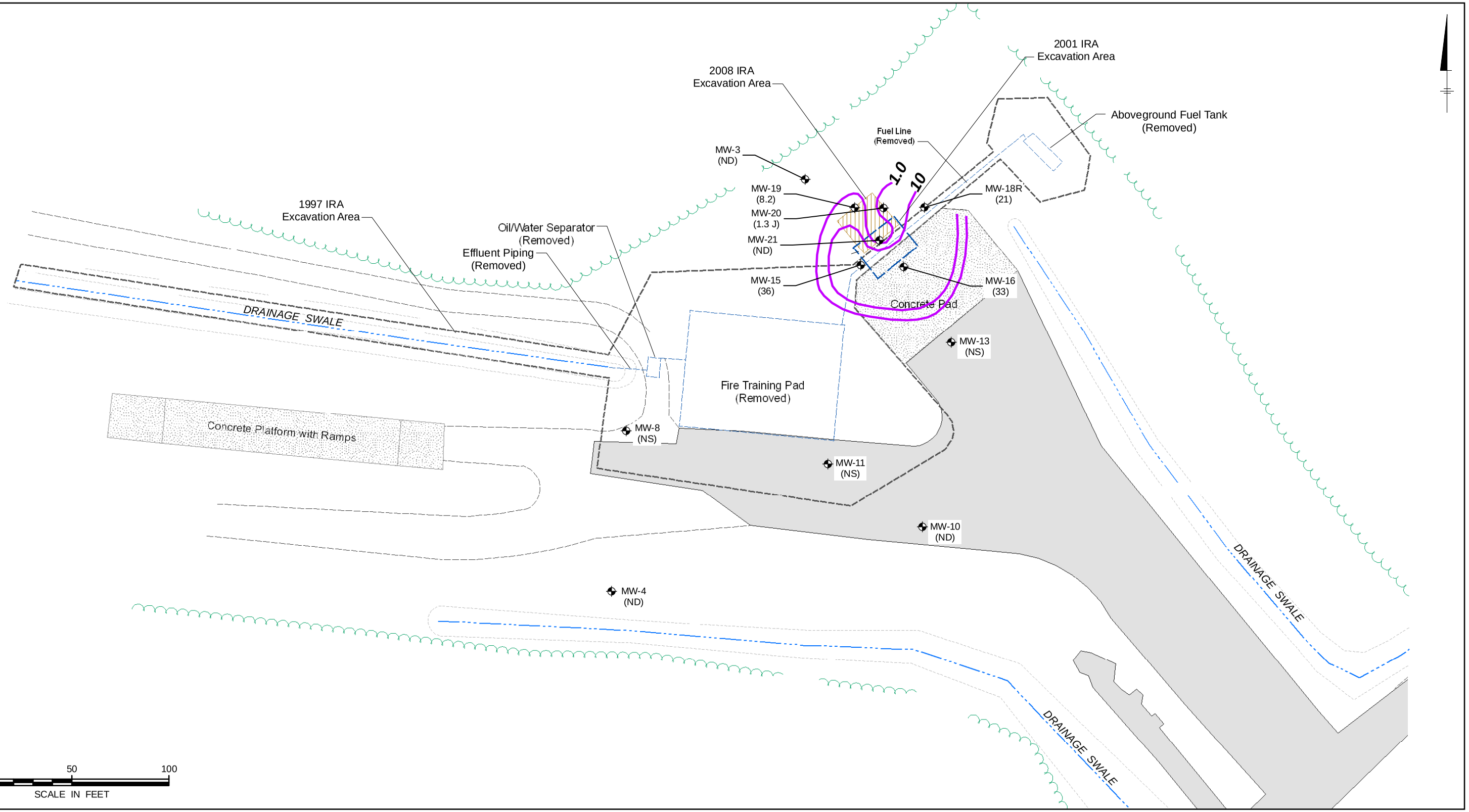
NOTES:
1) All concentrations reported in micrograms per liter (µg/L).
2) Remedial levels were established in the Revised Final RFI (SAIC 2000).
3) Ethylbenene Remedial Level = 700 µg/L

FORT STEWART MILITARY RESERVATION, GEORGIA
SWMU 13 – FIRE TRAINING AREA AT WAAF
CAP PROGRESS REPORT/ADDENDUM

Ethylbenzene Isoconcentration Map (December 2008)

ARCADIS

FIGURE 3-3



LEGEND:

- Monitor Well (shallow)
- 2-Methylnaphthalene Isoconcentration (µg/L)
- (NS) Not Sampled
- (ND) Not Detected
- (J) Estimated Value

NOTES:
1) All concentrations reported in micrograms per liter (µg/L).
2) Remedial levels were established in the Revised Final RFI (SAIC 2000).
3) 2-Methylnaphthalene Remedial Level = 142 µg/L

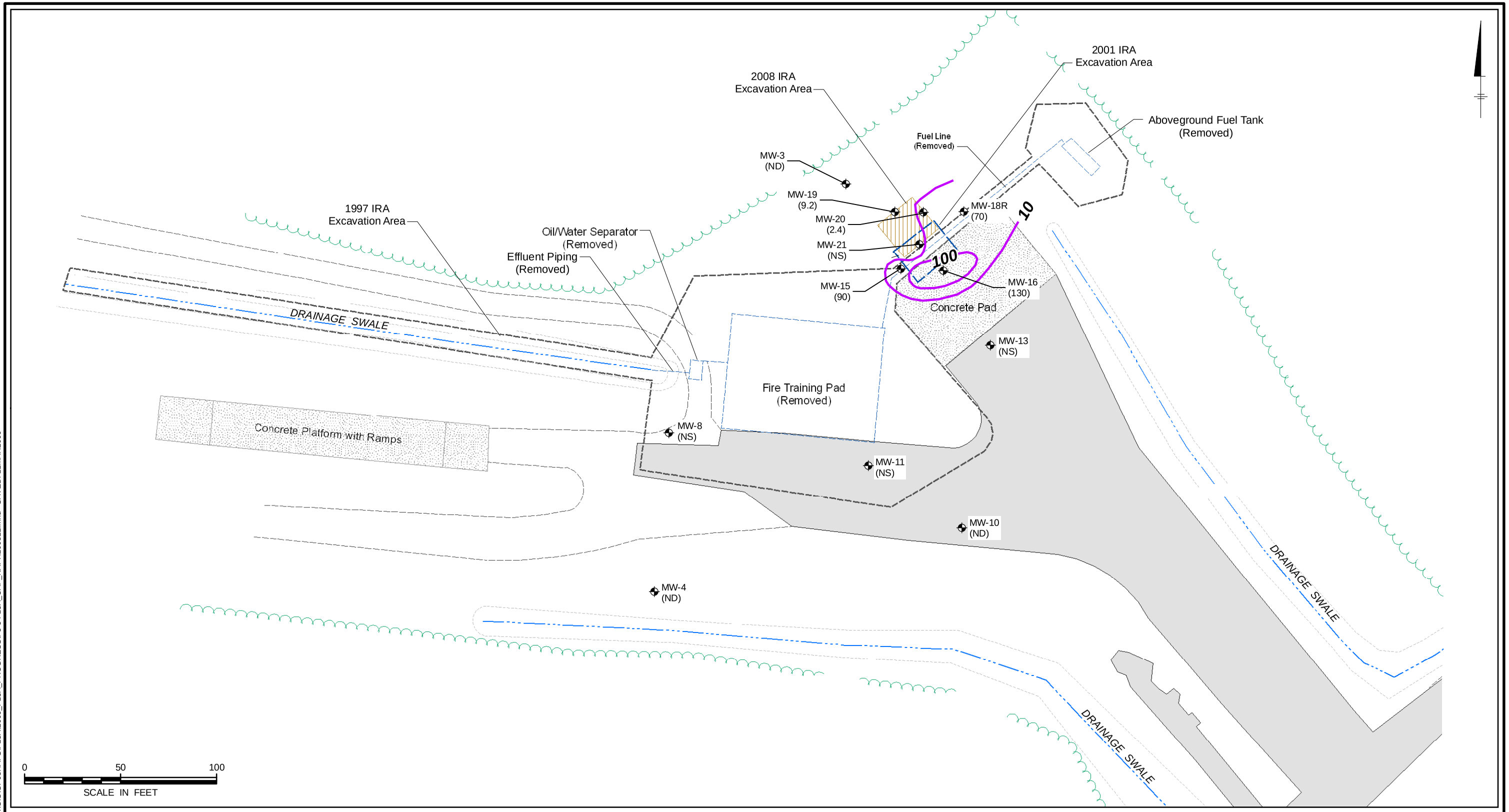
FORT STEWART MILITARY RESERVATION, GEORGIA
SWMU 13 – FIRE TRAINING AREA AT WAAF
CAP PROGRESS REPORT/ADDENDUM

2-Methylnaphthalene Isoconcentration Map (December 2008)

ARCADIS

FIGURE
3-4

CITY:(KNOXVILLE) DIV/GROUP:(ENV) DB:(B.ALTOM) LD:(B.ALTOM) PIC:(M.FENNER) PM:(C.BERTZ) TM:(A.DAVIS)
PROJECT: GP08HAFS.F13A.EHCAP PATH: G:\GIS\GP08HAFS\F13A\2009_F13A_PROGRESS\F3-4 F13A_CAP_2MN200812.mxd SAVED: 11MAR2009



LEGEND:

- Monitor Well (shallow)
- Naphthalene Isoconcentration (µg/L)

(NS) Not Sampled
(ND) Not Detected

NOTES:
1) All concentrations reported in micrograms per liter (µg/L).
2) Remedial levels were established in the Revised Final RFI (SAIC 2000).
3) Naphthalene Remedial Level = 149 µg/L

FORT STEWART MILITARY RESERVATION, GEORGIA
SWMU 13 – FIRE TRAINING AREA AT WAAF
CAP PROGRESS REPORT/ADDENDUM

Naphthalene Isoconcentration Map
(December 2008)

ARCADIS

FIGURE
3-5

CITY:(KNOXVILLE) DIV/GROUP:(ENV) DB:(B.ALTOM) LD:(B.ALTOM) PIC:(M.FENNER) PM:(C.BERTZ) TM:(A.DAVIS)
PROJECT: GP08HAFS.F13A.EHCAP PATH: G:\GIS\GP08HAFS\F13A\2009_F13A_PROGRESS\F3-5 F13A_CAP_NAPH200812.mxd SAVED: 11MAR2009

4. Conclusions

An IRA was completed at SWMU 13 in June 2008. The IRA was successful in removing 337 tons of contaminated soils. The IRA was also successful in introducing ORC into both the subsurface of the former excavation area and into the groundwater downgradient of the excavation area.

A groundwater monitoring event completed in December 2008 showed that concentrations of benzene either remained non-detect in monitor wells or decreased from concentrations previously detected in December 2007. In particular, concentrations of benzene detected in monitor well MW-18R decreased from 48.1 ug/L to 5.8 ug/L. Based on this, it can be concluded that natural attenuation is occurring. It can also be concluded that placement of ORC in the excavation as well as injections to the subsurface have had a positive impact on the natural attenuation of contaminants in the groundwater.

5. Recommendations

Based on the completion of IRA activities in 2008, as well as the trends exhibited by annual groundwater monitoring activities, several modifications to the selected remedy documented in the CAP are recommended.

Additional Soil Investigation

Based on the results of historical investigations, and GA EPD comments received in December 2008 on the *Final Work Plan for Interim Remedial Action and Corrective Action Progress Report at Wright Army Airfield Fire Training Area* (SES 2008) and the *Corrective Action Plan Progress Report for the Former Fire Training Area at Wright Army Airfield* (SAIC 2008), additional investigation regarding soils is warranted.

Additional soil investigations shall be completed at several locations in the vicinity of SWMU 13. Investigations will be completed in order to delineate VOC and SVOC contaminants to background (non-detect) levels. Target areas and depths include southwest of MW-09 (6-8 ft below ground surface [bgs]), southeast of MW-16 (6-8 ft bgs), northeast of the former aboveground fuel tank (0-4 ft bgs), and northwest of soil sample S-2 (8 ft bgs). Refer to Figure 5-1 for the location of proposed soil investigation activities.

Soil investigations will be completed using direct push technology (DPT). DPT uses a combination of hydraulic pressure and percussion to drive steel rods into subsurface soil for sample collection. At each boring location, a continuous soil core sample will be collected using a macro-core sampler from ground surface to the target depth. The lithology will be logged at each location using the Unified Soil Classification System (USCS) and the core will be field screened with a PID to determine if volatile organic vapors are present. Field screening will be utilized to determine if collection of a confirmation soil sample is warranted. Should field screening show definitive evidence of contamination, the area of investigation will be expanded in order to complete delineation of soils in the area. Where field screening results indicate a potential absence of organic vapors, samples will be collected and submitted for laboratory analysis.

Upon completion of the DPT borings, the boring locations will be abandoned by allowing the saturated portion of the formation (i.e., unconsolidated sands and gravel) to collapse back into the 2-inch diameter borehole as the Geoprobe® rods are retracted.

The upper 10 ft of the borehole will be plugged with granular bentonite and hydrated with potable water to make an impermeable seal.

Between each boring all drilling equipment (all downhole equipment and any tools used at the surface) will be properly decontaminated in accordance with the procedures outlined in ARCADIS' Sampling and Analysis Plan (ARCADIS, 2008).

Samples collected will be sent to Shealy Laboratory in West Columbia, South Carolina (National Environmental Laboratory Accreditation Conference [NELAC] No. E87653) under appropriate preservation and chain-of-custody procedures. The samples will be analyzed for VOCs using EPA Method 8260B and SVOCs using EPA Method 8270B. Based on the results of laboratory analytical, additional soil borings will be installed in order to complete delineation of VOCs and SVOCs in soils.

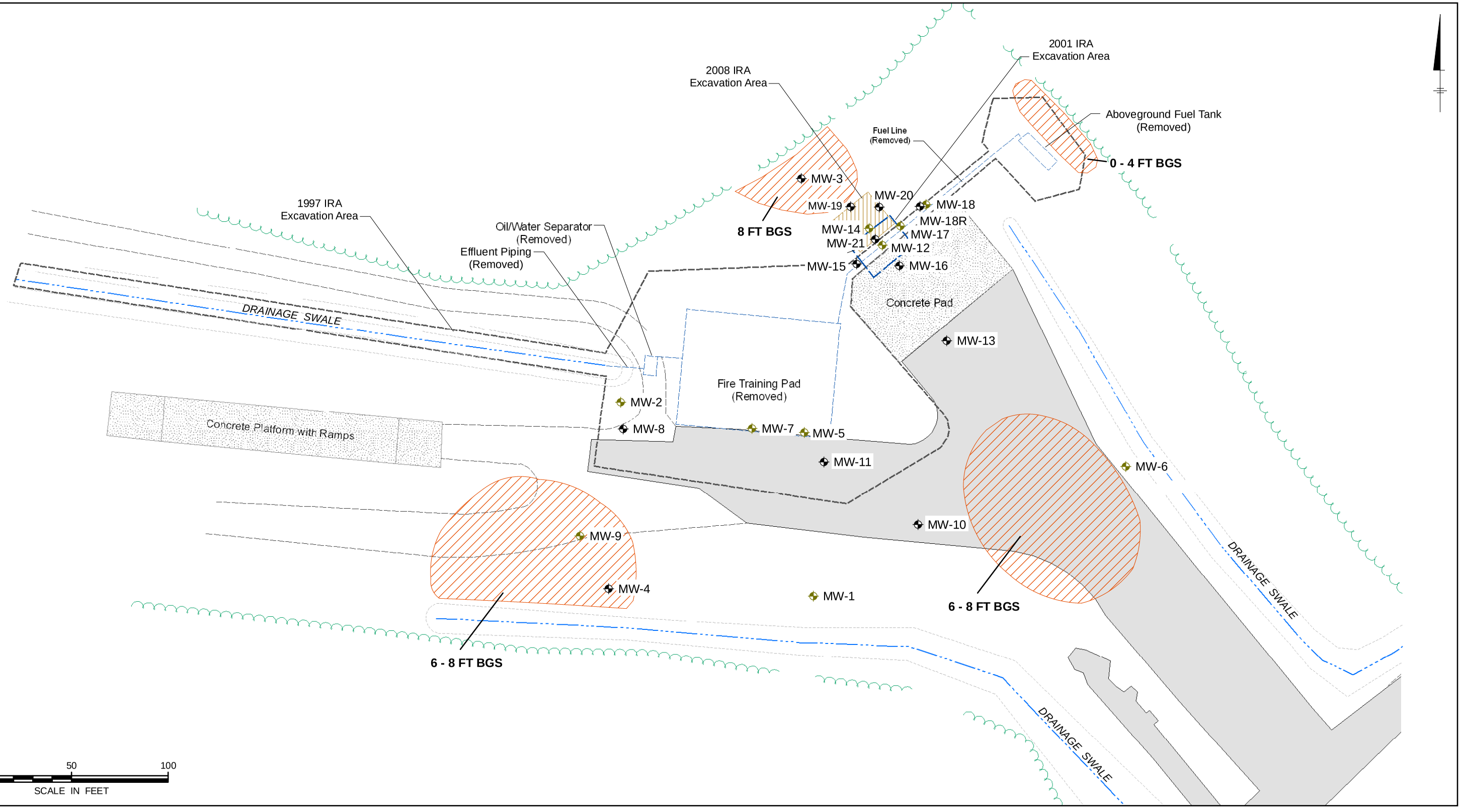
Additional Groundwater Investigation

Historical groundwater monitoring activities show that only benzene is present at concentrations exceeding remedial levels in MW-18R. While concentrations have decreased since completion of the IRA and application of ORC to both the excavation and subsurface in 2008, additional delineation is necessary to determine the extent of the contamination. Based on this, and in accordance with GA EPD comments received in December 2008 on the *Final Work Plan for Interim Remedial Action and Corrective Action Progress Report at Wright Army Airfield Fire Training Area* (SES 2008) and the *Corrective Action Plan Progress Report CY 2007 for the Former Fire Training Area at Wright Army Airfield* (SAIC 2008), two additional monitor wells (sentinel wells) are proposed.

New monitor wells will be installed downgradient and sidegradient of existing monitor well MW-18R. Proposed monitor well locations can be seen on Figure 5-2. Monitor wells are proposed in areas sidegradient and downgradient of MW-18R based on groundwater elevations collected in December 2008. Monitor wells will be installed so that the screened portion is set to bracket the groundwater table (See Figure 5-3 for a proposed well construction diagram). The estimated total depth for each well is approximately 18 ft bgs with a screened interval estimated from 8 to 18 ft bgs. All well installation and well development activities will be performed in accordance with the *Sampling and Analysis Plan (SAP) and Quality Assurance Project Plan (QAPP),* (ARCADIS 2008).

Per the CAP, MNA activities were proposed to be conducted on seven (7) monitor wells (MW-3, MW-9, MW-10, MW-15, MW-16, MW-18, and MW-19). Due to monitor well MW-9 being destroyed in 2001, MW-4 will be substituted into the MNA program. In addition , it is recommended new monitor wells MW-20 and MW-21 (installed during IRA in 2008) and MW-22 and MW-23 (to be installed upon GA EPD approval) be added to the annual groundwater monitoring program. In addition, at the request of the GA EPD, monitor well MW-13 will also be added to the groundwater monitoring program in order to confirm the presence or absence of benzene, last detected during the 2002 annual monitoring event. Should the initial monitoring event at the site reveal that monitor wells MW-22 and MW-23 do not adequately delineate the benzene impacts in groundwater in the area northeast of MW-18R, additional monitor wells will be installed.

Each well will be sampled annually and analyzed by EPA Method 8260 for VOCs, EPA Method 8270 for SVOCs, and for Natural Attenuation Parameters (nitrate/nitrite, sulfate/sulfite, total iron, total phosphorous, carbon dioxide, and methane). In addition, field parameters (dissolved oxygen, temperature, Redox, conductivity, and pH) will be collected from each well during the monitoring events. Results of groundwater monitoring activities will continue to be reported in annual CAP Progress Reports.



REFERENCE: REPORT (SAIC 2006.

LEGEND:

- Monitor Well (shallow)
- Monitor Well (abandoned)
- Proposed Soil Investigation Area

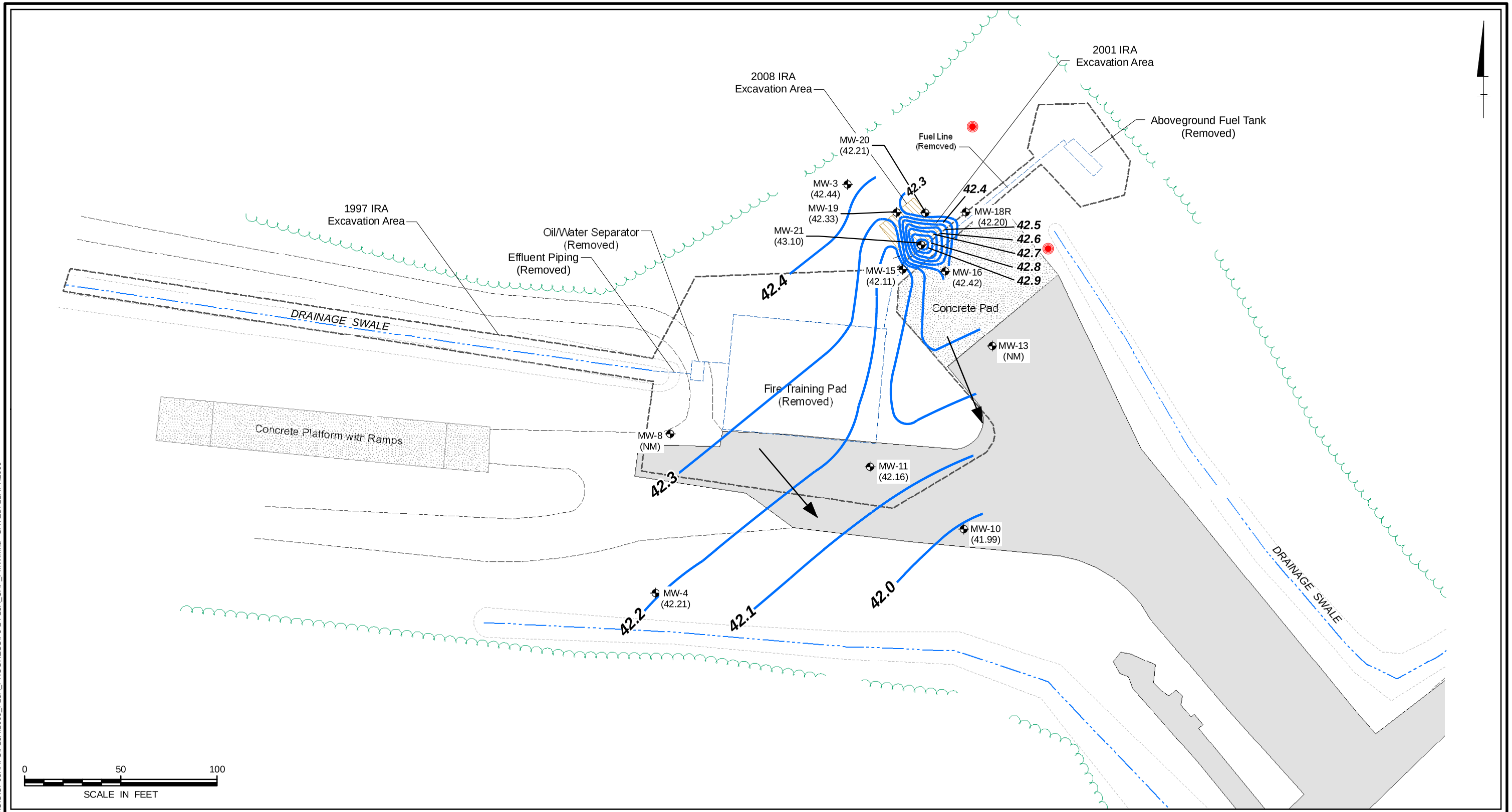
FORT STEWART MILITARY RESERVATION, GEORGIA
SWMU 13 – FIRE TRAINING AREA AT WAAF
CAP PROGRESS REPORT/ADDENDUM

Proposed Soil Investigation Areas

ARCADIS

FIGURE
5-1

CITY:(KNOXVILLE) DIV/GROUP:(ENV) DB:(B.ALTOM) LD:(B.ALTOM) PIC:(M.FENNER) PM:(C.BERTZ) TM:(A.DAVIS)
PROJECT: GP08HAFS.F13A.EHCAP PATH: G:\GIS\GP08HAFS\F13A\2009_F13A_PROGRESSIF5-1 F13A_CAP_SIA.mxd SAVED: 11MAR2009



LEGEND:

- Monitor Well (shallow)
- Proposed Monitor Well
- Groundwater Contour (ft, msl)
- Direction of Groundwater Flow
- (NM) Not Measured
- (42.21) Water-Level Elevation (ft, msl) Measured December 17, 2008

REFERENCE: 2008 PROGRESS REPORT (SAIC 2008).

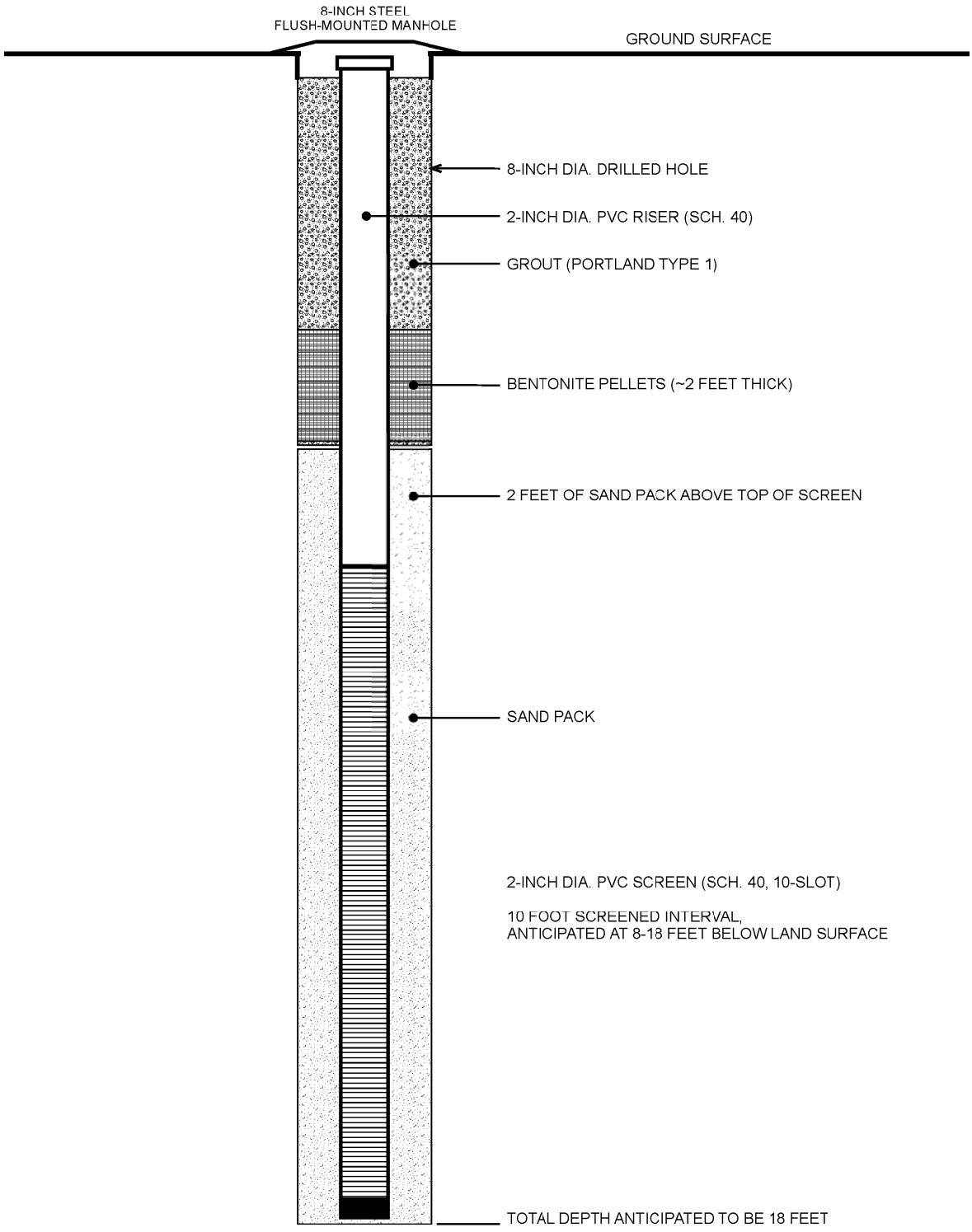
FORT STEWART MILITARY RESERVATION, GEORGIA
SWMU 13 – FIRE TRAINING AREA AT WAAF
CAP PROGRESS REPORT/ADDENDUM

Proposed Groundwater Investigation Map

ARCADIS

FIGURE
5-2

CITY:(KNOXVILLE) DIV/GROUP:(ENV) DB:(B.ALTOM) LD:(B.ALTOM) PIC:(M.FENNER) PM:(C.BERTZ) TM:(A.DAVIS)
PROJECT: GP08HAFS.F13A.EHCAP PATH: G:\GIS\GP08HAFS\F13A\2009_F13A_PROGRESS\F5-2 F13A_CAP_PMW.mxd SAVED: 22APR2009



FORT STEWART MILITARY RESERVATION, GEORGIA

SWMU 13 – FIRE TRAINING AREA AT WAAF
CAP PROGRESS REPORT/ADDENDUM

Proposed Well-Construction Diagram

ARCADIS

FIGURE
5-3

CITY:(KNOXVILLE) DIV/GROUP:(ENV) DB:(B.ALTOM) LD:(B.ALTOM) PIC:(M.FENNER) PM:(C.BERTZ) TM:(A.DAVIS)
PROJECT: GP08HAFS.F13A.EHCAP PATH: G:\GIS\GP08HAFS\F13A\2009_F13A_PROGRESS\F5-3_F13A_CAP_TYP_WCON.cdr SAVED: 11MAR2009

6. References

ARCADIS, 2008. Sampling and Analysis Plan (SAP) and Quality Assurance Project Plan (QAPP), Fort Stewart Military Reservation and Hunter Army Airfield, Georgia November 2008.

CAPE Environmental Management, Inc. (CAPE) 1998. Final Interim Measures Report, SWMU FST-013, Fort Stewart, Fire Training Pit Site, March.

GAEPD, 2008Georgia Department of Natural Resources, Environmental Protection Division 2008 correspondence from Potter to Biering, November 17, 2008)

Science Applications International Corporation (SAIC) 2000. RCRA Facility Investigation Report for the Fire Training Area at Wright Army Airfield (SWMU 13) Fort Stewart, Georgia, May.

SAIC, 2006. Corrective Action Plan for the Fire Training Area (FTA) at the Wright Army Airfield (Solid Waste Management Unit 13) at Fort Stewart Military Reservation, Fort Stewart, Georgia, 2006.

SAIC, 2007. Final Corrective Action Plan Progress Report for Calendar Year 2006 for the Former Fire Training Area at Wright Army Airfield (SWMU 13) at Fort Stewart Military Reservation, Fort Stewart, Georgia. February.

SAIC, 2008. Corrective Action Plan Progress Report for the Calendar Year 2007 for the Former Fire Training Area at Wright Army Airfield (SWMU 13) at Fort Stewart Military Reservation, January.

SpecPro Environmental Services LLC (SES), 2008. Final Work Plan for Interim Remedial Action and Corrective Action Progress Report at Wright Army Airfield Fire Training Area (SWMU 13), Fort Stewart, Georgia, March.

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Appendix A

Monitor Well MW-18 Abandonment Form

BOART LONGYEAR

WELL/BORING ABANDONMENT FORM

CLIENT: SES

LOCATION: SWMU-13

JOB NO.: 3436-0067

WELL/BORING NO.: MW-18

CHIEF: Greitney

REASON FOR ABANDONMENT: ________

DATE OF ABANDONMENT: 3-31-08

Construction Type: Drilled ✓ Driven ____ Other ________

Formation Type: Unconsolidated ✓ Bedrock _____

Sealing Method: Gravity ____ Pumped ✓ Other ________

Sealing Materials: Bentonite Chips ____ Cement-Bent. ✓ Other _____

SEALING MATERIAL	FROM (FT.)	TO (FT.)	# BAGS OR VOLUME
Cement Bent.	15	Ø	3 bgs

WELL INFORMATION ONLY

Total Well Depth: 13

Screen Removed? NO

Casing Diameter: 1

Overdrilled? yes

Casing Depth: 13

Casing Pulled? NO

Depth to Water: ________

Cut Below Surface? yes

SUPPLIES USED:

HOLEPLUG	GROUT	OTHER
bags	gal. 26	

ARCADIS

Appendix B

Waste Characterization and Waste Manifest Forms

Generator's Nonhazardous Waste Profile S

101126GA

Requested Disposal Facility SUPERIOR Profile Numb

☐ Renewal for Profile Number _____ Waste Approval Expiration Date _____

A. Waste Generator Facility Information (must reflect location of waste generation/origin)

1. Generator Name: US Army Fort Stewart
2. Site Address: 1550 Frank Cochran Drive
3. City/ZIP: Fort Stewart / 31314-4927
4. State: Georgia
5. County: Liberty
6. Contact Name/Title: Randy Powell Jones/Env. Spec
7. Email Address: Randy.Powell.Jones@Stewart.Army.mil
8. Phone: 912-315-5109 9. FAX: 912-315-5148
10. NAICS Code: _____
11. Generator USEPA ID #: GA9210020872
12. State ID# (if applicable): _____

B. Customer Information ☐ same as above

P. O. Number: _____

1. Customer Name: Atlantic Waste Services
2. Billing Address: 125 B Pine Meadow Drive
3. City, State and ZIP: Pooler, GA 31322
4. Contact Name: Theresa Curtis
5. Contact Email: _____
6. Phone: 912-964-2000 FAX: 912-964-2006
7. Transporter Name: Atlantic Waste Services
8. Transporter ID # (if appl.): _____
9. Transporter Address: 125 B Pine Meadow Drive
10. City, State and ZIP: Pooler GA 31322

C. Waste Stream Information

1. DESCRIPTION Diesel Fuel Contaminated Soil

a. Common Waste Name: and Clean-up Debris State Waste Code(s): _____

b. Describe Process Generating Waste or Source of Contamination:

Soil Contaminated with diesel fuel from a product spill or leaking UST or minor spills experienced during fuel transfers. Site Cleanup generated materials.

c. Typical Color(s): Gray / Brown / Black sandy soil

d. Strong Odor? ☐ Yes ☑ No Describe: Diesel Fuel

e. Physical State at 70°F: ☑ Solid ☐ Liquid ☐ Powder ☐ Semi-Solid or Sludge ☐ Other: _____

f. Layers? ☐ Single layer ☐ Multi- layer ☑ NA

g. Water Reactive? ☐ Yes ☑ No If Yes, Describe: _____

h. Free Liquid Range (%): _____ to _____ ☑ NA(solid)

i. pH Range: ☐ ≤2 ☐ 2.1-12.4 ☐ ≥12.5 ☑ NA(solid) ☐ Actual: _____

j. Liquid Flash Point: ☐ < 140°F ☐ ≥ 140°F ☑ NA(solid) ☐ Actual: _____

k. Flammable Solid: ☐ Yes ☑ No

l. Physical Constituents: List all constituents of waste stream - (e.g. Soil 0-80%, Wood 0-20%): ☐ (See Attached)

Constituents *(Total Composition Must be ≥ 100%)*	Concentration %	Constituents *(Total Composition Must be ≥ 100%)*	Concentration %
1. soil	90-100	4. ancillary debris-wood/plastic	1-5
2. absorbants	0-10	5.	
3. diesel fuel	1-10	6.	

2. ESTIMATED QUANTITY OF WASTE AND SHIPPING INFORMATION

a. ☑ Event ☐ Base/Ongoing (Check One)

b. Estimated Annual Quantity: 240 ☐ Tons ☑ Cubic Yards ☐ Drums ☐ Gallons ☐ Other (specify): _____

c. Shipping Frequency: _____ Units per ☐ Month ☐ Quarter ☐ Year ☑ One Time ☐ Other

d. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If yes, answer e.) ☐ Yes ☑ No

e. USDOT Shipping Description (if applicable): _____

3. SAFETY REQUIREMENTS (Handling, PPE, etc.): Normal Landfill site personal protective equipment

Generator's Nonhazardous Waste Profile Sheet

D. Regulatory Status (Please check appropriate responses)

1. Is this a USEPA (40 CFR Part 261)/State hazardous waste? If yes, contact your sales representative. ☐ Yes ☑ No
2. Is this waste included in one or more of categories below (Check all that apply)? If yes, attach supporting documentation. ☐ Yes ☑ No
   - ☐ Delisted Hazardous Waste
   - ☐ Excluded Wastes Under 40 CFR 261.4
   - ☐ Treated Hazardous Waste Debris
   - ☐ Treated Characteristic Hazardous Waste
3. Is the waste from a Federal (40 CFR 300, Appendix B) or state mandated clean-up? If yes, see instructions. ☐ Yes ☑ No
4. Does the waste represented by this waste profile sheet contain radioactive material? ☐ Yes ☑ No
   a. If yes, is disposal regulated by the Nuclear Regulatory Commission? ☐ Yes ☑ No
   b. If yes, is disposal regulated by a State Agency for radioactive waste/NORM? ☐ Yes ☑ No
5. Does the waste represented by this waste profile sheet contain concentrations of regulated Polychlorinated Biphenyls (PCBs)? ☐ Yes ☑ No
   a. If yes, is disposal regulated under TSCA? ☐ Yes ☐ No
6. Does the waste contain untreated, regulated, medical or infectious waste? ☐ Yes ☑ No
7. Does the waste contain asbestos? ☐ Yes ☑ No If Yes, ☐ Friable ☐ Non Friable
8. Is this profile for remediation waste from a facility that is a major source of Hazardous Air Pollutants (Site Remediation NESHAP, 40 CFR 63 subpart GGGGG)? ☐ Yes ☑ No
   If yes, does the waste contain <500 ppmw VOHAPs at the point of determination? ☐ Yes ☐ No

E. Generator Certification (Please read and certify by signature below)

By signing this Generator's Waste Profile Sheet, I hereby certify that all:

1. Information submitted in this profile and all attached documents contain true and accurate descriptions of the waste material;
2. Relevant information within the possession of the Generator regarding known or suspected hazards pertaining to this waste has been disclosed to WM/the Contractor;
3. Analytical data attached pertaining to the profiled waste was derived from testing a representative sample in accordance with 40 CFR 261.20(c) or equivalent rules; and
4. Changes that occur in the character of the waste (i.e. changes in the process or new analytical) will be identified by the Generator and disclosed to WM (and the Contractor if applicable) prior to providing the waste to WM (and the Contractor if applicable).
5. Check all that apply:
   - ☑ Attached analytical pertains to the waste. Identify laboratory & sample ID #'s and parameters tested: Sample 208208TCLP (Full TCLP, RCI) Sample 210TCLP (Full TCLP, RCI) # Pages: 10
   - ☐ Only the analyses identified on the attachment pertain to the waste (identify by laboratory & sample ID #'s and parameters tested). Attachment #: _____
   - ☐ Additional information necessary to characterize the profiled waste has been attached (other than analytical). Indicate the number of attached pages: _____
   - ☐ I am an agent signing on behalf of the Generator, and the delegation of authority to me from the Generator for this signature is available upon request.
   - ☐ By Generator process knowledge, the following waste is not a listed waste and is below all TCLP regulatory limits.

Certification Signature: Sandy Powell-Jones Title: Environ. Prod. Spec.

Company Name: _____ Name (Print): Sandy Powell-Jones

Date: 2/April/08

FOR WM USE ONLY

Management Method: ☒ Landfill ☐ Bioremediation Approval Decision: ☒ Approved ☐ Not Approved

☐ Non-hazardous solidification ☐ Other: _____ Waste Approval Expiration Date: 7-3-08

Management Facility Precautions, Special Handling Procedures or Limitation on approval: _____

☐ Shall not contain free liquid
☐ Shipment must be scheduled into disposal facility
☐ Approval Number must accompany each shipment
☒ Waste Manifest must accompany load

WM Authorization Name / Title: Sara Adams Date: 4-3-08

State Authorization (if Required): _____ Date: _____

EMPIRICAL LABORATORIES, LL[illegible] - CHAIN OF CUSTODY RECORD

SHIP TO: 227 French Landing Drive, Suite 550 ♦ N[illegible]ille, TN 37228 ♦ 615-345-1115 ♦ (fax) 615-846-5426

Send Results to:	Send Invoice to: SAME
Name DOUG HAWN	Name
Company SES LLC	Company
Address 1006 Floyd Collect	Address
City OAK RIDGE	City
State, Zip TN 37830	State, Zip
Phone 865-481-7837	Phone
Fax 865-481-0290	Fax
E-mail DHAWN@SPECPROENV.COM	E-mail
Project No./Name: SWMU 13	Sampler's (Signature): Jeff Williams

Analysis Requirements: Full TCLP, RCI

Lab Use Only:

VOA Headspace	Y	N	(NA)
Field Filtered	Y	(N)	NA
Correct Containers	(Y)	N	NA
Discrepancies	Y	(N)	NA
Cust. Seals Intact	(Y)	N	NA
Containers Intact	(Y)	N	NA

Airbill #:

CAR #:

Lab Use Only Lab #	Date/Time Sampled	Sample Description	Sample Matrix	Comments	No. of Bottles	Lab Use Only Containers/Pres.
0804083-01	4-8-08/1500	13TCLP	Soil		4	4m

Sample Kit Prep'd by: (Signature)	Date/Time	Received By: (Signature)
Relinquished by: (Signature) Jeff Williams	Date/Time 4-8-08/1700	Received By: (Signature)
Relinquished by: (Signature)	Date/Time	Received By: (Signature)
Received for Laboratory by: (Signature)	Date/Time 4-9-08 1000	Temperature 3.1°C

REMARKS: CALL DOUG HAWN UPON RECEIPT

Details:

Page 1 of 1

Cooler No. 1 of 1

Date Shipped 4-8-08

Shipped By UPS

Turnaround NORMAL

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

Empirical Laboratories

CLIENT: SES, LLC
DATE RECEIVED: 04/09/08
DATE REPORTED: 04/23/08

EMPIRICAL LABORATORIES SAMPLE NUMBER						0804083-01
CLIENT SAMPLE DESCRIPTION/SAMPLING DATE						13 TCLP 04/08/08 3:00:00 PM
ANALYTES	REGULATORY LIMITS	MDL	REPORTING LIMITS	USEPA METHOD	UNITS	CONC
Arsenic-TCLP	5.0	0.030	0.10	1311/6010B	mg/L	<0.030
Barium-TCLP	100	0.050	2.0	1311/6010B	mg/L	0.199 B
Cadmium-TCLP	1.0	0.010	0.050	1311/6010B	mg/L	<0.010
Chromium-TCLP	5.0	0.020	0.10	1311/6010B	mg/L	<0.020
Lead-TCLP	5.0	0.015	0.030	1311/6010B	mg/L	<0.015
Mercury-TCLP	0.20	0.00080	0.0020	1311/7470A	mg/L	<0.00080
Selenium-TCLP	1.0	0.030	0.050	1311/6010B	mg/L	<0.030
Silver-TCLP	5.0	0.010	0.10	1311/6010B	mg/L	<0.010
Initial pH - TCLP	NA	NA	NA	1311	Units	5.3
Final pH - TCLP	NA	NA	NA	1311	Units	4.9
Cyanide	250	0.13	0.25	9012A	mg/kg (as Rec'd)	<0.13
Ignitability	<140	NA	NA	1010	°F	>158
pH- Laboratory (1)	<2/>12.5	NA	NA	9045B	Units	5.4 @ 25°C
Reactive Sulfide	500	18	54	Chap.7.3.4.2	mg/kg (as Rec'd)	<18

See attached page for definitions of terms and qualifiers.

EMPIRICAL LABORATORIES

D. Rick Davis
Vice President

227 French Landing Drive ▮ Suite 550 ▮ Nashville, TN 37228 ▮ Tel (615) 345-1115 ▮ Fax (615) 846-5426

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13 TCLP

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V04083

Matrix: (soil/water) TCLP Lab Sample ID: 0804083-01

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0408301T

Level: (low/med) LOW Date Sampled: 04/08/08 15:00

% Moisture: not dec. _____ Date Analyzed: 04/15/08 23:37

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

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

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

CAS NO.	COMPOUND	EQL	TCLP Regulatory Limit	CONC	Q
71-43-2	Benzene	0.010	0.50	<0.010	U
78-93-3	2-Butanone	0.10	200	<0.10	U
56-23-5	Carbon tetrachloride	0.010	0.50	<0.010	U
108-90-7	Chlorobenzene	0.010	100	<0.010	U
67-66-3	Chloroform	0.010	6.0	<0.010	U
106-46-7	1,4-Dichlorobenzene	0.010	7.5	<0.010	U
107-06-2	1,2-Dichloroethane	0.010	0.50	<0.010	U
75-35-4	1,1-Dichloroethene	0.010	0.70	<0.010	U
127-18-4	Tetrachloroethene	0.010	0.70	<0.010	U
79-01-6	Trichloroethene	0.010	0.50	0.0095	J
75-01-4	Vinyl chloride	0.020	0.20	<0.020	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13 TCLP

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B04083

Matrix: (soil/water) TCLP Lab Sample ID: 0804083-01

Sample wt/vol: 100.0 (g/mL) ML Lab File ID: 0408301T

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 04/08/08 15:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:04/11/08

Concentrated Extract Volume: 1000.0(uL) Date Analyzed: 04/14/08 16:17

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	EQL	TCLP Regulatory Limit	CONC	Q
121-14-2	2,4-Dinitrotoluene	0.050	0.13	<0.050	U
118-74-1	Hexachlorobenzene	0.050	0.13	<0.050	U
87-68-3	Hexachlorobutadiene	0.050	0.50	<0.050	U
67-72-1	Hexachloroethane	0.050	3.0	<0.050	U
108-39-4	3-Methylphenol	0.050	200	<0.050	U
106-44-5	4-Methylphenol	0.050	200	<0.050	U
95-48-7	2-Methylphenol	0.050	200	<0.050	U
98-95-3	Nitrobenzene	0.050	2.0	<0.050	U
87-86-5	Pentachlorophenol	0.20	100	<0.20	U
110-86-1	Pyridine	0.20	5.0	<0.20	U
95-95-4	2,4,5-Trichlorophenol	0.050	400	<0.050	U
88-06-2	2,4,6-Trichlorophenol	0.050	2.0	<0.050	U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13 TCLP

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: EL Case No.: SAS No.: NA SDG No.: SES.P04083

Matrix: (soil/water) TCLP Lab Sample ID: 0804083-01

Sample wt/vol: 100.0 (g/mL) ML Lab File ID: 018F1901

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 04/08/08 15:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:04/16/08

Concentrated Extract Volume: 10.0(mL) Date Analyzed: 04/18/08 19:00

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND	EQL	TCLP Regulatory Limit	CONC	Q
57-74-9	Chlordane	0.00050	0.030	<0.00050	U
72-20-8	Endrin	0.00010	0.020	<0.00010	U
58-89-9	Gamma-BHC	0.00010	0.40	<0.00010	U
76-44-8	Heptachlor	0.00010	0.0080	<0.00010	U
1024-57-3	Heptachlor Epoxide	0.00010	0.0080	<0.00010	U
72-43-5	Methoxychlor	0.00010	10	<0.00010	U
8001-35-2	Toxaphene	0.010	0.50	<0.010	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13 TCLP

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: EL Case No.: SAS No.: NA SDG No.: SES.H04083

Matrix: (soil/water) TCLP Lab Sample ID: 0804083-01

Sample wt/vol: 100.0 (g/mL) ML Lab File ID: 014F0301

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 04/08/08 15:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:04/16/08

Concentrated Extract Volume: 10.0(mL) Date Analyzed: 04/16/08 19:45

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND	EQL	TCLP Regulatory Limit	CONC	Q
94-75-7	2,4-D	0.0050	10	<0.0050	U
93-72-1	2,4,5-TP (Silvex)	0.00050	1.0	<0.00050	U

Atlantic waste services

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: US Army Ft Stewart

US EPA ID#:

Billing Address:

Site Address: 1550 Frank Cochran Dr. Ft Stewart, Ga 31314

County of Origin: Liberty

Phone: (912) 315-5101

Description of Waste	Total Quantity	Profile Number	Unit of Measure	Container Type
contaminated soil	1	1023605	30 yd	[illegible]
		1011[illegible]		

Special Handling Instructions

I hereby certify that the above described materials are non-hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Generator Authorized Agent Name: [illegible]

Signature: [signature]

Date Shipped: 4/28/08

TRANSPORTER

Transporter Name: Atlantic Waste Services 1055 Pine Meadow Dr.

DOT#:

Address: Pooler, Ga 31322

Truck Number:

Name of Authorized Agent: [illegible]

Signature

Date Delivered

DISPOSAL FACILITY

Site Name: Superior Landfill

Address: 3001 Little Neck Rd Savannah Ga 31322

I hereby acknowledge receipt of the above described materials.

Name of Authorized Agent

Signature

Date Received

White - Original Yellow - Transporter Pink - Disposal Facility Gold - Customer

Atlantic
waste services

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: [illegible] US EPA ID#:

Billing Address:

Site Address: [illegible]

County of Origin: Liberty Phone:

Description of Waste	Total Quantity	Profile Number	Unit of Measure	Container Type
[illegible]	1	[illegible]	[illegible]	[illegible]

Special Handling Instructions

I hereby certify that the above described materials are non-hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Generator Authorized Agent Name | Signature | Date Shipped

TRANSPORTER

Transporter Name: [illegible] DOT#:

Address: [illegible] Truck Number:

Name of Authorized Agent | Signature | Date Delivered

DISPOSAL FACILITY

Site Name: [illegible]

Address: [illegible]

I hereby acknowledge receipt of the above described materials.

Name of Authorized Agent | Signature | Date Received

White - Original Yellow - Transporter Pink - Disposal Facility Gold - Customer

atlantic
waste services

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: US Army Ft Stewart US EPA ID#:

Billing Address:

Site Address: 1550 Frank Cochran Dr. Ft. Stewart / GA 31314-4927

County of Origin: Liberty Phone: (912) 315-5101

Description of Waste	Total Quantity	Profile Number	Unit of Measure	Container Type
Diesel Fuel Contaminated Soil	1	100388SC	30	ROL

Special Handling Instructions

I hereby certify that the above described materials are non-hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Bunny Powell Jones [signature] 4/20/09

Generator Authorized Agent Name Signature Date Shipped

TRANSPORTER

Transporter Name: Atlantic Waste Services DOT#:

Address: 125 Ellis Meadows Truck Number:

Park / GA 30302

Name of Authorized Agent Signature Date Delivered

DISPOSAL FACILITY

Site Name: WM - Superior Landfill

Address: 3001 Little Neck Rd

I hereby acknowledge receipt of the above described materials.

Name of Authorized Agent Signature Date Received

Atlantic waste services

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: US Army Ft. Stewart US EPA ID#: ______

Billing Address: ______

Site Address: 1550 Frank Cochran Dr Ft. Stewart, GA 31314-4927

County of Origin: Liberty Phone: 912-315-5179

Description of Waste	Total Quantity	Profile Number	Unit of Measure	Container Type
Diesel Fuel Contaminated Soil	1	100388-50	30	Rol

Special Handling Instructions

I hereby certify that the above described materials are non-hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

[illegible] — Generator Authorized Agent Name

[signature] — Signature

4/28/09 — Date Shipped

TRANSPORTER

Transporter Name: Atlantic Waste Services DOT#: ______

Address: 185 E Pine Meadow Dr. [illegible] GA 31322 Truck Number: 10[illegible]

______ Name of Authorized Agent

[signature] — Signature

______ Date Delivered

DISPOSAL FACILITY

Site Name:

Address:

I hereby acknowledge receipt of the above described materials.

______ Name of Authorized Agent

______ Signature

______ Date Received

White - Original Yellow - Transporter Pink - Disposal Facility Gold - Customer

0132

Atlantic
waste services

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: Fort Stewart US EPA ID#:

Billing Address:

Site Address

County of Origin: Phone:

Description of Waste	Total Quantity	Profile Number	Unit of Measure	Container Type

Special Handling Instructions

I hereby certify that the above described materials are non-hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Generator Authorized Agent Name Signature Date Shipped

TRANSPORTER

Transporter Name: DOT#:

Address: Truck Number:

Name of Authorized Agent Signature Date Delivered

DISPOSAL FACILITY

Site Name:

Address:

I hereby acknowledge receipt of the above described materials.

Name of Authorized Agent Signature Date Received

White - Original Yellow - Transporter Pink - Disposal Facility Gold - Customer

0133

Atlantic
waste services

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: _____ US EPA ID#: _____

Billing Address: _____

Site Address: _____

County of Origin: _____ Phone: _____

Description of Waste	Total Quantity	Profile Number	Unit of Measure	Container Type

Special Handling Instructions

I hereby certify that the above described materials are non-hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Generator Authorized Agent Name _____ Signature _____ Date Shipped _____

TRANSPORTER

Transporter Name: _____ DOT#: _____

Address: _____ Truck Number: _____

Name of Authorized Agent _____ Signature _____ Date Delivered _____

DISPOSAL FACILITY

Site Name: _____

Address: _____

I hereby acknowledge receipt of the above described materials.

Name of Authorized Agent _____ Signature _____ Date Received _____

White - Original Yellow - Transporter Pink - Disposal Facility Gold - Customer

Empirical Laboratories

CLIENT: SES, LLC
DATE RECEIVED: 06/06/08
DATE REPORTED: 06/24/08

EMPIRICAL LABORATORIES SAMPLE NUMBER						0806070-02
CLIENT SAMPLE DESCRIPTION/SAMPLING DATE						SWMU-13 WW 06/04/08 1:30:00 PM
ANALYTES	USEPA METHOD	UNITS	MDL	REPORTING LIMITS	DILUTION FACTOR	CONC
Oil & Grease	1664A	mg/L	2.0	5.0	1	<2.0
pH- Laboratory (1)	SM4500H$^+$B	Units	NA	NA	1	6.0 @ 17°C
Phenolics	9065	mg/L	0.010	0.030	1	0.019 B

See attached page for definitions of terms and qualifiers.

EMPIRICAL LABORATORIES

Betty DeVille for

D. Rick Davis
Vice President

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SWMU-13 WW

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V06070

Matrix: (soil/water) WATER Lab Sample ID: 0806070-02

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0607002

Level: (low/med) LOW Date Sampled: 06/04/08 13:30

% Moisture: not dec. _____ Date Analyzed: 06/10/08 13:59

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

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
67-64-1	Acetone	1.1	10	9.3	J
71-43-2	Benzene	0.11	1.0	0.24	J
75-27-4	Bromodichloromethane	0.086	1.0		U
75-25-2	Bromoform	0.24	1.0		U
74-83-9	Bromomethane	0.33	2.0		U
78-93-3	2-Butanone	1.2	10		U
75-15-0	Carbon disulfide	0.13	1.0	0.27	J
56-23-5	Carbon tetrachloride	0.14	1.0		U
108-90-7	Chlorobenzene	0.28	1.0		U
75-00-3	Chloroethane	0.38	2.0		U
67-66-3	Chloroform	0.10	1.0		U
74-87-3	Chloromethane	0.40	2.0		U
110-82-7	Cyclohexane	0.18	2.0	4.6	
124-48-1	Dibromochloromethane	0.080	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4	1,2-Dibromoethane	0.070	1.0		U
95-50-1	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8	Dichlorodifluoromethane	0.24	2.0		U
75-34-3	1,1-Dichloroethane	0.15	1.0		U
107-06-2	1,2-Dichloroethane	0.15	1.0		U
75-35-4	1,1-Dichloroethene	0.42	1.0		U
156-59-2	cis-1,2-Dichloroethene	0.44	1.0		U
156-60-5	trans-1,2-Dichloroethene	0.40	1.0		U
78-87-5	1,2-Dichloropropane	0.18	1.0		U
10061-01-5	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4	Ethylbenzene	0.14	1.0	15	
591-78-6	2-Hexanone	0.83	5.0		U
98-82-8	Isopropylbenzene	0.034	1.0	1.6	
79-20-9	Methyl acetate	0.87	1.0		U
75-09-2	Methylene chloride	0.26	2.0	0.73	JB
108-87-2	Methyl cyclohexane	0.20	1.0	4.4	
1634-04-4	MTBE	0.17	1.0		U
108-10-1	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5	Styrene	0.22	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SWMU-13 WW

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V06070

Matrix: (soil/water) WATER Lab Sample ID: 0806070-02

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0607002

Level: (low/med) LOW Date Sampled: 06/04/08 13:30

% Moisture: not dec. _____ Date Analyzed: 06/10/08 13:59

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

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
108-88-3	Toluene	0.18	1.0	1.0	
120-82-1	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6	Trichloroethene	0.28	1.0		U
76-13-1	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4	Trichlorofluoromethane	0.15	2.0		U
75-01-4	Vinyl chloride	0.19	2.0		U
1330-20-7	Xylene(total)	0.21	1.0	65	

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SWMU-13 WW

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B06070

Matrix: (soil/water) WATER Lab Sample ID: 0806070-02

Sample wt/vol: 1040 (g/mL) ML Lab File ID: 0607002

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 06/04/08 13:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:06/11/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 06/13/08 02:34

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
83-32-9	Acenaphthene	0.30	0.96		U
208-96-8	Acenaphthylene	0.22	0.96		U
120-12-7	Anthracene	0.37	0.96		U
56-55-3	Benzo(a)anthracene	0.44	0.96		U
205-99-2	Benzo(b)fluoranthene	0.34	0.96		U
207-08-9	Benzo(k)fluoranthene	0.24	0.96		U
191-24-2	Benzo(g,h,i)perylene	0.70	0.96		U
50-32-8	Benzo(a)pyrene	0.29	0.96		U
218-01-9	Chrysene	0.48	0.96		U
53-70-3	Dibenz(a,h)anthracene	0.82	0.96		U
206-44-0	Fluoranthene	0.34	0.96		U
86-73-7	Fluorene	0.26	0.96		U
193-39-5	Indeno(1,2,3-cd)pyrene	0.68	0.96		U
91-20-3	Naphthalene	0.22	0.96		U
85-01-8	Phenanthrene	0.37	0.96		U
129-00-0	Pyrene	0.31	0.96		U

EMPIRICAL LABORATORIES, LLC CHAIN OF CUSTODY RECORD

SHIP TO: 227 French Landing Drive, Suite 550 • Nashville, TN 37228 • 615-345-1115 • (fax) 615-846-5426

Send Results to:	Send Invoice to: SAME
Name: DOUG HAUON	Name:
Company: SES LLC	Company:
Address: 1006 Floyd Cullerct	Address:
City: OAK RIDGE	City:
State, Zip: TN 37830	State, Zip:
Phone: 865-481-7837	Phone:
Fax: 865-481-0290	Fax:
E-mail: DHAUON@SPECPROENV.COM	E-mail:
Project No./Name: SWMU 13	Sampler's (Signature): Jeff Williams

Analysis Requirements: BTEX, GRO; PAH, DRO

Lab Use Only:

VOA Headspace	Y	(N)	(NA)
Field Filtered	Y	(N)	NA
Correct Containers	(Y)	N	NA
Discrepancies	Y	(N)	NA
Cust. Seals Intact	(Y)	N	NA
Containers Intact	(Y)	N	NA

Airbill #:

CAR #:

Lab Use Only Lab #	Date/Time Sampled	Sample Description	Sample Matrix	BTEX	GRO	PAH	DRO	Comments	No. of Bottles	Lab Use Only Containers/Pres.
0804080-01		TRIP BLANK 5452	WATER	X				LAB PREPPED	2	2J
↓ -02	4-8-08/1520	13 SS01	Soil	X	X				4	3EN, 1M

Sample Kit Prep'd by: (Signature)	Date/Time	Received By: (Signature)
Relinquished by: (Signature) Jeff Williams	Date/Time 4-8-08/1700	Received By: (Signature)
Relinquished by: (Signature)	Date/Time	Received By: (Signature)
Received for Laboratory by: (Signature)	Date/Time 4-9-08 1000	Temperature 3.1°C

REMARKS: CALL DOUG HAUON UPON RECEIPT

Details:

Page 1 of 1

Cooler No. 1 of 1

Date Shipped 4-8-08

Shipped By UPS

Turnaround RUSH

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13 SS01

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: Case No.: SAS No.: NA SDG No.: SES.V04080

Matrix: (soil/water) SOIL Lab Sample ID: 0804080-02

Sample wt/vol: 6.0 (g/mL) G Lab File ID: 0408002A

Level: (low/med) LOW Date Sampled: 04/08/08 15:20

% Moisture: not dec. 12 Date Analyzed: 04/09/08 12:25

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
71-43-2	Benzene	0.45	4.8		U
100-41-4	Ethylbenzene	0.71	4.8		U
108-88-3	Toluene	0.82	4.8		U
1330-20-7	Xylene(total)	0.66	4.8		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13 SS01

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B04080

Matrix: (soil/water) SOIL Lab Sample ID: 0804080-02

Sample wt/vol: 15.4 (g/mL) G Lab File ID: 0408002

% Moisture: 12 decanted: (Y/N) N Date Sampled: 04/08/08 15:20

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted:04/09/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 04/09/08 15:00

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
83-32-9	Acenaphthene	15	56		U
208-96-8	Acenaphthylene	11	56		U
120-12-7	Anthracene	15	56		U
56-55-3	Benzo(a)anthracene	20	56		U
205-99-2	Benzo(b)fluoranthene	18	56		U
207-08-9	Benzo(k)fluoranthene	22	56		U
191-24-2	Benzo(g,h,i)perylene	39	56		U
50-32-8	Benzo(a)pyrene	13	56		U
218-01-9	Chrysene	17	56		U
53-70-3	Dibenz(a,h)anthracene	33	56		U
206-44-0	Fluoranthene	30	56		U
86-73-7	Fluorene	14	56		U
193-39-5	Indeno(1,2,3-cd)pyrene	26	56		U
91-20-3	Naphthalene	18	56		U
85-01-8	Phenanthrene	13	56		U
129-00-0	Pyrene	22	56		U

FORM 1
GRO ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13 SS01

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: Case No.: SAS No.: NA SDG No.: SES.G04080

Matrix: (soil/water) SOIL Lab Sample ID: 0804080-02

Sample wt/vol: 6.0 (g/mL) G Lab File ID: 006F0101

Level: (low/med) HIGH Date Sampled: 04/08/08 15:20

% Moisture: not dec. 12 Date Analyzed: 04/10/08 10:11

GC Column: RTX 502.2 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000(ul) Soil Aliquot Volume: 100(ul)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG MDL	RL	CONC	Q
8006-61-9	Gasoline Range Organics	2.4	4.8		U

FORM 1
DRO ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13 SS01

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: Case No.: SAS No.: NA SDG No.: SES.D04080

Matrix: (soil/water) SOIL Lab Sample ID: 0804080-02

Sample wt/vol: 25.4 (g/mL) G Lab File ID: 013R0201

% Moisture: 12 decanted: (Y/N) N Date Sampled: 04/08/08 15:20

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted:04/08/08

Concentrated Extract Volume: 1.0(mL) Date Analyzed: 04/10/08 01:35

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: MDL	(ug/L or ug/Kg) RL	CONC	MG/KG Q
11-84-7	-------Diesel Range Organics_____	4.5	4.5		U

ARCADIS

Appendix C

Soil Compaction Test Report

WHITTAKER LABORATORY, INC.
P.O. Box 7078 2500 Tremont Road Savannah, Georgia 31418
(912) 234-0696 Fax (912) 233-5061 Email: info@whitakerlab.net
www.whitakerlab.net

Report No.: 4-11-08-74
Client: Hodges Brothers
Project: Dennis Waters Pit
Walthourville, GA

Attached are the results of the classification test performed on one (1) sample of proposed fill material obtained by Ralph Perez on 4-10-08.

In general, with proper moisture conditioning, this (SM) soil would be considered suitable within most project specifications.

We thank you for the opportunity to be of service on this project. We appreciate your trust and look forward to a continuing relationship in the future. If you should have any questions, please do not hesitate to contact our office.

Respectfully submitted,

WHITAKER LABORATORY, INC.

Joseph F. Whitaker, P.E.

1 cc: Hodges Brothers
1 cc: File

Particle Size Distribution Report

% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	3.1	89.3	7.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	99.9		
#40	96.9		
#60	84.6		
#140	8.8		
#200	7.6		

* (no specification provided)

Material Description

Tan Fine Hard Pan Sand

Atterberg Limits (ASTM D 4318)

PL= LL= PI=

Classification

USCS= SP-SM AASHTO=

Coefficients

D_{85}= 0.2518 D_{60}= 0.1893 D_{50}= 0.1724
D_{30}= 0.1424 D_{15}= 0.1192 D_{10}= 0.1092
C_u= 1.73 C_c= 0.98

Date Tested: **Tested By:**

Remarks

Sampled by: Ralph Perez

Sample No.: 1 **Source of Sample:** Pit Sample **Date Sampled:** 4/10/08
Location: Dennis Waters Pit, Walthourville, Ga. **Elev./Depth:**
Checked By: **Title:**

WHITAKER LABORATORY, INC.

Client: Hodges Brothers
Project: Pit Sample
Project No: **Report No.** 4/11/08-104

COMPACTION TEST REPORT

Curve No.: 1

Project No.: **Date:** 4/10/08

Project: Pit Sample
Client: Hodges Brothers
Location: Dennis Waters Pit, Walthourville, Ga.
Sample Number: 1
Remarks: Sampled by: Ralph Perez

MATERIAL DESCRIPTION

Description: Tan Fine Hard Pan Sand

Classifications - **USCS:** SP-SM **AASHTO:**
Nat. Moist. = **Sp.G. =**
Liquid Limit = **Plasticity Index =**
% < No.200 = 7.6 %

TEST RESULTS
Maximum dry density = 96.9 pcf
Optimum moisture = 15.7 %

Report 4/11/08-103

WHITAKER LABORATORY, INC.

WHITAKER LABORATORY, INC.
2500 Tremont Road - Savannah, GA - 31405
Phone (912) 234-0696 - Fax (912) 233-5061

FIELD DENSITY REPORT

Report #: 4/15/08-86 **Date of Test(s):** 4/14/2008

Client: Hodges Brothers **Test Performed by:** Ralph Perez

Project: SMMU 13 Site Wright Army Airfield, Ft. Stewart, GA

Test Methods Used (underline all that apply)

ASTM-D-698, ASTM-D-1557, **ASTM-D-4959**, ASTM-D-2216, ASTM-D-1556, **ASTM-D-2922**

Test Number	% Moisture	% Optimum Moisture	Wet Density (PCF)	Dry Density (PCF)	Proctor (PCF)	% Compaction	% Required Compaction	Pass or Fail	Depth of Test (inches)	Elevation of Test (ft. **BFSG)
1	13.1	15.7	106.0	93.7	96.9	96.7	95.0	Pass	0-6"	0-FSG
	Test Location: *SMMU 13 - Contamination Clean Up Area , Center of Excavation - Subgrade*									

Remarks: No on-site sketch available

Compaction and penetrometer tests reflect only the condition of the materials at the depth and location specified. These tests alone are not a substitute for an engineered geotechnical investigation and report, which can provide information on underlying soil conditions that can adversely affect support of structures and/or pavements.

cc: Hodges Brothers

WHITAKER LABORATORY, INC.

Joseph F. Whitaker, P.E.

WHITAKER LABORATORY, INC.
2500 Tremont Road - Savannah, GA - 31405
Phone (912) 234-0696 - Fax (912) 233-5061

FIELD DENSITY REPORT

Report #: 4/15/08-87 **Date of Test(s):** 4/11/2008

Client: Hodges Brothers **Test Performed by:** Ralph Perez

Project: SMMU 13 Site Wright Army Airfield, FT. Stewart, GA

Test Methods Used (underline all that apply)

ASTM-D-698, ASTM-D-1557, **ASTM-D-4959**, ASTM-D-2216, ASTM-D-1556, **ASTM-D-2922**

Test Number	% Moisture	% Optimum Moisture	Wet Density (PCF)	Dry Density (PCF)	Proctor (PCF)	% Compaction	% Required Compaction	Pass or Fail	Depth of Test (inches)	Elevation of Test (ft. **BFSG)
1	13.9	15.7	108.2	95.0	96.9	98.0	95.0	Pass	0-6"	4-FSG
	Test Location: *SMMU 13 - Contamination Clean Up Area, Center of Excavation - Subgrade*									

Remarks: No on-site sketch available

Compaction and penetrometer tests reflect only the condition of the materials at the depth and location specified. These tests alone are not a substitute for an engineered geotechnical investigation and report, which can provide information on underlying soil conditions that can adversely affect support of structures and/or pavements.

cc: Hodges Brothers

WHITAKER LABORATORY, INC.

Joseph F. Whitaker, P.E.

ARCADIS

Appendix D

Soil Boring Logs and Well Installation Diagrams

SpecPro Environmental Services LLC
1006 Floyd Culler Court
Oak Ridge, Tennessee 37830
(865)481-7837

Well No. ~~MW-0~~ KW 13-MW-18R

DRILLING LOG

CLIENT _____ LOCATION Ft Stewart

LOGGED BY: Leann McNeal PROOFED BY: _____

DRILLING COMPANY: Boart Longyear

DRILLER: Wade Allen HELPER: Chris Rushmeyer

COORDINATES(IF AVAILABLE)
N _____
E _____
ELEV. GROUND _____
ELEVATION MEASURING POINT _____

DRILLING DATES:
STARTED: 5/29/08
FINISHED: 5/29/08
TIME: 1630

CLASSIFICATIION OF MATERIALS (Description)	% RECOVERY	REMARKS
0'-4' → yellowish brown, 10YR 5/8 sandy clay, low plasticity, no odor, damp, 60%-clay 40%-sand, soft red 2.5 YR 5/8 mottles	2.5/4	
4'-8' → light reddish grey 2.5YR 7/1 sandy clay, low plasticity, odor at 7.5-8 damp, 75%-clay, 25%-sand, medium stiff red 2.5 YR 4/8 from 6.5-8	4/4	
8'-12' → 2.5 YR 4/8 red sandy clay, 75%-clay 25%-sand, low plasticity, damp, medium stiff, odor at 8'-9', ~~SAT~~ KW wet sand at 11'	4/4	
12'-16' → SAA, to 13.5 14' is strong brown 7.5 YR 5/8 sandy clay, no odor moist, stiff, low plasticity, 60%-clay, 40%-sand 14'-16' is clayey sand, no odor wet, soft 80%-sand, 20%-clay	4/4	
16'-20 - SAA		

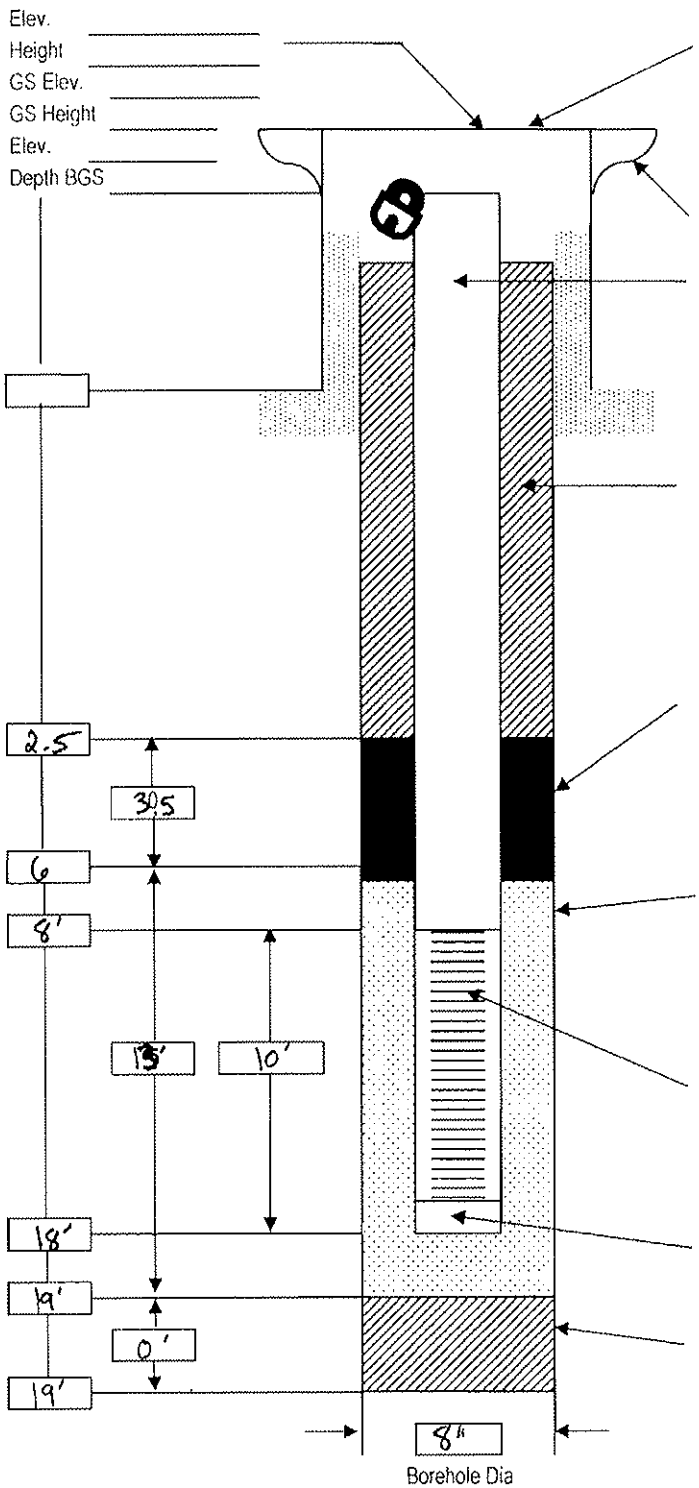
NOT TO SCALE

R:\Projects\E0145.0001\Graphics\Blanding MW-114 Drill Log.dwg(05/16/08)

05/22/08

MONITORING WELL CONSTRUCTION LOG - Standard Flush Mount

Well No.: 13-MW-18R	Installation: Ft Stewart	Site: SWMU 13
Project No.: E0138.0003	Client/Project:	
Contractor:	Drilling Contractor: Boart Longyear	
Start Date: 5/30/08	End Date 5/31/08	Time: 1130
Built By: Wade Allen	Well Coordinates: N:	E:



PROTECTIVE CASING
Material/Type
Diameter
Watertight O-Ring ☑ Yes ☐ No
Breathes with Vadose Zone ☐ Yes ☑ No

SURFACE PAD
Composition & Size 4 40lb bags concrete

RISER PIPE
Type Schedule 40 PVC
Diameter 2"
Total Length (TOC to TOS) 0'-18'
Ventilated Cap ☐ Yes ☐ No
O-Rings for Threads ☐ Yes ☐ No

GROUT
Composition & Amount N/A
Tremied ☐ Yes ☐ No
Interval BGS N/A

CENTRALIZERS ☐ Yes ☑ No
Depth(s) N/A

SEAL
Type bentonite
Source Enviroplug medium
Setup/Hydration Time N/A
Volume Fluid Added
Tremied ☐ Yes ☑ No

FILTER PACK
Type Filter Sand #1
Amount Used 4.2 or 6 bags
Tremied ☐ Yes ☑ No
Source DSI
Gr. Size Dist #1

SCREEN
Type Schedule 40 PVC
Diameter 2"
Slot Size 0.010
Interval BGS 8'-18'

SUMP
Interval BGS N/A
Type of Bottom Cap N/A

BACKFILL PLUG
Material N/A
Setup/Hydration Time N/A
Tremied ☐ Yes ☐ No

SpecPro Environmental Services LLC
1006 Floyd Culler Court
Oak Ridge, Tennessee 37830
(865)481-7837

Well No. ~~MW-0~~ KU
13-MW-20

DRILLING LOG

COORDINATES(IF AVAILABLE)
N
E
ELEV. GROUND
ELEVATION MEASURING POINT

CLIENT
LOCATION Ft Stewart
LOGGED BY: Leann McNeal
PROOFED BY:
DRILLING COMPANY: Boart Longyear
DRILLER: Wade Allen
HELPER: Chris Rushmeyer
DRILLING DATES:
STARTED: 5/30/08
FINISHED: 5/30/08
TIME: 0835

CLASSIFICATIION OF MATERIALS (Description)	% RECOVERY	REMARKS
0-1 → strong brown 7.5YR 5/6 sand, no odor, nonplastic subangular, poorly graded 100% sand, soft, dry	3/4	PID=0.0
1'-2' → dark brown 7.5YR 3/3, no odor, nonplastic, subangular, poorly graded, 100% sand, soft, dry, fine grained		
2'-4' → reddish yellow 7.5YR 7/6, sandy clay, no odor, low plasticity, damp, medium stiff, 75% clay, 25% sand	4/4	PID=729
~~4-8'~~ KU 4-5.5 → pale brown 10YR 6/3 sand, nonplastic, no odor, subangular, poorly graded 100% sand soft, damp fine grained		
5.5-8 → red 10R 5/8 with white mottles sandy clay, low plasticity, no odor, medium stiff, damp 70% clay, 30% sand	~~4/4~~ KU	PID=15.2
8'-12' → SAA	4/4	
12'-16' →	4/4	PID=57.4
16'-20' → 16-17- SAA	4/4	PID=1.8
17-18' → reddish yellow 7.5YR 7/8 sand, coarse grained, wet, no odor, poorly graded, 100% sand		
18-20' → white 7.5YR clayey sand fine grained, subangular, poorly sorted, no odor, wet, soft, 80% sand 20% clay		

NOT TO SCALE

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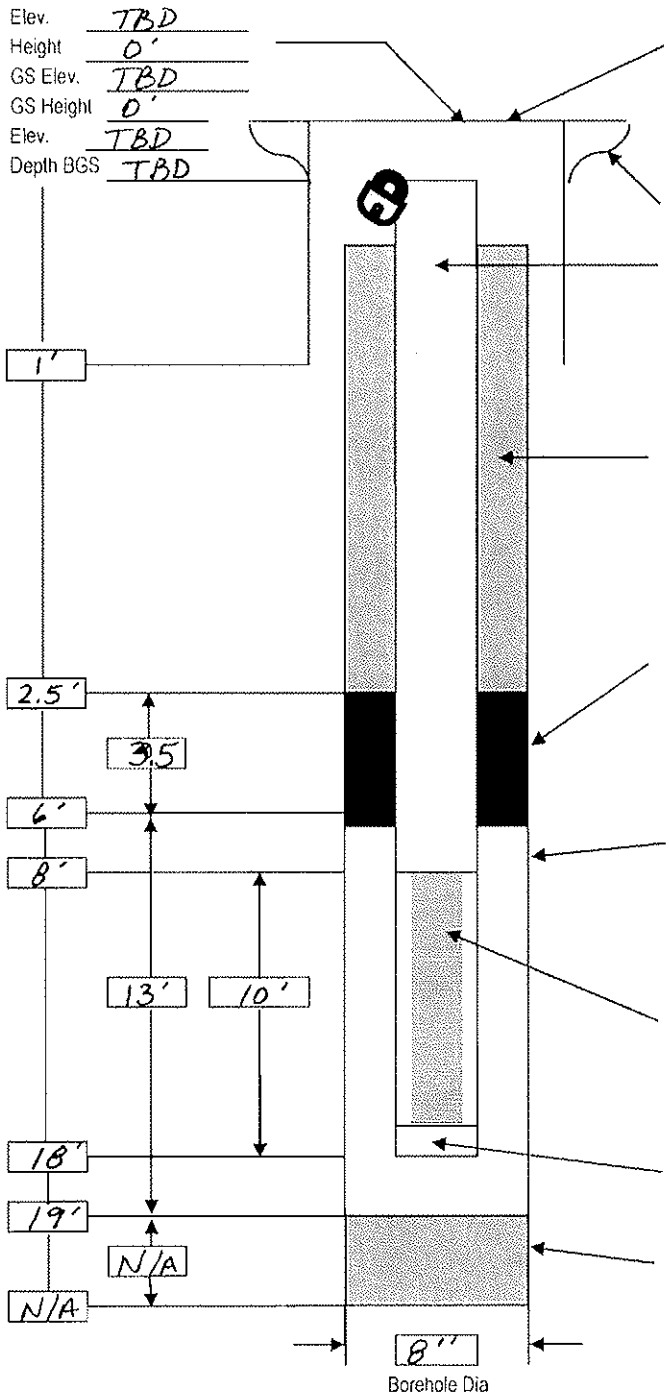
05/22/08

MONITORING WELL CONSTRUCTION LOG - Standard Flush Mount

Well No.: 13-MW-20	Installation: Fort Stewart	Site: SWMU 13
Project No.: E0138.0003	Client/Project: US Army Corps of Engineers	
Contractor: SpecPro Environmental Services LLC	Drilling Contractor: Boart Longyear	
Start Date: 5/30/08	End Date 5/30/08 Time: 1450	
Built By: Wade Allen	Well Coordinates: N: TBD E: TBD	



PROTECTIVE CASING
Material/Type STEEL
Diameter 8"
Watertight O-Ring ☒ Yes ☐ No
Breathes with Vadose Zone ☐ Yes ☒ No

SURFACE PAD
Composition & Size 2'X2' CONCRETE

RISER PIPE
Type SCHEDULE 40
Diameter 2"
Total Length (TOC to TOS) 6'
Ventilated Cap ☐ Yes ☒ No
O-Rings for Threads ☒ Yes ☐ No

GROUT
Composition & Amount NO GROUT, BENTONITE MEETS CONCRETE PAD
Tremied ☐ Yes ☒ No
Interval BGS N/A

CENTRALIZERS ☐ Yes ☒ No
Depth(s) N/A

SEAL
Type BENTONITE
Source WYO-BEN, INC. ENVIROPLUG MEDIUM
Setup/Hydration Time 24 HOURS
Volume Fluid Added PELLETS
Tremied ☐ Yes ☒ No

FILTER PACK
Type DSI #1 FILTER SAND
Amount Used 3ft³
Tremied ☐ Yes ☒ No
Source DSI
Gr. Size Dist #1

SCREEN
Type SCHEDULE 40 PVC
Diameter 2"
Slot Size .010" FACTORY SLOT
Interval BGS 8'-18'

SUMP
Interval BGS N/A
Type of Bottom Cap N/A

BACKFILL PLUG
Material N/A
Setup/Hydration Time N/A
Tremied ☐ Yes ☐ No

SpecPro Environmental Services LLC
1006 Floyd Culler Court
Oak Ridge, Tennessee 37830
(865)481-7837

Well No. MW-0
13-MW-21

DRILLING LOG

CLIENT _____ LOCATION Ft Stewart
LOGGED BY: L PROOFED BY: _____

DRILLING COMPANY: Boart Longyear
DRILLER: Wade Allen HELPER: Chris Ruchmeyer

COORDINATES(IF AVAILABLE)
N _____
E _____
ELEV. GROUND _____
ELEVATION MEASURING POINT _____

DRILLING DATES:
STARTED: 5/30/08
FINISHED: 5/30/08
TIME: 0915

CLASSIFICATIION OF MATERIALS (Description)	% RECOVERY	REMARKS
0-4' → dark brown 7.5 YR 3/3, Fine grained sand, nonplastic, no odor, dry, soft, subangular, poorly graded 100% sand	3/4	PID = 6.0
4-8 → 4-5.5 → SAA 5.5-8 → pale brown 10YR, 6/3 sand, fine grained, no odor, damp, soft, nonplastic, 100% sand, subangular to angular, poorly graded	3/4	PID = 4.1
8'-12' → 8'-9' → SAA	2/4	PID = 0.4
9'-12' → granite gravel fill material, wet 12'-16' - 12'-13.5' → SAA	3.5/4	PID = 6.4
13.5'-16' → white 10 YR 8/1 Finegrained, clayey sand, low plasticity, no odor, wet subangular, poorly graded, soft, yellow 10YR 7/8 mottles throughout		
16-20 → SAA, no mottles, no odor	2/4	PID = 0.0

NOT TO SCALE

05/22/08

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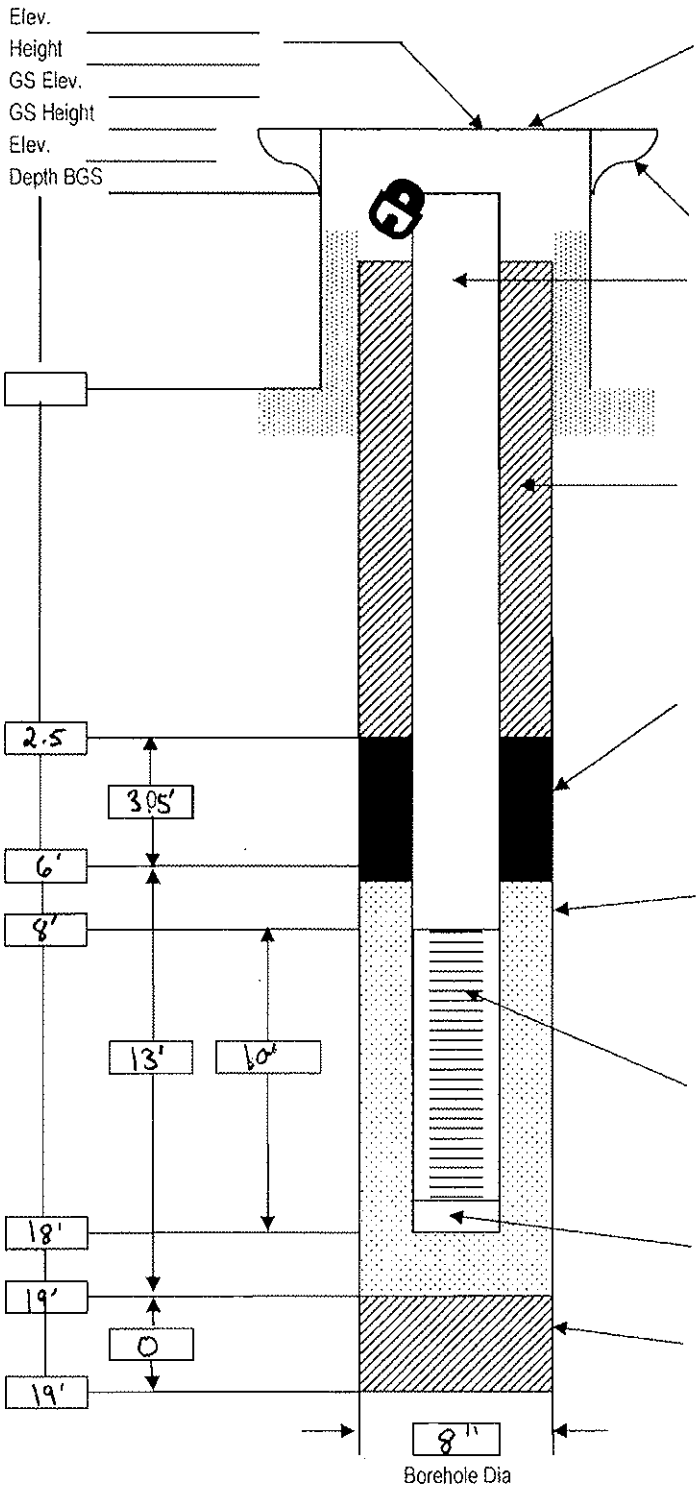
MONITORING WELL CONSTRUCTION LOG - Standard Flush Mount

Well No.: 13-MW-21	Installation: Ft Stewart	Site: SWMU 13
Project No.: E0138 0003	Client/Project:	
Contractor:	Drilling Contractor: Boart Longyear	
Start Date: 5/31/08	End Date 5/31/08 Time: 1130	
Built By: Wade Allen	Well Coordinates: N:	E:



PROTECTIVE CASING
Material/Type
Diameter
Watertight O-Ring ☑ Yes ☐ No
Breathes with Vadose Zone ☐ Yes ☑ No

SURFACE PAD
Composition & Size concrete

RISER PIPE
Type Schedule 40 PVC
Diameter 2"
Total Length (TOC to TOS) 0'-18'
Ventilated Cap ☐ Yes ☐ No
O-Rings for Threads ☐ Yes ☐ No

GROUT
Composition & Amount N/A
Tremied ☐ Yes ☐ No
Interval BGS N/A

CENTRALIZERS ☐ Yes ☑ No
Depth(s) N/A

SEAL
Type bentonite
Source Enviroplug medium
Setup/Hydration Time N/A
Volume Fluid Added
Tremied ☐ Yes ☑ No

FILTER PACK
Type #1 Filter Sand
Amount Used 6 bags
Tremied ☐ Yes ☑ No
Source DSI
Gr. Size Dist #1

SCREEN
Type Schedule 40 PVC
Diameter 2"
Slot Size 0.010
Interval BGS 8'-18'

SUMP
Interval BGS N/A
Type of Bottom Cap N/A

BACKFILL PLUG
Material N/A
Setup/Hydration Time N/A
Tremied ☐ Yes ☐ No

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Appendix E

2008 Groundwater Laboratory
Analytical Data

Validation Report

SWMU 13
Groundwater Sampling

Fort Stewart

Prepared by DataChek

January 20, 2009

TABLE OF CONTENTS

List of Tables

ACRONYMS AND ABBREVIATIONS

%	Percent
%D	percent difference
BTEX	benzene, toluene, ethylbenzene, and xylenes
CB	calibration blank
CCAL	continuing calibration
CCV	continuing calibration verification
COC	chain of custody
DRO	diesel range organic
EPH	extractible petroleum hydrocarbons
ER	equipment rinsate
FD	field duplicate
GRO	gasoline range organic
ICAL	initial calibration
ICL	instrument calibration limit
IS	internal standard
J	estimated value
LCS	laboratory control sample
MB	method blank
MDL	method detection limit
MS	matrix spike
MSD	matrix spike duplicate
MTBE	methyl tert butyl ether
PAH	polynuclear aromatic hydrocarbon
PARCC	precision, accuracy, representativeness, comparability, completeness
PRO	petroleum range organics
QC	quality control
R	Rejected
RL	reporting limit
RPD	relative percent difference
RRF	relative response factor
RSD	relative standard deviation
SDG	sample delivery group
TB	trip blank
TPH	total petroleum hydrocarbons
TCE	trichloroethene
U	not detected
UJ	not detected; associated value is an estimate
VOC	volatile organic compound

1. INTRODUCTION

The data validation of 10 groudwater samples from SWMU 13, Ft Stewart was completed in January 2009. Level III data validation was performed on all samples collected during the sampling activities. Empirical Laboratories, Nashville, TN, produced all the analytical data. The chemical parameters for which the samples were analyzed are identified below:

- Volatile organic compounds by SW846 8260B; and
- Semivolatile organic compounds by SW846 8270C.

2. PROCEDURES

The sample data were validated following the logic identified in *The CLP National Functional Guidelines for Organic Data Review (October 1999)* for all areas. The data validation qualifiers (Table 5-1) applied by the reviewer were recorded in a column adjacent and to the right of the laboratory results. A data validation reason code was also added to each of the reviewer's qualifiers to provide the user with a means to identify which results were qualified and the reason for the qualifiers (Table 5-2).

3. SUMMARY OF DATA VALIDATION FINDINGS

This data validation report reflects the data validation findings for samples associated with SWMU 13. The validated data set consisted of 10 groundwater samples and was validated at Level III. Overall the data was of excellent quality, and all measurements required to satisfy the project quality control (QC) objectives (precision, accuracy, representativeness, comparability, and completeness) were met. Each of these measures and specific data qualifications are discussed below.

Precision: Precision is a measure of the agreement between duplicate sample measurements of the same quantity and is reflected in the relative percent difference (RPD) between spikes and the RPD for the field duplicate analysis. Precision for the SWMU 13 samples was measured at 100.0 percent.

Accuracy: Accuracy is measured by the results from the recovery of known amounts of compounds or elements from laboratory control samples (LCS), matrix spikes (MS), and surrogate recoveries. The overall measure of accuracy for SWMU 13 was calculated by comparing the number of spike recoveries that exceeded the laboratory limits by the total number of LCS, MS and surrogate spikes. For both analyte groups accuracy was measured at 98.1 percent.

Representativeness: The measures of representativeness – sample handling, analytical blank analysis, field blanks – were met for all sites. Designated analytical protocols were followed. Holding times were met for all analyses. Overall, no major problems were identified resulting from analytical failure.

Comparability: All data were analyzed using appropriate approved methods of analysis. All data results were reported correctly and in standard units

Completeness: Completeness is the amount of valid data compared to the planned amount and is expressed as a percent of the usable data points divided by the total number of analytes for each parameter analyzed. Out of a total of 1030 data points, no data points were rejected, resulting in a completeness of 100 percent.

Several sample results for the organic compounds were assigned "J" qualifiers by the laboratory, which is standard practice, because the concentrations were quantified between the method detection limit and the reporting limit. Due to the uncertainty associated with this region of quantification, the validation reviewer retained the "J" qualifiers assigned by the laboratory to indicate an estimated quantity.

Data validation summaries, which function as worksheets for the validation task, are included for each parameter in each data package. The following section highlights the key findings of the data validation for each analysis.

4. ANALYSIS-SPECIFIC DATA VALIDATION SUMMARIES

4.1 VOCs BY SW846 8260B

Ten groundwater samples were analyzed for the full array of volatile organic compounds. Samples from both SDGs required dilutions to quantified the results. Overall, the data are of good quality and are usable as reported by the laboratory with the exceptions noted below. Data were reviewed for the following:

Holding Times/Sample Condition. Holding times were met for all sample analyses. All samples were received in acceptable condition.

Initial Calibration and Continuing Calibration. All initial calibrations (ICAL) associated with the project samples met QC criteria. All continuing calibration (CCAL) analyses were within the limits except the percent difference in the SDG 0812291 for acetone. This compound was qualified as "UJ" in samples 08354G01 and 08354G02.

Blanks. Contamination was present in the method blanks (MB) and trip blanks (TB) associated with SDG 0812291. Chlorobenzene and methylene chloride were the compounds present in those blanks and the results for those two compounds were qualified as "U" in samples 08354G01 and 08354G02.

Surrogate Recoveries. All surrogate recoveries were within the QC limits.

Matrix Spike/Matrix Spike Duplicate (MS /MSD). The MS or MSD recoveries were within the QC limits, so no qualifiers were required.

Laboratory Control Sample (LCS). Chloromethane had a low LCS recovery in SDG 0812291 and was qualified as "UJ" in samples 08354G01 and 08354G02. Likewise 2-butanone had a high recovery but was not present in either sample, so no qualifiers were required. All other recoveries were within the QC limits.

Field Duplicates. The field duplicate RPD for SDG 0812273 was within the 30% QC limit, so no qualifiers were required.

Quantification. All results were acceptable as qualified.

4.2 SVOCs BY SW846 8270C

Overall, the data are of good quality and are usable as qualified. Ten groundwater samples were analyzed for semivolatile organic compounds. Data were reviewed for the following:

Holding Times/Sample Condition. All samples were received in acceptable conditions.

Initial and Continuing Calibration. The ICAL analyses were within the QC limits. The CCALs in both SDGs had high percent differences for compounds as follows:

SDG	*Samples*	*Compounds*	*Qualifier*
0812273	All 10 samples	2,4-dimethylphenol, 2,4-dinitrotoluene, 4-nitroaniline	UJ
0812291	Both samples	2,4-dimethylphenol, 2,4-dinitrotoluene, bis(2-chloroisopropyl)ether, hexachlorocyclopentadiene	UJ

Blanks. Di-n-butylphthalate was present in the method blank associated with SDG 0812273. The results for samples 08353G02, 08353G04, 08353G06, 08353G07, and 08353907 were qualified as "U". No other contamination was noted in the associated method or field blanks.

Surrogate Recoveries. The phenol-d6 surrogate recoveries were outside the QC limits for samples in both SDGs. Since only one surrogate was outside the limit no qualifiers were required.

Internal Standards. Area count recoveries for the internal standards were within the QC limits, as were the retention times and no qualifiers were required.

Matrix Spike/Matrix Spike Duplicates. The MS/MSD analyses results were acceptable except for those for caprolactam. The recoveries for this compound were also below the QC limits for the LCS and as such all sample results were qualified as "UJ"

Laboratory Control Sample (LCS). Caprolactam had a low recovery in the LCS/LCSD analyses and a "UJ" qualifier was required for all sample results. Likewise, hexachlorocyclopentadiene had a high recovery in both SDG LCS/LCSD, since all the sample results were nondetects no qualifiers were required.

Field Duplicates. The field duplicate RPDs were within the QC limits. No qualifiers were required.

Quantification. All results were acceptable as qualified. Samples 08353G01 and 08353G03 had naphthalene results that were above the instrument calibration limit. A dilution was analyzed and the result from the dilution was acceptable and the original results rejected.

5. DATA QUALIFIER DEFINITIONS

5.1 DATA QUALIFIER DEFINITIONS

Table 5-1 Data Qualifier Definitions

Qualifier	Definition
R	Indicates that the analyte result was rejected. The data was not reliable. Additional supporting analyses required.
U	The analyte was analyzed for, but was not detected above the reported sample quantification limit or the reported analyte value was not detected above 5x or 10x the level reported in laboratory or field blanks.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

5.2 DATA VALIDATION REASON CODES

During the review process, a data validation reason code was added to each of the reviewer's qualifiers to allow the user to identify which results were qualified and the reason(s) for the qualifiers. Reason codes are listed and defined in Table 5-2.

Table 5-2 Data Validation Reason Codes

Reason Code	Definition
01	Sample received outside of 4+/-2 degrees Celsius
01A	Improper sample preservation
02	Holding time exceeded
02A	Extraction
02B	Analysis
03	Instrument performance – outside criteria
03A	BFB
03B	DFTPP
03C	DDT and/or Endrin % breakdown exceeds criteria
03D	Retention time windows
03E	Resolution
04	Initial calibration results outside specified criteria
04A	Compound mean RRF QC criteria not met

04B	Individual % RSD criteria not met
04C	Correlation coefficient >0.995
05	Continuing calibration results outside specified criteria
05A	Compound mean RRF QC criteria not met
05B	Compound % D QC criteria not met
06	Result qualified as a result of the 5x/10x blank correction
06A	Method or preparation blank
06B	ICB or CCB
06C	ER
06D	TB
06E	FB
07	Surrogate recoveries outside control limits
07A	Sample
07B	Associated method blank or LCS
08	MS/MSD/Duplicate results outside criteria
08A	MS and/or MSD recovery not within control limits (accuracy)
08B	% RPD outside acceptance criteria (precision)
09	Post digestion spike outside criteria (GFAA)
10	Internal standards outside specified control limits
10A	Recovery
10B	Retention time
11	Laboratory control sample recoveries outside specified limits
11A	Recovery
11B	% RPD (if run in duplicate)
12	Interference check standard
13	Serial dilution
14	Tentatively identified compounds
15	Quantification
16	Multiple results available; alternate analysis preferred
17	Field duplicate RPD criteria is exceeded
18	Percent difference between original and second column exceeds QC criteria
19	Professional judgment was used to qualify the data
20	Pesticide clean-up checks
21	Target compound identification
22	Radiological calibration
23	Radiological quantification
24	Reported result and/or lab qualifier revised to reflect validation findings

% = percent
%D = percent difference
BFB = bromofluorobenzene
CCB = continuing calibration blank
DFTPP = decafluorotriphenylphosphine
ER = equipment rinseate
FB = field blank
GFAA = graphite furnace atomic absorption
ICB = initial calibration blank
LCS = laboratory control sample
MS = matrix spike
MSD = matrix spike duplicate
QC = quality control
RPD = relative percent difference
RRF = relative response factor
RSD = relative standard deviation
TB = trip blank

6. REFERENCES

EPA (U.S. Environmental Protection Agency), October 1999. *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (EPA-540/R-99-008).*

EMPIRICAL LABORATORIES, L[illegible] CHAIN OF CUSTODY RECORD

SHIP TO: 227 French Landing Drive, Suite 550 • Na[illegible]e, TN 37228 • 615-345-1115 • (fax) 615-846-5426

4370

Send Results to:	Send Invoice to:
Name Doug Hawn	Name SAME
Company SES	Company
Address 1606 Floyd Culler Ct	Address
City Oak Ridge	City
State, Zip TN 37830	State, Zip
Phone 865 481 7837	Phone
Fax	Fax
E-mail dhawn@specpwcs.com	E-mail
Project No./Name: SWMU 13 GW Sampling	**Sampler's (Signature):**

Analysis Requirements: VOCs; SVOCs

Lab Use Only:

VOA Headspace	Y	(N)	NA
Field Filtered	Y	(N)	NA
Correct Containers	(Y)	N	NA
Discrepancies	Y	(N)	NA
Cust. Seals Intact	(Y)	N	NA
Containers Intact	(Y)	N	NA

Airbill #: FX 9470

CAR #:

Lab Use Only Lab #	Date/Time Sampled	Sample Description	Sample Matrix	VOCs	SVOCs	Comments	No. of Bottles	Lab Use Only Containers/Preservatives
0812273-01	lab	trip blank	lab	✓			2	2S-HY
-02	12-18-08 1045	08353G01	GW	✓	✓		5	2H, 3S-HY
-03	12-18-08 1140	08353G02	GW	✓	✓		5	
-04 -04	12-18-08 1200	08353G03	GW	✓	✓		5	
-03 -05	12-18-08 1200	08353G02 MS/MSD	GW	✓	✓		5	
-05 -06	12-18-08 1550	08353G04	GW	✓	✓		5	
-06 -07	12-18-08 1325	08353G05	GW	✓	✓		5	
-07	12-18-08 1530	08353G06	GW	✓	✓		5	
-08	12-18-08 1630	08353G07	GW	✓	✓		5	
-09	12-18-08 1630	08353907	GW	✓	✓		5	

	Date/Time	Received By: (Signature)
Sample Kit Prep'd by: (Signature)		
Relinquished by: (Signature)	12-19-08 1830	Received By: (Signature)
Relinquished by: (Signature)	Date/Time	Received By: (Signature)
Received for Laboratory by: (Signature)	Date/Time 12-19-08 0900	*Temperature* 6.0°C

REMARKS: call Doug Hawn upon arrival

Details:

Page 1 of 1

Cooler No. 1 of 3

Date Shipped 12-18-08

Shipped By FedEx

Turnaround Normal

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G01

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-02

Sample wt/vol: 1070 (g/mL) ML Lab File ID: 1227302

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 10:45

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/07/09 20:49

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q	Qual
83-32-9	Acenaphthene	0.29	2.3	0.33	J	J
208-96-8	Acenaphthylene	0.22	2.3		U	U
98-86-2	Acetophenone	0.35	2.3		U	
120-12-7	Anthracene	0.36	2.3		U	
1912-24-9	Atrazine	0.32	2.3		U	
100-52-7	Benzaldehyde	0.27	2.3		U	
56-55-3	Benzo(a)anthracene	0.42	2.3		U	
205-99-2	Benzo(b)fluoranthene	0.33	2.3		U	
207-08-9	Benzo(k)fluoranthene	0.23	2.3		U	
191-24-2	Benzo(g,h,i)perylene	0.68	2.3		U	
50-32-8	Benzo(a)pyrene	0.28	2.3		U	
111-91-1	bis(2-Chloroethoxy)methane	0.24	2.3		U	
92-52-4	1,1'-Biphenyl	0.18	2.3	3.5		
111-44-4	bis(2-Chloroethyl)ether	0.21	2.3		U	U
108-60-1	bis(2-Chloroisopropyl)ether	0.40	2.3		U	
117-81-7	Bis(2-ethylhexyl)phthalate	0.60	2.3		U	
101-55-3	4-Bromophenyl-phenylether	0.27	2.3		U	
85-68-7	Butylbenzylphthalate	0.38	2.3		U	
105-60-2	Caprolactam	0.17	2.3		U	ur Hafm
86-74-8	Carbazole	0.32	2.3		U	U
106-47-8	4-Chloroaniline	0.44	2.3		U	
59-50-7	4-Chloro-3-methylphenol	0.27	2.3		U	
91-58-7	2-Chloronaphthalene	0.27	2.3		U	
95-57-8	2-Chlorophenol	0.28	2.3		U	
7005-72-3	4-Chlorophenyl-phenylether	0.42	2.3		U	
218-01-9	Chrysene	0.47	2.3		U	
53-70-3	Dibenz(a,h)anthracene	0.79	2.3		U	
132-64-9	Dibenzofuran	0.30	2.3	0.47	J	J
91-94-1	3,3'-Dichlorobenzidine	0.42	2.3		U	U
120-83-2	2,4-Dichlorophenol	0.20	2.3		U	
84-66-2	Diethylphthalate	0.48	2.3		U	
105-67-9	2,4-Dimethylphenol	0.33	9.3		U	UJ Sb
131-11-3	Dimethylphthalate	0.34	2.3		U	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G01

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-02

Sample wt/vol: 1070 (g/mL) ML Lab File ID: 1227302

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 10:45

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/07/09 20:49

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q	Rel Qual	
84-74-2	Di-n-butylphthalate	0.61	2.3		U	U	
534-52-1	4,6-Dinitro-2-methylphenol	0.34	9.3		U	U	
51-28-5	2,4-Dinitrophenol	0.40	23		U	U	56
121-14-2	2,4-Dinitrotoluene	0.23	2.3		U	U	
606-20-2	2,6-Dinitrotoluene	0.31	2.3		U	U	
117-84-0	Di-n-octylphthalate	0.15	2.3		U	U	
206-44-0	Fluoranthene	0.33	2.3		U	U	
86-73-7	Fluorene	0.26	2.3	1.2	J	J	
118-74-1	Hexachlorobenzene	0.22	2.3		U	U	
87-68-3	Hexachlorobutadiene	0.43	2.3		U	U	
77-47-4	Hexachlorocyclopentadiene	0.42	2.3		U	U	
67-72-1	Hexachloroethane	0.21	2.3		U	U	
193-39-5	Indeno(1,2,3-cd)pyrene	0.66	2.3		U	U	
78-59-1	Isophorone	0.26	2.3		U	U	
91-57-6	2-Methylnaphthalene	0.32	2.3	36			
91-20-3	Naphthalene	0.21	2.3	90	E	R	16
106-44-5	4-Methylphenol	0.36	2.3		U	U	
95-48-7	2-Methylphenol	0.39	2.3		U	U	
88-74-4	2-Nitroaniline	0.56	9.3		U	U	
99-09-2	3-Nitroaniline	0.49	9.3		U	U	
100-01-6	4-Nitroaniline	0.95	9.3		U	UJ	52
98-95-3	Nitrobenzene	0.29	2.3		U	U	
88-75-5	2-Nitrophenol	0.34	2.3		U	U	
100-02-7	4-Nitrophenol	0.39	9.3		U	U	
86-30-6	N-Nitrosodiphenylamine (1)	0.21	2.3		U	U	
621-64-7	N-Nitroso-di-n-propylamine	0.42	2.3		U	U	
87-86-5	Pentachlorophenol	0.47	9.3		U	U	
85-01-8	Phenanthrene	0.36	2.3	0.51	J	J	
108-95-2	Phenol	0.21	2.3		U	U	
129-00-0	Pyrene	0.30	2.3		U	U	
95-95-4	2,4,5-Trichlorophenol	0.23	2.3		U	U	
88-06-2	2,4,6-Trichlorophenol	0.34	2.3		U	U	

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G01DL

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-02DL

Sample wt/vol: 1070 (g/mL) ML Lab File ID: 1227302D

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 10:45

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/10/09 00:42

Injection Volume: 0.5(uL) Dilution Factor: 10.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
83-32-9	Acenaphthene	2.9	23		UD
208-96-8	Acenaphthylene	2.2	23		UD
98-86-2	Acetophenone	3.5	23		UD
120-12-7	Anthracene	3.6	23		UD
1912-24-9	Atrazine	3.2	23		UD
100-52-7	Benzaldehyde	2.7	23		UD
56-55-3	Benzo(a)anthracene	4.2	23		UD
205-99-2	Benzo(b)fluoranthene	3.3	23		UD
207-08-9	Benzo(k)fluoranthene	2.3	23		UD
191-24-2	Benzo(g,h,i)perylene	6.8	23		UD
50-32-8	Benzo(a)pyrene	2.8	23		UD
111-91-1	bis(2-Chloroethoxy)methane	2.4	23		UD
92-52-4	1,1'-Biphenyl	1.8	23	3.1	UD
111-44-4	bis(2-Chloroethyl)ether	2.1	23		UD
108-60-1	bis(2-Chloroisopropyl)ether	4.0	23		UD
117-81-7	Bis(2-ethylhexyl)phthalate	6.0	23		UD
101-55-3	4-Bromophenyl-phenylether	2.7	23		UD
85-68-7	Butylbenzylphthalate	3.8	23		UD
105-60-2	Caprolactam	1.7	23		UD
86-74-8	Carbazole	3.2	23		UD
106-47-8	4-Chloroaniline	4.4	23		UD
59-50-7	4-Chloro-3-methylphenol	2.7	23		UD
91-58-7	2-Chloronaphthalene	2.7	23		UD
95-57-8	2-Chlorophenol	2.8	23		UD
7005-72-3	4-Chlorophenyl-phenylether	4.2	23		UD
218-01-9	Chrysene	4.7	23		UD
53-70-3	Dibenz(a,h)anthracene	7.9	23		UD
132-64-9	Dibenzofuran	3.0	23		UD
91-94-1	3,3'-Dichlorobenzidine	4.2	23		UD
120-83-2	2,4-Dichlorophenol	2.0	23		UD
84-66-2	Diethylphthalate	4.8	23		UD
105-67-9	2,4-Dimethylphenol	3.3	93		UD
131-11-3	Dimethylphthalate	3.4	23		UD

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G01DL

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-02DL

Sample wt/vol: 1070 (g/mL) ML Lab File ID: 1227302D

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 10:45

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/10/09 00:42

Injection Volume: 0.5(uL) Dilution Factor: 10.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC		
84-74-2	Di-n-butylphthalate	6.1	23		UD	R 16
534-52-1	4,6-Dinitro-2-methylphenol	3.4	93		UD	
51-28-5	2,4-Dinitrophenol	4.0	230		UD	
121-14-2	2,4-Dinitrotoluene	2.3	23		UD	
606-20-2	2,6-Dinitrotoluene	3.1	23		UD	
117-84-0	Di-n-octylphthalate	1.5	23		UD	
206-44-0	Fluoranthene	3.3	23		UD	
86-73-7	Fluorene	2.6	23		UD	
118-74-1	Hexachlorobenzene	2.2	23		UD	
87-68-3	Hexachlorobutadiene	4.3	23		UD	
77-47-4	Hexachlorocyclopentadiene	4.2	23		UD	
67-72-1	Hexachloroethane	2.1	23		UD	
193-39-5	Indeno(1,2,3-cd)pyrene	6.6	23		UD	
78-59-1	Isophorone	2.6	23		UD	
91-57-6	2-Methylnaphthalene	3.2	23	31	D	R 16
91-20-3	Naphthalene	2.1	23	76	D	
106-44-5	4-Methylphenol	3.6	23		UD	R 16
95-48-7	2-Methylphenol	3.9	23		UD	
88-74-4	2-Nitroaniline	5.6	93		UD	
99-09-2	3-Nitroaniline	4.9	93		UD	
100-01-6	4-Nitroaniline	9.5	93		UD	
98-95-3	Nitrobenzene	2.9	23		UD	
88-75-5	2-Nitrophenol	3.4	23		UD	
100-02-7	4-Nitrophenol	3.9	93		UD	
86-30-6	N-Nitrosodiphenylamine (1)	2.1	23		UD	
621-64-7	N-Nitroso-di-n-propylamine	4.2	23		UD	
87-86-5	Pentachlorophenol	4.7	93		UD	
85-01-8	Phenanthrene	3.6	23		UD	
108-95-2	Phenol	2.1	23		UD	
129-00-0	Pyrene	3.0	23		UD	
95-95-4	2,4,5-Trichlorophenol	2.3	23		UD	
88-06-2	2,4,6-Trichlorophenol	3.4	23		UD	

Rev 2nd

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G02

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-03

Sample wt/vol: 1060 (g/mL) ML Lab File ID: 1227303

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 10:45

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/07/09 21:29

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L MDL	RL	CONC	Q
83-32-9	Acenaphthene	0.30	2.4		U
208-96-8	Acenaphthylene	0.22	2.4		U
98-86-2	Acetophenone	0.35	2.4		U
120-12-7	Anthracene	0.36	2.4		U
1912-24-9	Atrazine	0.32	2.4		U
100-52-7	Benzaldehyde	0.27	2.4		U
56-55-3	Benzo(a)anthracene	0.43	2.4		U
205-99-2	Benzo(b)fluoranthene	0.33	2.4		U
207-08-9	Benzo(k)fluoranthene	0.24	2.4		U
191-24-2	Benzo(g,h,i)perylene	0.69	2.4		U
50-32-8	Benzo(a)pyrene	0.28	2.4		U
111-91-1	bis(2-Chloroethoxy)methane	0.24	2.4		U
92-52-4	1,1'-Biphenyl	0.18	2.4		U
111-44-4	bis(2-Chloroethyl)ether	0.21	2.4		U
108-60-1	bis(2-Chloroisopropyl)ether	0.40	2.4		U
117-81-7	Bis(2-ethylhexyl)phthalate	0.60	2.4		U
101-55-3	4-Bromophenyl-phenylether	0.27	2.4		U
85-68-7	Butylbenzylphthalate	0.39	2.4		U
105-60-2	Caprolactam	0.17	2.4		U
86-74-8	Carbazole	0.32	2.4		U
106-47-8	4-Chloroaniline	0.45	2.4		U
59-50-7	4-Chloro-3-methylphenol	0.27	2.4		U
91-58-7	2-Chloronaphthalene	0.27	2.4		U
95-57-8	2-Chlorophenol	0.28	2.4		U
7005-72-3	4-Chlorophenyl-phenylether	0.42	2.4		U
218-01-9	Chrysene	0.48	2.4		U
53-70-3	Dibenz(a,h)anthracene	0.80	2.4		U
132-64-9	Dibenzofuran	0.31	2.4		U
91-94-1	3,3'-Dichlorobenzidine	0.42	2.4		U
120-83-2	2,4-Dichlorophenol	0.21	2.4		U
84-66-2	Diethylphthalate	0.48	2.4		U
105-67-9	2,4-Dimethylphenol	0.33	9.4		U
131-11-3	Dimethylphthalate	0.35	2.4		U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G02

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-03

Sample wt/vol: 1060 (g/mL) ML Lab File ID: 1227303

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 10:45

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/07/09 21:29

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q	Qual
84-74-2	Di-n-butylphthalate	0.61	2.4	0.82	JB	u 6a
534-52-1	4,6-Dinitro-2-methylphenol	0.35	9.4		U	u
51-28-5	2,4-Dinitrophenol	0.40	24		U	u J 56
121-14-2	2,4-Dinitrotoluene	0.23	2.4		U	u
606-20-2	2,6-Dinitrotoluene	0.31	2.4		U	
117-84-0	Di-n-octylphthalate	0.16	2.4		U	
206-44-0	Fluoranthene	0.33	2.4		U	
86-73-7	Fluorene	0.26	2.4		U	
118-74-1	Hexachlorobenzene	0.22	2.4		U	
87-68-3	Hexachlorobutadiene	0.44	2.4		U	
77-47-4	Hexachlorocyclopentadiene	0.42	2.4		U	
67-72-1	Hexachloroethane	0.22	2.4		U	
193-39-5	Indeno(1,2,3-cd)pyrene	0.67	2.4		U	
78-59-1	Isophorone	0.26	2.4		U	
91-57-6	2-Methylnaphthalene	0.32	2.4		U	
91-20-3	Naphthalene	0.21	2.4		U	
106-44-5	4-Methylphenol	0.36	2.4		U	
95-48-7	2-Methylphenol	0.39	2.4		U	
88-74-4	2-Nitroaniline	0.56	9.4		U	
99-09-2	3-Nitroaniline	0.50	9.4		U	
100-01-6	4-Nitroaniline	0.96	9.4		U	u J 56
98-95-3	Nitrobenzene	0.29	2.4		U	u
88-75-5	2-Nitrophenol	0.35	2.4		U	
100-02-7	4-Nitrophenol	0.39	9.4		U	
86-30-6	N-Nitrosodiphenylamine (1)	0.22	2.4		U	
621-64-7	N-Nitroso-di-n-propylamine	0.42	2.4		U	
87-86-5	Pentachlorophenol	0.47	9.4		U	
85-01-8	Phenanthrene	0.36	2.4		U	
108-95-2	Phenol	0.22	2.4		U	
129-00-0	Pyrene	0.31	2.4		U	
95-95-4	2,4,5-Trichlorophenol	0.24	2.4		U	
88-06-2	2,4,6-Trichlorophenol	0.34	2.4		U	

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G03

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-04

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1227304

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 12:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/07/09 22:10

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
83-32-9	Acenaphthene	0.32	2.5		U
208-96-8	Acenaphthylene	0.24	2.5		U
98-86-2	Acetophenone	0.38	2.5		U
120-12-7	Anthracene	0.38	2.5		U
1912-24-9	Atrazine	0.34	2.5		U
100-52-7	Benzaldehyde	0.28	2.5		U
56-55-3	Benzo(a)anthracene	0.46	2.5		U
205-99-2	Benzo(b)fluoranthene	0.36	2.5		U
207-08-9	Benzo(k)fluoranthene	0.25	2.5		U
191-24-2	Benzo(g,h,i)perylene	0.73	2.5		U
50-32-8	Benzo(a)pyrene	0.30	2.5		U
111-91-1	bis(2-Chloroethoxy)methane	0.26	2.5		U
92-52-4	1,1'-Biphenyl	0.20	2.5	3.1	
111-44-4	bis(2-Chloroethyl)ether	0.22	2.5		U
108-60-1	bis(2-Chloroisopropyl)ether	0.42	2.5		U
117-81-7	Bis(2-ethylhexyl)phthalate	0.64	2.5		U
101-55-3	4-Bromophenyl-phenylether	0.28	2.5		U
85-68-7	Butylbenzylphthalate	0.41	2.5		U
105-60-2	Caprolactam	0.18	2.5		U
86-74-8	Carbazole	0.34	2.5		U
106-47-8	4-Chloroaniline	0.48	2.5		U
59-50-7	4-Chloro-3-methylphenol	0.29	2.5		U
91-58-7	2-Chloronaphthalene	0.29	2.5		U
95-57-8	2-Chlorophenol	0.30	2.5		U
7005-72-3	4-Chlorophenyl-phenylether	0.44	2.5		U
218-01-9	Chrysene	0.50	2.5		U
53-70-3	Dibenz(a,h)anthracene	0.85	2.5		U
132-64-9	Dibenzofuran	0.32	2.5	0.38	J
91-94-1	3,3'-Dichlorobenzidine	0.44	2.5		U
120-83-2	2,4-Dichlorophenol	0.22	2.5		U
84-66-2	Diethylphthalate	0.51	2.5		U
105-67-9	2,4-Dimethylphenol	0.36	10		U
131-11-3	Dimethylphthalate	0.37	2.5		U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G03

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-04

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1227304

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 12:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/07/09 22:10

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q	Rev Qual	
84-74-2	Di-n-butylphthalate	0.65	2.5		U	U	
534-52-1	4,6-Dinitro-2-methylphenol	0.37	10		U	U	
51-28-5	2,4-Dinitrophenol	0.42	25		U	UJ	56
121-14-2	2,4-Dinitrotoluene	0.24	2.5		U	U	
606-20-2	2,6-Dinitrotoluene	0.33	2.5		U		
117-84-0	Di-n-octylphthalate	0.16	2.5		U		
206-44-0	Fluoranthene	0.35	2.5		U		
86-73-7	Fluorene	0.28	2.5	0.94	J	J	
118-74-1	Hexachlorobenzene	0.24	2.5		U	U	
87-68-3	Hexachlorobutadiene	0.46	2.5		U		
77-47-4	Hexachlorocyclopentadiene	0.44	2.5		U		
67-72-1	Hexachloroethane	0.23	2.5		U		
193-39-5	Indeno(1,2,3-cd)pyrene	0.71	2.5		U		
78-59-1	Isophorone	0.28	2.5		U		
91-57-6	2-Methylnaphthalene	0.34	2.5	33			
91-20-3	Naphthalene	0.22	2.5	130	E	R	16
106-44-5	4-Methylphenol	0.38	2.5		U	U	
95-48-7	2-Methylphenol	0.42	2.5		U		
88-74-4	2-Nitroaniline	0.60	10		U		
99-09-2	3-Nitroaniline	0.52	10		U		
100-01-6	4-Nitroaniline	1.0	10		U	UJ	52
98-95-3	Nitrobenzene	0.31	2.5		U	U	
88-75-5	2-Nitrophenol	0.37	2.5		U		
100-02-7	4-Nitrophenol	0.42	10		U		
86-30-6	N-Nitrosodiphenylamine (1)	0.23	2.5		U		
621-64-7	N-Nitroso-di-n-propylamine	0.45	2.5		U		
87-86-5	Pentachlorophenol	0.50	10		U		
85-01-8	Phenanthrene	0.38	2.5		U		
108-95-2	Phenol	0.23	2.5		U		
129-00-0	Pyrene	0.32	2.5		U		
95-95-4	2,4,5-Trichlorophenol	0.25	2.5		U		
88-06-2	2,4,6-Trichlorophenol	0.36	2.5		U		

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G03DL

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-04DL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1227304D

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 12:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/10/09 01:23

Injection Volume: 0.5(uL) Dilution Factor: 10.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
83-32-9	Acenaphthene	3.2	25		UD
208-96-8	Acenaphthylene	2.4	25		UD
98-86-2	Acetophenone	3.8	25		UD
120-12-7	Anthracene	3.8	25		UD
1912-24-9	Atrazine	3.4	25		UD
100-52-7	Benzaldehyde	2.8	25		UD
56-55-3	Benzo(a)anthracene	4.6	25		UD
205-99-2	Benzo(b)fluoranthene	3.6	25		UD
207-08-9	Benzo(k)fluoranthene	2.5	25		UD
191-24-2	Benzo(g,h,i)perylene	7.3	25		UD
50-32-8	Benzo(a)pyrene	3.0	25		UD
111-91-1	bis(2-Chloroethoxy)methane	2.6	25		UD
92-52-4	1,1'-Biphenyl	2.0	25		UD
111-44-4	bis(2-Chloroethyl)ether	2.2	25		UD
108-60-1	bis(2-Chloroisopropyl)ether	4.2	25		UD
117-81-7	Bis(2-ethylhexyl)phthalate	6.4	25		UD
101-55-3	4-Bromophenyl-phenylether	2.8	25		UD
85-68-7	Butylbenzylphthalate	4.1	25		UD
105-60-2	Caprolactam	1.8	25		UD
86-74-8	Carbazole	3.4	25		UD
106-47-8	4-Chloroaniline	4.8	25		UD
59-50-7	4-Chloro-3-methylphenol	2.9	25		UD
91-58-7	2-Chloronaphthalene	2.9	25		UD
95-57-8	2-Chlorophenol	3.0	25		UD
7005-72-3	4-Chlorophenyl-phenylether	4.4	25		UD
218-01-9	Chrysene	5.0	25		UD
53-70-3	Dibenz(a,h)anthracene	8.5	25		UD
132-64-9	Dibenzofuran	3.2	25		UD
91-94-1	3,3'-Dichlorobenzidine	4.4	25		UD
120-83-2	2,4-Dichlorophenol	2.2	25		UD
84-66-2	Diethylphthalate	5.1	25		UD
105-67-9	2,4-Dimethylphenol	3.6	100		UD
131-11-3	Dimethylphthalate	3.7	25		UD

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G03DL

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-04DL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1227304D

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 12:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/10/09 01:23

Injection Volume: 0.5(uL) Dilution Factor: 10.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q	Qual
84-74-2	Di-n-butylphthalate	6.5	25		UD	R
534-52-1	4,6-Dinitro-2-methylphenol	3.7	100		UD	L
51-28-5	2,4-Dinitrophenol	4.2	250		UD	
121-14-2	2,4-Dinitrotoluene	2.4	25		UD	
606-20-2	2,6-Dinitrotoluene	3.3	25		UD	
117-84-0	Di-n-octylphthalate	1.6	25		UD	
206-44-0	Fluoranthene	3.5	25		UD	
86-73-7	Fluorene	2.8	25		UD	
118-74-1	Hexachlorobenzene	2.4	25		UD	
87-68-3	Hexachlorobutadiene	4.6	25		UD	
77-47-4	Hexachlorocyclopentadiene	4.4	25		UD	
67-72-1	Hexachloroethane	2.3	25		UD	
193-39-5	Indeno(1,2,3-cd)pyrene	7.1	25		UD	
78-59-1	Isophorone	2.8	25		UD	
91-57-6	2-Methylnaphthalene	3.4	25	29	D	R
91-20-3	Naphthalene	2.2	25	120	D	
106-44-5	4-Methylphenol	3.8	25		UD	R
95-48-7	2-Methylphenol	4.2	25		UD	
88-74-4	2-Nitroaniline	6.0	100		UD	
99-09-2	3-Nitroaniline	5.2	100		UD	
100-01-6	4-Nitroaniline	10	100		UD	
98-95-3	Nitrobenzene	3.1	25		UD	
88-75-5	2-Nitrophenol	3.7	25		UD	
100-02-7	4-Nitrophenol	4.2	100		UD	
86-30-6	N-Nitrosodiphenylamine (1)	2.3	25		UD	
621-64-7	N-Nitroso-di-n-propylamine	4.5	25		UD	
87-86-5	Pentachlorophenol	5.0	100		UD	
85-01-8	Phenanthrene	3.8	25		UD	
108-95-2	Phenol	2.3	25		UD	
129-00-0	Pyrene	3.2	25		UD	
95-95-4	2,4,5-Trichlorophenol	2.5	25		UD	
88-06-2	2,4,6-Trichlorophenol	3.6	25		UD	

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G04

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-05

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 1227305

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 15:50

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/07/09 22:51

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q	Rev Qual
83-32-9	Acenaphthene	0.29	2.3		U	U
208-96-8	Acenaphthylene	0.22	2.3		U	
98-86-2	Acetophenone	0.35	2.3		U	
120-12-7	Anthracene	0.36	2.3		U	
1912-24-9	Atrazine	0.32	2.3		U	
100-52-7	Benzaldehyde	0.26	2.3		U	
56-55-3	Benzo(a)anthracene	0.42	2.3		U	
205-99-2	Benzo(b)fluoranthene	0.33	2.3		U	
207-08-9	Benzo(k)fluoranthene	0.23	2.3		U	
191-24-2	Benzo(g,h,i)perylene	0.68	2.3		U	
50-32-8	Benzo(a)pyrene	0.28	2.3		U	
111-91-1	bis(2-Chloroethoxy)methane	0.24	2.3		U	
92-52-4	1,1'-Biphenyl	0.18	2.3		U	
111-44-4	bis(2-Chloroethyl)ether	0.21	2.3		U	
108-60-1	bis(2-Chloroisopropyl)ether	0.39	2.3		U	
117-81-7	Bis(2-ethylhexyl)phthalate	0.59	2.3		U	
101-55-3	4-Bromophenyl-phenylether	0.26	2.3		U	
85-68-7	Butylbenzylphthalate	0.38	2.3		U	
105-60-2	Caprolactam	0.17	2.3		U	UJ 11a/kg
86-74-8	Carbazole	0.32	2.3		U	U
106-47-8	4-Chloroaniline	0.44	2.3		U	
59-50-7	4-Chloro-3-methylphenol	0.27	2.3		U	
91-58-7	2-Chloronaphthalene	0.27	2.3		U	
95-57-8	2-Chlorophenol	0.27	2.3		U	
7005-72-3	4-Chlorophenyl-phenylether	0.41	2.3		U	
218-01-9	Chrysene	0.47	2.3		U	
53-70-3	Dibenz(a,h)anthracene	0.79	2.3		U	
132-64-9	Dibenzofuran	0.30	2.3		U	
91-94-1	3,3'-Dichlorobenzidine	0.41	2.3		U	
120-83-2	2,4-Dichlorophenol	0.20	2.3		U	
84-66-2	Diethylphthalate	0.47	2.3		U	
105-67-9	2,4-Dimethylphenol	0.33	9.2		U	UJ SL
131-11-3	Dimethylphthalate	0.34	2.3		U	UL

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G04

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-05

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 1227305

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 15:50

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/07/09 22:51

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q	
84-74-2	Di-n-butylphthalate	0.60	2.3	0.82	JB	
534-52-1	4,6-Dinitro-2-methylphenol	0.34	9.2		U	
51-28-5	2,4-Dinitrophenol	0.39	23		U	
121-14-2	2,4-Dinitrotoluene	0.23	2.3		U	
606-20-2	2,6-Dinitrotoluene	0.30	2.3		U	
117-84-0	Di-n-octylphthalate	0.15	2.3		U	
206-44-0	Fluoranthene	0.32	2.3		U	
86-73-7	Fluorene	0.25	2.3		U	
118-74-1	Hexachlorobenzene	0.22	2.3		U	
87-68-3	Hexachlorobutadiene	0.43	2.3		U	
77-47-4	Hexachlorocyclopentadiene	0.41	2.3		U	
67-72-1	Hexachloroethane	0.21	2.3		U	
193-39-5	Indeno(1,2,3-cd)pyrene	0.66	2.3		U	
78-59-1	Isophorone	0.25	2.3		U	
91-57-6	2-Methylnaphthalene	0.31	2.3	1.3	J	
91-20-3	Naphthalene	0.21	2.3	2.4		
106-44-5	4-Methylphenol	0.36	2.3		U	
95-48-7	2-Methylphenol	0.38	2.3		U	
88-74-4	2-Nitroaniline	0.55	9.2		U	
99-09-2	3-Nitroaniline	0.49	9.2		U	
100-01-6	4-Nitroaniline	0.94	9.2		U	
98-95-3	Nitrobenzene	0.29	2.3		U	
88-75-5	2-Nitrophenol	0.34	2.3		U	
100-02-7	4-Nitrophenol	0.38	9.2		U	
86-30-6	N-Nitrosodiphenylamine (1)	0.21	2.3		U	
621-64-7	N-Nitroso-di-n-propylamine	0.42	2.3		U	
87-86-5	Pentachlorophenol	0.46	9.2		U	
85-01-8	Phenanthrene	0.36	2.3		U	
108-95-2	Phenol	0.21	2.3		U	
129-00-0	Pyrene	0.30	2.3		U	
95-95-4	2,4,5-Trichlorophenol	0.23	2.3		U	
88-06-2	2,4,6-Trichlorophenol	0.34	2.3		U	

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G05

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-06

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1227306

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 13:25

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/07/09 23:31

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
83-32-9	Acenaphthene	0.32	2.5		U
208-96-8	Acenaphthylene	0.24	2.5		U
98-86-2	Acetophenone	0.38	2.5		U
120-12-7	Anthracene	0.38	2.5		U
1912-24-9	Atrazine	0.34	2.5		U
100-52-7	Benzaldehyde	0.28	2.5		U
56-55-3	Benzo(a)anthracene	0.46	2.5		U
205-99-2	Benzo(b)fluoranthene	0.36	2.5		U
207-08-9	Benzo(k)fluoranthene	0.25	2.5		U
191-24-2	Benzo(g,h,i)perylene	0.73	2.5		U
50-32-8	Benzo(a)pyrene	0.30	2.5		U
111-91-1	bis(2-Chloroethoxy)methane	0.26	2.5		U
92-52-4	1,1'-Biphenyl	0.20	2.5		U
111-44-4	bis(2-Chloroethyl)ether	0.22	2.5		U
108-60-1	bis(2-Chloroisopropyl)ether	0.42	2.5		U
117-81-7	Bis(2-ethylhexyl)phthalate	0.64	2.5		U
101-55-3	4-Bromophenyl-phenylether	0.28	2.5		U
85-68-7	Butylbenzylphthalate	0.41	2.5		U
105-60-2	Caprolactam	0.18	2.5		U
86-74-8	Carbazole	0.34	2.5		U
106-47-8	4-Chloroaniline	0.48	2.5		U
59-50-7	4-Chloro-3-methylphenol	0.29	2.5		U
91-58-7	2-Chloronaphthalene	0.29	2.5		U
95-57-8	2-Chlorophenol	0.30	2.5		U
7005-72-3	4-Chlorophenyl-phenylether	0.44	2.5		U
218-01-9	Chrysene	0.50	2.5		U
53-70-3	Dibenz(a,h)anthracene	0.85	2.5		U
132-64-9	Dibenzofuran	0.32	2.5		U
91-94-1	3,3'-Dichlorobenzidine	0.44	2.5		U
120-83-2	2,4-Dichlorophenol	0.22	2.5		U
84-66-2	Diethylphthalate	0.51	2.5		U
105-67-9	2,4-Dimethylphenol	0.36	10		U
131-11-3	Dimethylphthalate	0.37	2.5		U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G05

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-06

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1227306

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 13:25

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/07/09 23:31

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
84-74-2	Di-n-butylphthalate	0.65	2.5		U
534-52-1	4,6-Dinitro-2-methylphenol	0.37	10		U
51-28-5	2,4-Dinitrophenol	0.42	25		U
121-14-2	2,4-Dinitrotoluene	0.24	2.5		U
606-20-2	2,6-Dinitrotoluene	0.33	2.5		U
117-84-0	Di-n-octylphthalate	0.16	2.5		U
206-44-0	Fluoranthene	0.35	2.5		U
86-73-7	Fluorene	0.28	2.5	0.30	J
118-74-1	Hexachlorobenzene	0.24	2.5		U
87-68-3	Hexachlorobutadiene	0.46	2.5		U
77-47-4	Hexachlorocyclopentadiene	0.44	2.5		U
67-72-1	Hexachloroethane	0.23	2.5		U
193-39-5	Indeno(1,2,3-cd)pyrene	0.71	2.5		U
78-59-1	Isophorone	0.28	2.5		U
91-57-6	2-Methylnaphthalene	0.34	2.5	8.2	
91-20-3	Naphthalene	0.22	2.5	9.2	
106-44-5	4-Methylphenol	0.38	2.5		U
95-48-7	2-Methylphenol	0.42	2.5		U
88-74-4	2-Nitroaniline	0.60	10		U
99-09-2	3-Nitroaniline	0.52	10		U
100-01-6	4-Nitroaniline	1.0	10		U
98-95-3	Nitrobenzene	0.31	2.5		U
88-75-5	2-Nitrophenol	0.37	2.5		U
100-02-7	4-Nitrophenol	0.42	10		U
86-30-6	N-Nitrosodiphenylamine (1)	0.23	2.5		U
621-64-7	N-Nitroso-di-n-propylamine	0.45	2.5		U
87-86-5	Pentachlorophenol	0.50	10		U
85-01-8	Phenanthrene	0.38	2.5		U
108-95-2	Phenol	0.23	2.5		U
129-00-0	Pyrene	0.32	2.5		U
95-95-4	2,4,5-Trichlorophenol	0.25	2.5		U
88-06-2	2,4,6-Trichlorophenol	0.36	2.5		U

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G06

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-07

Sample wt/vol: 1020 (g/mL) ML Lab File ID: 1227307

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 15:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/08/09 00:12

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L MDL	RL	CONC	Q Rev Qual
83-32-9	Acenaphthene	0.31	2.4		U UJ
208-96-8	Acenaphthylene	0.23	2.4		U
98-86-2	Acetophenone	0.37	2.4		U
120-12-7	Anthracene	0.38	2.4		U
1912-24-9	Atrazine	0.34	2.4		U
100-52-7	Benzaldehyde	0.28	2.4		U
56-55-3	Benzo(a)anthracene	0.45	2.4		U
205-99-2	Benzo(b)fluoranthene	0.35	2.4		U
207-08-9	Benzo(k)fluoranthene	0.24	2.4		U
191-24-2	Benzo(g,h,i)perylene	0.72	2.4		U
50-32-8	Benzo(a)pyrene	0.29	2.4		U
111-91-1	bis(2-Chloroethoxy)methane	0.25	2.4		U
92-52-4	1,1'-Biphenyl	0.19	2.4		U
111-44-4	bis(2-Chloroethyl)ether	0.22	2.4		U
108-60-1	bis(2-Chloroisopropyl)ether	0.42	2.4		U
117-81-7	Bis(2-ethylhexyl)phthalate	0.63	2.4		U
101-55-3	4-Bromophenyl-phenylether	0.28	2.4		U
85-68-7	Butylbenzylphthalate	0.40	2.4		U
105-60-2	Caprolactam	0.18	2.4		U UJ 11h, 8a
86-74-8	Carbazole	0.34	2.4		U UJ
106-47-8	4-Chloroaniline	0.46	2.4		U
59-50-7	4-Chloro-3-methylphenol	0.28	2.4		U
91-58-7	2-Chloronaphthalene	0.28	2.4		U
95-57-8	2-Chlorophenol	0.29	2.4		U
7005-72-3	4-Chlorophenyl-phenylether	0.44	2.4		U
218-01-9	Chrysene	0.50	2.4		U
53-70-3	Dibenz(a,h)anthracene	0.83	2.4		U
132-64-9	Dibenzofuran	0.32	2.4		U
91-94-1	3,3'-Dichlorobenzidine	0.44	2.4		U
120-83-2	2,4-Dichlorophenol	0.22	2.4		U
84-66-2	Diethylphthalate	0.50	2.4		U
105-67-9	2,4-Dimethylphenol	0.35	9.8		U UJ 56
131-11-3	Dimethylphthalate	0.36	2.4		U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G06

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-07

Sample wt/vol: 1020 (g/mL) ML Lab File ID: 1227307

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 15:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/08/09 00:12

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
84-74-2	Di-n-butylphthalate	0.64	2.4	0.77	JB
534-52-1	4,6-Dinitro-2-methylphenol	0.36	9.8		U
51-28-5	2,4-Dinitrophenol	0.42	24		U
121-14-2	2,4-Dinitrotoluene	0.24	2.4		U
606-20-2	2,6-Dinitrotoluene	0.32	2.4		U
117-84-0	Di-n-octylphthalate	0.16	2.4		U
206-44-0	Fluoranthene	0.34	2.4		U
86-73-7	Fluorene	0.27	2.4		U
118-74-1	Hexachlorobenzene	0.23	2.4		U
87-68-3	Hexachlorobutadiene	0.46	2.4		U
77-47-4	Hexachlorocyclopentadiene	0.44	2.4		U
67-72-1	Hexachloroethane	0.22	2.4		U
193-39-5	Indeno(1,2,3-cd)pyrene	0.70	2.4		U
78-59-1	Isophorone	0.27	2.4		U
91-57-6	2-Methylnaphthalene	0.33	2.4		U
91-20-3	Naphthalene	0.22	2.4		U
106-44-5	4-Methylphenol	0.38	2.4		U
95-48-7	2-Methylphenol	0.41	2.4		U
88-74-4	2-Nitroaniline	0.58	9.8		U
99-09-2	3-Nitroaniline	0.51	9.8		U
100-01-6	4-Nitroaniline	1.0	9.8		U
98-95-3	Nitrobenzene	0.30	2.4		U
88-75-5	2-Nitrophenol	0.36	2.4		U
100-02-7	4-Nitrophenol	0.41	9.8		U
86-30-6	N-Nitrosodiphenylamine (1)	0.22	2.4		U
621-64-7	N-Nitroso-di-n-propylamine	0.44	2.4		U
87-86-5	Pentachlorophenol	0.49	9.8		U
85-01-8	Phenanthrene	0.38	2.4		U
108-95-2	Phenol	0.22	2.4		U
129-00-0	Pyrene	0.32	2.4		U
95-95-4	2,4,5-Trichlorophenol	0.24	2.4		U
88-06-2	2,4,6-Trichlorophenol	0.36	2.4		U

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G07

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-08

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1227308

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 16:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/08/09 00:53

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q	Rev Q Und
83-32-9	Acenaphthene	0.32	2.5		U	U
208-96-8	Acenaphthylene	0.24	2.5		U	
98-86-2	Acetophenone	0.38	2.5		U	
120-12-7	Anthracene	0.38	2.5		U	
1912-24-9	Atrazine	0.34	2.5		U	
100-52-7	Benzaldehyde	0.28	2.5		U	
56-55-3	Benzo(a)anthracene	0.46	2.5		U	
205-99-2	Benzo(b)fluoranthene	0.36	2.5		U	
207-08-9	Benzo(k)fluoranthene	0.25	2.5		U	
191-24-2	Benzo(g,h,i)perylene	0.73	2.5		U	
50-32-8	Benzo(a)pyrene	0.30	2.5		U	
111-91-1	bis(2-Chloroethoxy)methane	0.26	2.5		U	
92-52-4	1,1'-Biphenyl	0.20	2.5		U	
111-44-4	bis(2-Chloroethyl)ether	0.22	2.5		U	
108-60-1	bis(2-Chloroisopropyl)ether	0.42	2.5		U	
117-81-7	Bis(2-ethylhexyl)phthalate	0.64	2.5		U	
101-55-3	4-Bromophenyl-phenylether	0.28	2.5		U	
85-68-7	Butylbenzylphthalate	0.41	2.5		U	
105-60-2	Caprolactam	0.18	2.5		U	UJ 84,11a
86-74-8	Carbazole	0.34	2.5		U	U
106-47-8	4-Chloroaniline	0.48	2.5		U	
59-50-7	4-Chloro-3-methylphenol	0.29	2.5		U	
91-58-7	2-Chloronaphthalene	0.29	2.5		U	
95-57-8	2-Chlorophenol	0.30	2.5		U	
7005-72-3	4-Chlorophenyl-phenylether	0.44	2.5		U	
218-01-9	Chrysene	0.50	2.5		U	
53-70-3	Dibenz(a,h)anthracene	0.85	2.5		U	
132-64-9	Dibenzofuran	0.32	2.5		U	
91-94-1	3,3'-Dichlorobenzidine	0.44	2.5		U	
120-83-2	2,4-Dichlorophenol	0.22	2.5		U	
84-66-2	Diethylphthalate	0.51	2.5		U	
105-67-9	2,4-Dimethylphenol	0.36	10		U	UJ 56
131-11-3	Dimethylphthalate	0.37	2.5		U	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G07

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-08

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1227308

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 16:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/08/09 00:53

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
84-74-2	Di-n-butylphthalate	0.65	2.5	0.67	JB
534-52-1	4,6-Dinitro-2-methylphenol	0.37	10	U	U
51-28-5	2,4-Dinitrophenol	0.42	25	U	U
121-14-2	2,4-Dinitrotoluene	0.24	2.5	U	U
606-20-2	2,6-Dinitrotoluene	0.33	2.5	U	
117-84-0	Di-n-octylphthalate	0.16	2.5	U	
206-44-0	Fluoranthene	0.35	2.5	U	
86-73-7	Fluorene	0.28	2.5	U	
118-74-1	Hexachlorobenzene	0.24	2.5	U	
87-68-3	Hexachlorobutadiene	0.46	2.5	U	
77-47-4	Hexachlorocyclopentadiene	0.44	2.5	U	
67-72-1	Hexachloroethane	0.23	2.5	U	
193-39-5	Indeno(1,2,3-cd)pyrene	0.71	2.5	U	
78-59-1	Isophorone	0.28	2.5	U	
91-57-6	2-Methylnaphthalene	0.34	2.5	U	
91-20-3	Naphthalene	0.22	2.5	U	
106-44-5	4-Methylphenol	0.38	2.5	U	
95-48-7	2-Methylphenol	0.42	2.5	U	
88-74-4	2-Nitroaniline	0.60	10	U	
99-09-2	3-Nitroaniline	0.52	10	U	
100-01-6	4-Nitroaniline	1.0	10	U	
98-95-3	Nitrobenzene	0.31	2.5	U	
88-75-5	2-Nitrophenol	0.37	2.5	U	
100-02-7	4-Nitrophenol	0.42	10	U	
86-30-6	N-Nitrosodiphenylamine (1)	0.23	2.5	U	
621-64-7	N-Nitroso-di-n-propylamine	0.45	2.5	U	
87-86-5	Pentachlorophenol	0.50	10	U	
85-01-8	Phenanthrene	0.38	2.5	U	
108-95-2	Phenol	0.23	2.5	U	
129-00-0	Pyrene	0.32	2.5	U	
95-95-4	2,4,5-Trichlorophenol	0.25	2.5	U	
88-06-2	2,4,6-Trichlorophenol	0.36	2.5	U	

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353907

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-09

Sample wt/vol: 1060 (g/mL) ML Lab File ID: 1227309

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 16:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/08/09 01:33

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L MDL	RL	CONC	Q
83-32-9	Acenaphthene	0.30	2.4		U
208-96-8	Acenaphthylene	0.22	2.4		U
98-86-2	Acetophenone	0.35	2.4		U
120-12-7	Anthracene	0.36	2.4		U
1912-24-9	Atrazine	0.32	2.4		U
100-52-7	Benzaldehyde	0.27	2.4		U
56-55-3	Benzo(a)anthracene	0.43	2.4		U
205-99-2	Benzo(b)fluoranthene	0.33	2.4		U
207-08-9	Benzo(k)fluoranthene	0.24	2.4		U
191-24-2	Benzo(g,h,i)perylene	0.69	2.4		U
50-32-8	Benzo(a)pyrene	0.28	2.4		U
111-91-1	bis(2-Chloroethoxy)methane	0.24	2.4		U
92-52-4	1,1'-Biphenyl	0.18	2.4		U
111-44-4	bis(2-Chloroethyl)ether	0.21	2.4		U
108-60-1	bis(2-Chloroisopropyl)ether	0.40	2.4		U
117-81-7	Bis(2-ethylhexyl)phthalate	0.60	2.4		U
101-55-3	4-Bromophenyl-phenylether	0.27	2.4		U
85-68-7	Butylbenzylphthalate	0.39	2.4		U
105-60-2	Caprolactam	0.17	2.4		U
86-74-8	Carbazole	0.32	2.4		U
106-47-8	4-Chloroaniline	0.45	2.4		U
59-50-7	4-Chloro-3-methylphenol	0.27	2.4		U
91-58-7	2-Chloronaphthalene	0.27	2.4		U
95-57-8	2-Chlorophenol	0.28	2.4		U
7005-72-3	4-Chlorophenyl-phenylether	0.42	2.4		U
218-01-9	Chrysene	0.48	2.4		U
53-70-3	Dibenz(a,h)anthracene	0.80	2.4		U
132-64-9	Dibenzofuran	0.31	2.4		U
91-94-1	3,3'-Dichlorobenzidine	0.42	2.4		U
120-83-2	2,4-Dichlorophenol	0.21	2.4		U
84-66-2	Diethylphthalate	0.48	2.4		U
105-67-9	2,4-Dimethylphenol	0.33	9.4		U
131-11-3	Dimethylphthalate	0.35	2.4		U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353907

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-09

Sample wt/vol: 1060 (g/mL) ML Lab File ID: 1227309

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/18/08 16:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/20/08

Concentrated Extract Volume: 500.0(uL) Date Analyzed: 01/08/09 01:33

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q	Q	Q
84-74-2	Di-n-butylphthalate	0.61	2.4	0.62	JB	U	ca
534-52-1	4,6-Dinitro-2-methylphenol	0.35	9.4		U	U	
51-28-5	2,4-Dinitrophenol	0.40	24		U	UJ	sb
121-14-2	2,4-Dinitrotoluene	0.23	2.4		U	U	
606-20-2	2,6-Dinitrotoluene	0.31	2.4		U		
117-84-0	Di-n-octylphthalate	0.16	2.4		U		
206-44-0	Fluoranthene	0.33	2.4		U		
86-73-7	Fluorene	0.26	2.4		U		
118-74-1	Hexachlorobenzene	0.22	2.4		U		
87-68-3	Hexachlorobutadiene	0.44	2.4		U		
77-47-4	Hexachlorocyclopentadiene	0.42	2.4		U		
67-72-1	Hexachloroethane	0.22	2.4		U		
193-39-5	Indeno(1,2,3-cd)pyrene	0.67	2.4		U		
78-59-1	Isophorone	0.26	2.4		U		
91-57-6	2-Methylnaphthalene	0.32	2.4		U		
91-20-3	Naphthalene	0.21	2.4		U		
106-44-5	4-Methylphenol	0.36	2.4		U		
95-48-7	2-Methylphenol	0.39	2.4		U		
88-74-4	2-Nitroaniline	0.56	9.4		U		
99-09-2	3-Nitroaniline	0.50	9.4		U		
100-01-6	4-Nitroaniline	0.96	9.4		U	UJ	sb
98-95-3	Nitrobenzene	0.29	2.4		U	U	
88-75-5	2-Nitrophenol	0.35	2.4		U		
100-02-7	4-Nitrophenol	0.39	9.4		U		
86-30-6	N-Nitrosodiphenylamine (1)	0.22	2.4		U		
621-64-7	N-Nitroso-di-n-propylamine	0.42	2.4		U		
87-86-5	Pentachlorophenol	0.47	9.4		U		
85-01-8	Phenanthrene	0.36	2.4		U		
108-95-2	Phenol	0.22	2.4		U		
129-00-0	Pyrene	0.31	2.4		U		
95-95-4	2,4,5-Trichlorophenol	0.24	2.4		U		
88-06-2	2,4,6-Trichlorophenol	0.34	2.4		U		

(1) - Cannot be separated from Diphenylamine

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G01

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-02

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1227302D

Level: (low/med) LOW Date Sampled: 12/18/08 10:45

% Moisture: not dec. _____ Date Analyzed: 12/27/08 16:12

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 12.5

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
67-64-1	Acetone	22	120		UD U
71-43-2	Benzene	1.5	12		UD
75-27-4	Bromodichloromethane	2.2	12		UD
75-25-2	Bromoform	1.2	12		UD
74-83-9	Bromomethane	3.4	25		UD
78-93-3	2-Butanone	13	120		UD
75-15-0	Carbon disulfide	2.1	12		UD
56-23-5	Carbon tetrachloride	2.8	12		UD
108-90-7	Chlorobenzene	1.2	12		UD
75-00-3	Chloroethane	3.1	25		UD
67-66-3	Chloroform	2.1	12		UD
74-87-3	Chloromethane	4.5	25		UD
110-82-7	Cyclohexane	1.8	25	73	D
124-48-1	Dibromochloromethane	1.2	12		UD U
96-12-8	1,2-Dibromo-3-chloropropane	2.9	25		UD
106-93-4	1,2-Dibromoethane	1.8	12		UD
95-50-1	1,2-Dichlorobenzene	2.0	12		UD
541-73-1	1,3-Dichlorobenzene	1.6	12		UD
106-46-7	1,4-Dichlorobenzene	1.2	12		UD
75-71-8	Dichlorodifluoromethane	2.5	25		UD
75-34-3	1,1-Dichloroethane	2.4	12		UD
107-06-2	1,2-Dichloroethane	2.8	12		UD
75-35-4	1,1-Dichloroethene	3.0	12		UD
156-59-2	cis-1,2-Dichloroethene	2.0	12		UD
156-60-5	trans-1,2-Dichloroethene	2.6	12		UD
78-87-5	1,2-Dichloropropane	2.1	12		UD
10061-01-5	cis-1,3-Dichloropropene	1.5	12		UD
10061-02-6	trans-1,3-Dichloropropene	2.1	12		UD
100-41-4	Ethylbenzene	1.2	12	400	D
591-78-6	2-Hexanone	5.2	62		UD U
98-82-8	Isopropylbenzene	1.4	12	47	D
79-20-9	Methyl acetate	6.4	12		UD U
75-09-2	Methylene chloride	3.4	25		UD U
108-87-2	Methyl cyclohexane	1.5	12	73	D
1634-04-4	MTBE	1.2	12		UD U
108-10-1	4-Methyl-2-pentanone	6.2	62		UD U
100-42-5	Styrene	1.4	12	1.4	JD J
79-34-5	1,1,2,2-Tetrachloroethane	2.9	12		UD U
127-18-4	Tetrachloroethene	2.0	12		UD U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G01

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-02

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1227302D

Level: (low/med) LOW Date Sampled: 12/18/08 10:45

% Moisture: not dec. _____ Date Analyzed: 12/27/08 16:12

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 12.5

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
108-88-3	Toluene	1.8	12	23	D
120-82-1	1,2,4-Trichlorobenzene	2.2	12		UD
71-55-6	1,1,1-Trichloroethane	2.5	12		UD
79-00-5	1,1,2-Trichloroethane	1.8	12		UD
79-01-6	Trichloroethene	6.2	12		UD
76-13-1	Trichlorotrifluoroethane	1.5	12		UD
75-69-4	Trichlorofluoromethane	2.8	25		UD
75-01-4	Vinyl chloride	2.4	25		UD
1330-20-7	Xylene(total)	2.6	12	1700	D

Re-Qual

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G02

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-03

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1227303

Level: (low/med) LOW Date Sampled: 12/18/08 10:45

% Moisture: not dec. _____ Date Analyzed: 12/27/08 16:42

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

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
67-64-1	Acetone	1.8	10		U
71-43-2	Benzene	0.12	1.0		U
75-27-4	Bromodichloromethane	0.18	1.0		U
75-25-2	Bromoform	0.10	1.0		U
74-83-9	Bromomethane	0.27	2.0		U
78-93-3	2-Butanone	1.1	10		U
75-15-0	Carbon disulfide	0.17	1.0		U
56-23-5	Carbon tetrachloride	0.22	1.0		U
108-90-7	Chlorobenzene	0.10	1.0		U
75-00-3	Chloroethane	0.25	2.0		U
67-66-3	Chloroform	0.17	1.0		U
74-87-3	Chloromethane	0.36	2.0		U
110-82-7	Cyclohexane	0.14	2.0		U
124-48-1	Dibromochloromethane	0.10	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	0.23	2.0		U
106-93-4	1,2-Dibromoethane	0.14	1.0		U
95-50-1	1,2-Dichlorobenzene	0.16	1.0		U
541-73-1	1,3-Dichlorobenzene	0.13	1.0		U
106-46-7	1,4-Dichlorobenzene	0.10	1.0		U
75-71-8	Dichlorodifluoromethane	0.20	2.0		U
75-34-3	1,1-Dichloroethane	0.19	1.0		U
107-06-2	1,2-Dichloroethane	0.22	1.0		U
75-35-4	1,1-Dichloroethene	0.24	1.0		U
156-59-2	cis-1,2-Dichloroethene	0.16	1.0		U
156-60-5	trans-1,2-Dichloroethene	0.21	1.0		U
78-87-5	1,2-Dichloropropane	0.17	1.0		U
10061-01-5	cis-1,3-Dichloropropene	0.12	1.0		U
10061-02-6	trans-1,3-Dichloropropene	0.17	1.0		U
100-41-4	Ethylbenzene	0.10	1.0	0.12	J
591-78-6	2-Hexanone	0.42	5.0		U
98-82-8	Isopropylbenzene	0.11	1.0		U
79-20-9	Methyl acetate	0.51	1.0		U
75-09-2	Methylene chloride	0.27	2.0		U
108-87-2	Methyl cyclohexane	0.12	1.0		U
1634-04-4	MTBE	0.10	1.0		U
108-10-1	4-Methyl-2-pentanone	0.50	5.0		U
100-42-5	Styrene	0.11	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	0.23	1.0		U
127-18-4	Tetrachloroethene	0.16	1.0		U

Rev Qual

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G02

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-03

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1227303

Level: (low/med) LOW Date Sampled: 12/18/08 10:45

% Moisture: not dec. _____ Date Analyzed: 12/27/08 16:42

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

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
108-88-3	Toluene	0.14	1.0		U
120-82-1	1,2,4-Trichlorobenzene	0.18	1.0		U
71-55-6	1,1,1-Trichloroethane	0.20	1.0		U
79-00-5	1,1,2-Trichloroethane	0.14	1.0		U
79-01-6	Trichloroethene	0.50	1.0		U
76-13-1	Trichlorotrifluoroethane	0.12	1.0		U
75-69-4	Trichlorofluoromethane	0.22	2.0		U
75-01-4	Vinyl chloride	0.19	2.0		U
1330-20-7	Xylene(total)	0.21	1.0	0.42	J

Rev Q m4

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G03

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-04

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1227304

Level: (low/med) LOW Date Sampled: 12/18/08 12:00

% Moisture: not dec. _____ Date Analyzed: 12/27/08 17:11

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 25.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q	Re Qual
67-64-1	Acetone	44	250		UD	u
71-43-2	Benzene	3.0	25		UD	
75-27-4	Bromodichloromethane	4.5	25		UD	
75-25-2	Bromoform	2.5	25		UD	
74-83-9	Bromomethane	6.8	50		UD	
78-93-3	2-Butanone	27	250		UD	
75-15-0	Carbon disulfide	4.2	25		UD	
56-23-5	Carbon tetrachloride	5.5	25		UD	
108-90-7	Chlorobenzene	2.5	25		UD	
75-00-3	Chloroethane	6.2	50		UD	
67-66-3	Chloroform	4.2	25		UD	
74-87-3	Chloromethane	9.0	50		UD	
110-82-7	Cyclohexane	3.5	50	96	D	
124-48-1	Dibromochloromethane	2.5	25		UD	u
96-12-8	1,2-Dibromo-3-chloropropane	5.8	50		UD	
106-93-4	1,2-Dibromoethane	3.5	25		UD	
95-50-1	1,2-Dichlorobenzene	4.0	25		UD	
541-73-1	1,3-Dichlorobenzene	3.2	25		UD	
106-46-7	1,4-Dichlorobenzene	2.5	25		UD	
75-71-8	Dichlorodifluoromethane	5.0	50		UD	
75-34-3	1,1-Dichloroethane	4.8	25		UD	
107-06-2	1,2-Dichloroethane	5.5	25		UD	
75-35-4	1,1-Dichloroethene	6.0	25		UD	
156-59-2	cis-1,2-Dichloroethene	4.0	25		UD	
156-60-5	trans-1,2-Dichloroethene	5.2	25		UD	
78-87-5	1,2-Dichloropropane	4.2	25		UD	
10061-01-5	cis-1,3-Dichloropropene	3.0	25		UD	
10061-02-6	trans-1,3-Dichloropropene	4.2	25		UD	
100-41-4	Ethylbenzene	2.5	25	600	D	
591-78-6	2-Hexanone	10	120		UD	u
98-82-8	Isopropylbenzene	2.8	25	52	D	
79-20-9	Methyl acetate	13	25		UD	u
75-09-2	Methylene chloride	6.8	50		UD	u
108-87-2	Methyl cyclohexane	3.0	25	54	D	
1634-04-4	MTBE	2.5	25		UD	u
108-10-1	4-Methyl-2-pentanone	12	120		UD	
100-42-5	Styrene	2.8	25		UD	
79-34-5	1,1,2,2-Tetrachloroethane	5.8	25		UD	
127-18-4	Tetrachloroethene	4.0	25		UD	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G03

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-04

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1227304

Level: (low/med) LOW Date Sampled: 12/18/08 12:00

% Moisture: not dec. _____ Date Analyzed: 12/27/08 17:11

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 25.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
108-88-3	Toluene	3.5	25	18	JD
120-82-1	1,2,4-Trichlorobenzene	4.5	25		UD
71-55-6	1,1,1-Trichloroethane	5.0	25		UD
79-00-5	1,1,2-Trichloroethane	3.5	25		UD
79-01-6	Trichloroethene	12	25		UD
76-13-1	Trichlorotrifluoroethane	3.0	25		UD
75-69-4	Trichlorofluoromethane	5.5	50		UD
75-01-4	Vinyl chloride	4.8	50		UD
1330-20-7	Xylene(total)	5.2	25	2300	D

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G04

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-05

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1227305

Level: (low/med) LOW Date Sampled: 12/18/08 15:50

% Moisture: not dec. _____ Date Analyzed: 12/27/08 17:41

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

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q	Rev Qual
67-64-1	Acetone	1.8	10		U	U
71-43-2	Benzene	0.12	1.0		U	
75-27-4	Bromodichloromethane	0.18	1.0		U	
75-25-2	Bromoform	0.10	1.0		U	
74-83-9	Bromomethane	0.27	2.0		U	
78-93-3	2-Butanone	1.1	10		U	
75-15-0	Carbon disulfide	0.17	1.0		U	
56-23-5	Carbon tetrachloride	0.22	1.0		U	
108-90-7	Chlorobenzene	0.10	1.0		U	
75-00-3	Chloroethane	0.25	2.0		U	
67-66-3	Chloroform	0.17	1.0		U	
74-87-3	Chloromethane	0.36	2.0		U	
110-82-7	Cyclohexane	0.14	2.0	1.8	J	J
124-48-1	Dibromochloromethane	0.10	1.0		U	U
96-12-8	1,2-Dibromo-3-chloropropane	0.23	2.0		U	
106-93-4	1,2-Dibromoethane	0.14	1.0		U	
95-50-1	1,2-Dichlorobenzene	0.16	1.0		U	
541-73-1	1,3-Dichlorobenzene	0.13	1.0		U	
106-46-7	1,4-Dichlorobenzene	0.10	1.0		U	
75-71-8	Dichlorodifluoromethane	0.20	2.0		U	
75-34-3	1,1-Dichloroethane	0.19	1.0		U	
107-06-2	1,2-Dichloroethane	0.22	1.0		U	
75-35-4	1,1-Dichloroethene	0.24	1.0		U	
156-59-2	cis-1,2-Dichloroethene	0.16	1.0		U	
156-60-5	trans-1,2-Dichloroethene	0.21	1.0		U	
78-87-5	1,2-Dichloropropane	0.17	1.0		U	
10061-01-5	cis-1,3-Dichloropropene	0.12	1.0		U	
10061-02-6	trans-1,3-Dichloropropene	0.17	1.0		U	
100-41-4	Ethylbenzene	0.10	1.0	12		
591-78-6	2-Hexanone	0.42	5.0		U	U
98-82-8	Isopropylbenzene	0.11	1.0	2.3		
79-20-9	Methyl acetate	0.51	1.0		U	U
75-09-2	Methylene chloride	0.27	2.0		U	U
108-87-2	Methyl cyclohexane	0.12	1.0	0.77	J	J
1634-04-4	MTBE	0.10	1.0		U	U
108-10-1	4-Methyl-2-pentanone	0.50	5.0		U	
100-42-5	Styrene	0.11	1.0		U	
79-34-5	1,1,2,2-Tetrachloroethane	0.23	1.0		U	
127-18-4	Tetrachloroethene	0.16	1.0		U	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G04

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-05

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1227305

Level: (low/med) LOW Date Sampled: 12/18/08 15:50

% Moisture: not dec. _____ Date Analyzed: 12/27/08 17:41

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

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q Rev Qual
108-88-3	Toluene	0.14	1.0		U
120-82-1	1,2,4-Trichlorobenzene	0.18	1.0		U
71-55-6	1,1,1-Trichloroethane	0.20	1.0		U
79-00-5	1,1,2-Trichloroethane	0.14	1.0		U
79-01-6	Trichloroethene	0.50	1.0		U
76-13-1	Trichlorotrifluoroethane	0.12	1.0		U
75-69-4	Trichlorofluoromethane	0.22	2.0		U
75-01-4	Vinyl chloride	0.19	2.0		U
1330-20-7	Xylene(total)	0.21	1.0	1.0	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G05

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-06

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1227306

Level: (low/med) LOW Date Sampled: 12/18/08 13:25

% Moisture: not dec. _____ Date Analyzed: 12/27/08 18:10

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

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q	Raw Qual
67-64-1	Acetone	1.8	10		U	U
71-43-2	Benzene	0.12	1.0		U	
75-27-4	Bromodichloromethane	0.18	1.0		U	
75-25-2	Bromoform	0.10	1.0		U	
74-83-9	Bromomethane	0.27	2.0		U	
78-93-3	2-Butanone	1.1	10		U	
75-15-0	Carbon disulfide	0.17	1.0		U	
56-23-5	Carbon tetrachloride	0.22	1.0		U	
108-90-7	Chlorobenzene	0.10	1.0		U	
75-00-3	Chloroethane	0.25	2.0		U	
67-66-3	Chloroform	0.17	1.0		U	
74-87-3	Chloromethane	0.36	2.0		U	
110-82-7	Cyclohexane	0.14	2.0	20		
124-48-1	Dibromochloromethane	0.10	1.0		U	U
96-12-8	1,2-Dibromo-3-chloropropane	0.23	2.0		U	
106-93-4	1,2-Dibromoethane	0.14	1.0		U	
95-50-1	1,2-Dichlorobenzene	0.16	1.0		U	
541-73-1	1,3-Dichlorobenzene	0.13	1.0		U	
106-46-7	1,4-Dichlorobenzene	0.10	1.0		U	
75-71-8	Dichlorodifluoromethane	0.20	2.0		U	
75-34-3	1,1-Dichloroethane	0.19	1.0		U	
107-06-2	1,2-Dichloroethane	0.22	1.0		U	
75-35-4	1,1-Dichloroethene	0.24	1.0		U	
156-59-2	cis-1,2-Dichloroethene	0.16	1.0		U	
156-60-5	trans-1,2-Dichloroethene	0.21	1.0		U	
78-87-5	1,2-Dichloropropane	0.17	1.0		U	
10061-01-5	cis-1,3-Dichloropropene	0.12	1.0		U	
10061-02-6	trans-1,3-Dichloropropene	0.17	1.0		U	
100-41-4	Ethylbenzene	0.10	1.0	43		
591-78-6	2-Hexanone	0.42	5.0		U	U
98-82-8	Isopropylbenzene	0.11	1.0	13		
79-20-9	Methyl acetate	0.51	1.0		U	U
75-09-2	Methylene chloride	0.27	2.0		U	U
108-87-2	Methyl cyclohexane	0.12	1.0	11		
1634-04-4	MTBE	0.10	1.0		U	U
108-10-1	4-Methyl-2-pentanone	0.50	5.0		U	U
100-42-5	Styrene	0.11	1.0	0.30	J	J
79-34-5	1,1,2,2-Tetrachloroethane	0.23	1.0		U	U
127-18-4	Tetrachloroethene	0.16	1.0		U	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G05

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-06

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1227306

Level: (low/med) LOW Date Sampled: 12/18/08 13:25

% Moisture: not dec. _____ Date Analyzed: 12/27/08 18:10

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

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
108-88-3	Toluene	0.14	1.0	0.20	J
120-82-1	1,2,4-Trichlorobenzene	0.18	1.0		U
71-55-6	1,1,1-Trichloroethane	0.20	1.0		U
79-00-5	1,1,2-Trichloroethane	0.14	1.0		U
79-01-6	Trichloroethene	0.50	1.0		U
76-13-1	Trichlorotrifluoroethane	0.12	1.0		U
75-69-4	Trichlorofluoromethane	0.22	2.0		U
75-01-4	Vinyl chloride	0.19	2.0		U
1330-20-7	Xylene(total)	0.21	1.0	21	

Raj Qual

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G06

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-07

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1227307

Level: (low/med) LOW Date Sampled: 12/18/08 15:30

% Moisture: not dec. _____ Date Analyzed: 12/27/08 18:39

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

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q	Qual
67-64-1	Acetone	1.8	10		U	
71-43-2	Benzene	0.12	1.0		U	
75-27-4	Bromodichloromethane	0.18	1.0		U	
75-25-2	Bromoform	0.10	1.0		U	
74-83-9	Bromomethane	0.27	2.0		U	
78-93-3	2-Butanone	1.1	10		U	
75-15-0	Carbon disulfide	0.17	1.0		U	
56-23-5	Carbon tetrachloride	0.22	1.0		U	
108-90-7	Chlorobenzene	0.10	1.0		U	
75-00-3	Chloroethane	0.25	2.0		U	
67-66-3	Chloroform	0.17	1.0		U	
74-87-3	Chloromethane	0.36	2.0		U	
110-82-7	Cyclohexane	0.14	2.0		U	
124-48-1	Dibromochloromethane	0.10	1.0		U	
96-12-8	1,2-Dibromo-3-chloropropane	0.23	2.0		U	
106-93-4	1,2-Dibromoethane	0.14	1.0		U	
95-50-1	1,2-Dichlorobenzene	0.16	1.0		U	
541-73-1	1,3-Dichlorobenzene	0.13	1.0		U	
106-46-7	1,4-Dichlorobenzene	0.10	1.0		U	
75-71-8	Dichlorodifluoromethane	0.20	2.0		U	
75-34-3	1,1-Dichloroethane	0.19	1.0		U	
107-06-2	1,2-Dichloroethane	0.22	1.0		U	
75-35-4	1,1-Dichloroethene	0.24	1.0		U	
156-59-2	cis-1,2-Dichloroethene	0.16	1.0		U	
156-60-5	trans-1,2-Dichloroethene	0.21	1.0		U	
78-87-5	1,2-Dichloropropane	0.17	1.0		U	
10061-01-5	cis-1,3-Dichloropropene	0.12	1.0		U	
10061-02-6	trans-1,3-Dichloropropene	0.17	1.0		U	
100-41-4	Ethylbenzene	0.10	1.0	0.16	J	
591-78-6	2-Hexanone	0.42	5.0		U	
98-82-8	Isopropylbenzene	0.11	1.0		U	
79-20-9	Methyl acetate	0.51	1.0		U	
75-09-2	Methylene chloride	0.27	2.0		U	
108-87-2	Methyl cyclohexane	0.12	1.0		U	
1634-04-4	MTBE	0.10	1.0	0.78	J	
108-10-1	4-Methyl-2-pentanone	0.50	5.0		U	
100-42-5	Styrene	0.11	1.0		U	
79-34-5	1,1,2,2-Tetrachloroethane	0.23	1.0		U	
127-18-4	Tetrachloroethene	0.16	1.0		U	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G06

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-07

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1227307

Level: (low/med) LOW Date Sampled: 12/18/08 15:30

% Moisture: not dec. _____ Date Analyzed: 12/27/08 18:39

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

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q Rev Qual
108-88-3	Toluene	0.14	1.0		U U
120-82-1	1,2,4-Trichlorobenzene	0.18	1.0		U
71-55-6	1,1,1-Trichloroethane	0.20	1.0		U
79-00-5	1,1,2-Trichloroethane	0.14	1.0		U
79-01-6	Trichloroethene	0.50	1.0		U
76-13-1	Trichlorotrifluoroethane	0.12	1.0		U
75-69-4	Trichlorofluoromethane	0.22	2.0		U
75-01-4	Vinyl chloride	0.19	2.0		U
1330-20-7	Xylene(total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G07

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-08

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1227308

Level: (low/med) LOW Date Sampled: 12/18/08 16:30

% Moisture: not dec. _____ Date Analyzed: 12/27/08 19:09

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

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
67-64-1	Acetone	1.8	10		U
71-43-2	Benzene	0.12	1.0		U
75-27-4	Bromodichloromethane	0.18	1.0		U
75-25-2	Bromoform	0.10	1.0		U
74-83-9	Bromomethane	0.27	2.0		U
78-93-3	2-Butanone	1.1	10		U
75-15-0	Carbon disulfide	0.17	1.0		U
56-23-5	Carbon tetrachloride	0.22	1.0		U
108-90-7	Chlorobenzene	0.10	1.0		U
75-00-3	Chloroethane	0.25	2.0		U
67-66-3	Chloroform	0.17	1.0		U
74-87-3	Chloromethane	0.36	2.0		U
110-82-7	Cyclohexane	0.14	2.0		U
124-48-1	Dibromochloromethane	0.10	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	0.23	2.0		U
106-93-4	1,2-Dibromoethane	0.14	1.0		U
95-50-1	1,2-Dichlorobenzene	0.16	1.0		U
541-73-1	1,3-Dichlorobenzene	0.13	1.0		U
106-46-7	1,4-Dichlorobenzene	0.10	1.0		U
75-71-8	Dichlorodifluoromethane	0.20	2.0		U
75-34-3	1,1-Dichloroethane	0.19	1.0		U
107-06-2	1,2-Dichloroethane	0.22	1.0		U
75-35-4	1,1-Dichloroethene	0.24	1.0		U
156-59-2	cis-1,2-Dichloroethene	0.16	1.0		U
156-60-5	trans-1,2-Dichloroethene	0.21	1.0		U
78-87-5	1,2-Dichloropropane	0.17	1.0		U
10061-01-5	cis-1,3-Dichloropropene	0.12	1.0		U
10061-02-6	trans-1,3-Dichloropropene	0.17	1.0		U
100-41-4	Ethylbenzene	0.10	1.0		U
591-78-6	2-Hexanone	0.42	5.0		U
98-82-8	Isopropylbenzene	0.11	1.0		U
79-20-9	Methyl acetate	0.51	1.0		U
75-09-2	Methylene chloride	0.27	2.0		U
108-87-2	Methyl cyclohexane	0.12	1.0		U
1634-04-4	MTBE	0.10	1.0		U
108-10-1	4-Methyl-2-pentanone	0.50	5.0		U
100-42-5	Styrene	0.11	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	0.23	1.0		U
127-18-4	Tetrachloroethene	0.16	1.0		U

Rev 2nd

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353G07

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-08

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1227308

Level: (low/med) LOW Date Sampled: 12/18/08 16:30

% Moisture: not dec. _____ Date Analyzed: 12/27/08 19:09

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

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q Rev Qual
108-88-3	Toluene	0.14	1.0		U
120-82-1	1,2,4-Trichlorobenzene	0.18	1.0		U
71-55-6	1,1,1-Trichloroethane	0.20	1.0		U
79-00-5	1,1,2-Trichloroethane	0.14	1.0		U
79-01-6	Trichloroethene	0.50	1.0		U
76-13-1	Trichlorotrifluoroethane	0.12	1.0		U
75-69-4	Trichlorofluoromethane	0.22	2.0		U
75-01-4	Vinyl chloride	0.19	2.0		U
1330-20-7	Xylene(total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353907

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-09

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1227309

Level: (low/med) LOW Date Sampled: 12/18/08 16:30

% Moisture: not dec. _____ Date Analyzed: 12/27/08 19:38

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

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
67-64-1	Acetone	1.8	10		U
71-43-2	Benzene	0.12	1.0		U
75-27-4	Bromodichloromethane	0.18	1.0		U
75-25-2	Bromoform	0.10	1.0		U
74-83-9	Bromomethane	0.27	2.0		U
78-93-3	2-Butanone	1.1	10		U
75-15-0	Carbon disulfide	0.17	1.0		U
56-23-5	Carbon tetrachloride	0.22	1.0		U
108-90-7	Chlorobenzene	0.10	1.0		U
75-00-3	Chloroethane	0.25	2.0		U
67-66-3	Chloroform	0.17	1.0		U
74-87-3	Chloromethane	0.36	2.0		U
110-82-7	Cyclohexane	0.14	2.0		U
124-48-1	Dibromochloromethane	0.10	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	0.23	2.0		U
106-93-4	1,2-Dibromoethane	0.14	1.0		U
95-50-1	1,2-Dichlorobenzene	0.16	1.0		U
541-73-1	1,3-Dichlorobenzene	0.13	1.0		U
106-46-7	1,4-Dichlorobenzene	0.10	1.0		U
75-71-8	Dichlorodifluoromethane	0.20	2.0		U
75-34-3	1,1-Dichloroethane	0.19	1.0		U
107-06-2	1,2-Dichloroethane	0.22	1.0		U
75-35-4	1,1-Dichloroethene	0.24	1.0		U
156-59-2	cis-1,2-Dichloroethene	0.16	1.0		U
156-60-5	trans-1,2-Dichloroethene	0.21	1.0		U
78-87-5	1,2-Dichloropropane	0.17	1.0		U
10061-01-5	cis-1,3-Dichloropropene	0.12	1.0		U
10061-02-6	trans-1,3-Dichloropropene	0.17	1.0		U
100-41-4	Ethylbenzene	0.10	1.0		U
591-78-6	2-Hexanone	0.42	5.0		U
98-82-8	Isopropylbenzene	0.11	1.0		U
79-20-9	Methyl acetate	0.51	1.0		U
75-09-2	Methylene chloride	0.27	2.0		U
108-87-2	Methyl cyclohexane	0.12	1.0		U
1634-04-4	MTBE	0.10	1.0		U
108-10-1	4-Methyl-2-pentanone	0.50	5.0		U
100-42-5	Styrene	0.11	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	0.23	1.0		U
127-18-4	Tetrachloroethene	0.16	1.0		U

Rev Qual u

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08353907

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12273

Matrix: (soil/water) WATER Lab Sample ID: 0812273-09

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1227309

Level: (low/med) LOW Date Sampled: 12/18/08 16:30

% Moisture: not dec. _____ Date Analyzed: 12/27/08 19:38

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

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
108-88-3	Toluene	0.14	1.0		U
120-82-1	1,2,4-Trichlorobenzene	0.18	1.0		U
71-55-6	1,1,1-Trichloroethane	0.20	1.0		U
79-00-5	1,1,2-Trichloroethane	0.14	1.0		U
79-01-6	Trichloroethene	0.50	1.0		U
76-13-1	Trichlorotrifluoroethane	0.12	1.0		U
75-69-4	Trichlorofluoromethane	0.22	2.0		U
75-01-4	Vinyl chloride	0.19	2.0		U
1330-20-7	Xylene(total)	0.21	1.0		U

Rev 2 vkl

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08354G01

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12291

Matrix: (soil/water) WATER Lab Sample ID: 0812291-02

Sample wt/vol: 1060 (g/mL) ML Lab File ID: 1229102

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/19/08 08:35

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/22/08

Concentrated Extract Volume: 1000.0(uL) Date Analyzed: 01/09/09 15:32

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
83-32-9	Acenaphthene	0.59	4.7		U
208-96-8	Acenaphthylene	0.44	4.7		U
98-86-2	Acetophenone	0.71	4.7		U
120-12-7	Anthracene	0.73	4.7		U
1912-24-9	Atrazine	0.65	4.7		U
100-52-7	Benzaldehyde	0.54	4.7		U
56-55-3	Benzo(a)anthracene	0.86	4.7		U
205-99-2	Benzo(b)fluoranthene	0.67	4.7		U
207-08-9	Benzo(k)fluoranthene	0.47	4.7		U
191-24-2	Benzo(g,h,i)perylene	1.4	4.7		U
50-32-8	Benzo(a)pyrene	0.57	4.7		U
111-91-1	bis(2-Chloroethoxy)methane	0.49	4.7		U
92-52-4	1,1'-Biphenyl	0.37	4.7		U
111-44-4	bis(2-Chloroethyl)ether	0.42	4.7		U
108-60-1	bis(2-Chloroisopropyl)ether	0.80	4.7		U
117-81-7	Bis(2-ethylhexyl)phthalate	1.2	4.7		U
101-55-3	4-Bromophenyl-phenylether	0.54	4.7		U
85-68-7	Butylbenzylphthalate	0.77	4.7		U
105-60-2	Caprolactam	0.34	4.7		U
86-74-8	Carbazole	0.65	4.7		U
106-47-8	4-Chloroaniline	0.90	4.7		U
59-50-7	4-Chloro-3-methylphenol	0.55	4.7		U
91-58-7	2-Chloronaphthalene	0.55	4.7		U
95-57-8	2-Chlorophenol	0.56	4.7		U
7005-72-3	4-Chlorophenyl-phenylether	0.84	4.7		U
218-01-9	Chrysene	0.95	4.7		U
53-70-3	Dibenz(a,h)anthracene	1.6	4.7		U
132-64-9	Dibenzofuran	0.61	4.7		U
91-94-1	3,3'-Dichlorobenzidine	0.84	4.7		U
120-83-2	2,4-Dichlorophenol	0.42	4.7		U
84-66-2	Diethylphthalate	0.96	4.7		U
105-67-9	2,4-Dimethylphenol	0.67	19		U
131-11-3	Dimethylphthalate	0.70	4.7		U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08354G01

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12291

Matrix: (soil/water) WATER Lab Sample ID: 0812291-02

Sample wt/vol: 1060 (g/mL) ML Lab File ID: 1229102

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/19/08 08:35

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/22/08

Concentrated Extract Volume: 1000.0(uL) Date Analyzed: 01/09/09 15:32

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q	Rev Qual	
84-74-2	Di-n-butylphthalate	1.2	4.7		U	u	
534-52-1	4,6-Dinitro-2-methylphenol	0.70	19		U		
51-28-5	2,4-Dinitrophenol	0.80	47		U		
121-14-2	2,4-Dinitrotoluene	0.46	4.7		U		
606-20-2	2,6-Dinitrotoluene	0.62	4.7		U		
117-84-0	Di-n-octylphthalate	0.31	4.7		U		
206-44-0	Fluoranthene	0.66	4.7		U		
86-73-7	Fluorene	0.52	4.7	0.79	J	J	
118-74-1	Hexachlorobenzene	0.44	4.7		U	u	
87-68-3	Hexachlorobutadiene	0.88	4.7		U	u	
77-47-4	Hexachlorocyclopentadiene	0.84	4.7		U	uJ	Sb
67-72-1	Hexachloroethane	0.43	4.7		U	u	
193-39-5	Indeno(1,2,3-cd)pyrene	1.3	4.7		U		
78-59-1	Isophorone	0.52	4.7		U		
91-57-6	2-Methylnaphthalene	0.64	4.7	21			
91-20-3	Naphthalene	0.42	4.7	70			
106-44-5	4-Methylphenol	0.73	4.7		U	u	
95-48-7	2-Methylphenol	0.78	4.7		U		
88-74-4	2-Nitroaniline	1.1	19		U		
99-09-2	3-Nitroaniline	0.99	19		U		
100-01-6	4-Nitroaniline	1.9	19		U	uJ	Sb
98-95-3	Nitrobenzene	0.58	4.7		U	u	
88-75-5	2-Nitrophenol	0.70	4.7		U		
100-02-7	4-Nitrophenol	0.78	19		U		
86-30-6	N-Nitrosodiphenylamine (1)	0.43	4.7		U		
621-64-7	N-Nitroso-di-n-propylamine	0.85	4.7		U		
87-86-5	Pentachlorophenol	0.94	19		U		
85-01-8	Phenanthrene	0.73	4.7		U		
108-95-2	Phenol	0.43	4.7		U		
129-00-0	Pyrene	0.61	4.7		U		
95-95-4	2,4,5-Trichlorophenol	0.47	4.7		U		
88-06-2	2,4,6-Trichlorophenol	0.69	4.7		U		

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08354G02

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12291

Matrix: (soil/water) WATER Lab Sample ID: 0812291-03

Sample wt/vol: 1040 (g/mL) ML Lab File ID: 1229103

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/19/08 09:45

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/22/08

Concentrated Extract Volume: 1000.0(uL) Date Analyzed: 01/09/09 16:14

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q	Qual	
83-32-9	Acenaphthene	0.60	4.8		U	U	
208-96-8	Acenaphthylene	0.45	4.8		U		
98-86-2	Acetophenone	0.72	4.8		U		
120-12-7	Anthracene	0.74	4.8		U		
1912-24-9	Atrazine	0.66	4.8		U		
100-52-7	Benzaldehyde	0.55	4.8		U		
56-55-3	Benzo(a)anthracene	0.88	4.8		U		
205-99-2	Benzo(b)fluoranthene	0.68	4.8		U		
207-08-9	Benzo(k)fluoranthene	0.48	4.8		U		
191-24-2	Benzo(g,h,i)perylene	1.4	4.8		U		
50-32-8	Benzo(a)pyrene	0.58	4.8		U		
111-91-1	bis(2-Chloroethoxy)methane	0.50	4.8		U		
92-52-4	1,1'-Biphenyl	0.38	4.8		U		
111-44-4	bis(2-Chloroethyl)ether	0.43	4.8		U		
108-60-1	bis(2-Chloroisopropyl)ether	0.82	4.8		U	UJ	5b
117-81-7	Bis(2-ethylhexyl)phthalate	1.2	4.8		U	U	
101-55-3	4-Bromophenyl-phenylether	0.55	4.8		U		
85-68-7	Butylbenzylphthalate	0.79	4.8		U		
105-60-2	Caprolactam	0.35	4.8		U	UJ	11a
86-74-8	Carbazole	0.66	4.8		U	U	
106-47-8	4-Chloroaniline	0.91	4.8		U		
59-50-7	4-Chloro-3-methylphenol	0.56	4.8		U		
91-58-7	2-Chloronaphthalene	0.56	4.8		U		
95-57-8	2-Chlorophenol	0.57	4.8		U		
7005-72-3	4-Chlorophenyl-phenylether	0.86	4.8		U		
218-01-9	Chrysene	0.97	4.8		U		
53-70-3	Dibenz(a,h)anthracene	1.6	4.8		U		
132-64-9	Dibenzofuran	0.62	4.8		U		
91-94-1	3,3'-Dichlorobenzidine	0.86	4.8		U		
120-83-2	2,4-Dichlorophenol	0.42	4.8		U		
84-66-2	Diethylphthalate	0.98	4.8		U		
105-67-9	2,4-Dimethylphenol	0.68	19		U	UJ	5b
131-11-3	Dimethylphthalate	0.71	4.8		U	U	

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08354G02

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.B12291

Matrix: (soil/water) WATER Lab Sample ID: 0812291-03

Sample wt/vol: 1040 (g/mL) ML Lab File ID: 1229103

% Moisture: _____ decanted: (Y/N)___ Date Sampled: 12/19/08 09:45

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:12/22/08

Concentrated Extract Volume: 1000.0(uL) Date Analyzed: 01/09/09 16:14

Injection Volume: 0.5(uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q	Rev Qual
84-74-2	Di-n-butylphthalate	1.2	4.8	1.3	J	J
534-52-1	4,6-Dinitro-2-methylphenol	0.71	19		U	u
51-28-5	2,4-Dinitrophenol	0.82	48		U	
121-14-2	2,4-Dinitrotoluene	0.47	4.8		U	
606-20-2	2,6-Dinitrotoluene	0.63	4.8		U	
117-84-0	Di-n-octylphthalate	0.32	4.8		U	
206-44-0	Fluoranthene	0.67	4.8		U	
86-73-7	Fluorene	0.53	4.8		U	
118-74-1	Hexachlorobenzene	0.45	4.8		U	
87-68-3	Hexachlorobutadiene	0.89	4.8		U	
77-47-4	Hexachlorocyclopentadiene	0.86	4.8		U	u sb
67-72-1	Hexachloroethane	0.44	4.8		U	u
193-39-5	Indeno(1,2,3-cd)pyrene	1.4	4.8		U	
78-59-1	Isophorone	0.53	4.8		U	
91-57-6	2-Methylnaphthalene	0.65	4.8		U	
91-20-3	Naphthalene	0.43	4.8		U	
106-44-5	4-Methylphenol	0.74	4.8		U	
95-48-7	2-Methylphenol	0.80	4.8		U	
88-74-4	2-Nitroaniline	1.1	19		U	
99-09-2	3-Nitroaniline	1.0	19		U	
100-01-6	4-Nitroaniline	2.0	19		U	u sb
98-95-3	Nitrobenzene	0.60	4.8		U	u
88-75-5	2-Nitrophenol	0.71	4.8		U	
100-02-7	4-Nitrophenol	0.80	19		U	
86-30-6	N-Nitrosodiphenylamine (1)	0.44	4.8		U	
621-64-7	N-Nitroso-di-n-propylamine	0.86	4.8		U	
87-86-5	Pentachlorophenol	0.96	19		U	
85-01-8	Phenanthrene	0.74	4.8		U	
108-95-2	Phenol	0.44	4.8		U	
129-00-0	Pyrene	0.62	4.8		U	
95-95-4	2,4,5-Trichlorophenol	0.48	4.8		U	
88-06-2	2,4,6-Trichlorophenol	0.70	4.8		U	

(1) - Cannot be separated from Diphenylamine

EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

SHIP TO: 227 French Landing Drive, Suite 550 • Nashville, TN 37228 • 615-345-1115 • (fax) 615-846-5426

43703

Send Results to:	Send Invoice to:
Name Doug Hawn	Name SAME
Company SES	Company
Address 1006 Floyd Culler Ct	Address
City Oak Ridge	City
State, Zip TN 37830	State, Zip
Phone 865 481 7837	Phone
Fax	Fax
E-mail dhawn@specpreserv.com	E-mail
Project No./Name: SWMU 13 GW Sampling	**Sampler's (Signature):**

Analysis Requirements: VOCs; SVOCs

Lab Use Only:

VOA Headspace	Y	(N)	NA
Field Filtered	Y	(N)	NA
Correct Containers	(Y)	N	NA
Discrepancies	Y	(N)	NA
Cust. Seals Intact	(Y)	N	NA
Containers Intact	(Y)	N	NA

Airbill #: 2378

CAR #: —

Lab Use Only Lab #	Date/Time Sampled	Sample Description	Sample Matrix	Comments	No. of Bottles	Lab Use Only Containers/Pres
081229I-01	lab	trip blank	lab		2	2S-HP
-02	12.19.08 0835	08354G01	GW		5	3S-HP, 2H
-03	12.19.08 0945	08354G02	GW		5	
-04	12.19.08 0955	R1 SWMU13	DI WATER		5	
-05	12.19.08 0910	FS1 SWMU13	DI WATER		5	↓

	Date/Time	Received By: (Signature)
Sample Kit Prep'd by: (Signature)		
Relinquished by: (Signature)	Date/Time 12-19-08 1730	Received By: (Signature)
Relinquished by: (Signature)	Date/Time	Received By: (Signature)
Received for Laboratory by: (Signature)	Date/Time 12/20/08	Temperature 2.3°C

REMARKS: call Doug Hawn upon arrival

Details:

Page 1 of 1

Cooler No. 1 of 1

Date Shipped 12.19.08

Shipped By FedEx

Turnaround Normal

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

10:30

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08354G01

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12291

Matrix: (soil/water) WATER Lab Sample ID: 0812291-02

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1229102D

Level: (low/med) LOW Date Sampled: 12/19/08 08:35

% Moisture: not dec. _____ Date Analyzed: 01/02/09 03:35

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 5.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
67-64-1	Acetone	4.2	50		UD
71-43-2	Benzene	0.55	5.0	5.8	D
75-27-4	Bromodichloromethane	0.50	5.0		UD
75-25-2	Bromoform	0.50	5.0		UD
74-83-9	Bromomethane	1.6	10		UD
78-93-3	2-Butanone	5.0	50		UD
75-15-0	Carbon disulfide	0.65	5.0		UD
56-23-5	Carbon tetrachloride	0.75	5.0		UD
108-90-7	Chlorobenzene	0.50	5.0	0.93	JBD
75-00-3	Chloroethane	0.90	10		UD
67-66-3	Chloroform	0.55	5.0		UD
74-87-3	Chloromethane	1.4	10		UD
110-82-7	Cyclohexane	1.0	10	54	D
124-48-1	Dibromochloromethane	0.50	5.0		UD
96-12-8	1,2-Dibromo-3-chloropropane	0.55	10		UD
106-93-4	1,2-Dibromoethane	0.50	5.0		UD
95-50-1	1,2-Dichlorobenzene	0.50	5.0		UD
541-73-1	1,3-Dichlorobenzene	0.65	5.0		UD
106-46-7	1,4-Dichlorobenzene	0.50	5.0		UD
75-71-8	Dichlorodifluoromethane	1.1	10		UD
75-34-3	1,1-Dichloroethane	0.60	5.0		UD
107-06-2	1,2-Dichloroethane	0.50	5.0		UD
75-35-4	1,1-Dichloroethene	0.75	5.0		UD
156-59-2	cis-1,2-Dichloroethene	0.65	5.0		UD
156-60-5	trans-1,2-Dichloroethene	0.65	5.0		UD
78-87-5	1,2-Dichloropropane	0.50	5.0		UD
10061-01-5	cis-1,3-Dichloropropene	0.55	5.0		UD
10061-02-6	trans-1,3-Dichloropropene	0.50	5.0		UD
100-41-4	Ethylbenzene	0.65	5.0	340	D
591-78-6	2-Hexanone	1.5	25		UD
98-82-8	Isopropylbenzene	0.75	5.0	23	D
79-20-9	Methyl acetate	1.5	5.0		UD
75-09-2	Methylene chloride	0.70	10	1.3	JBD
108-87-2	Methyl cyclohexane	0.85	5.0	42	D
1634-04-4	MTBE	0.50	5.0		UD
108-10-1	4-Methyl-2-pentanone	1.4	25		UD
100-42-5	Styrene	0.50	5.0		UD
79-34-5	1,1,2,2-Tetrachloroethane	0.50	5.0		UD
127-18-4	Tetrachloroethene	0.75	5.0		UD

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08354G01

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12291

Matrix: (soil/water) WATER Lab Sample ID: 0812291-02

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1229102D

Level: (low/med) LOW Date Sampled: 12/19/08 08:35

% Moisture: not dec. _____ Date Analyzed: 01/02/09 03:35

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 5.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q
108-88-3	Toluene	0.50	5.0	10	D
120-82-1	1,2,4-Trichlorobenzene	0.50	5.0		UD
71-55-6	1,1,1-Trichloroethane	0.85	5.0		UD
79-00-5	1,1,2-Trichloroethane	0.50	5.0		UD
79-01-6	Trichloroethene	0.65	5.0		UD
76-13-1	Trichlorotrifluoroethane	0.90	5.0		UD
75-69-4	Trichlorofluoromethane	0.85	10		UD
75-01-4	Vinyl chloride	0.90	10		UD
1330-20-7	Xylene(total)	1.1	5.0	1000	D

Rev Qual

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08354G02

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12291

Matrix: (soil/water) WATER Lab Sample ID: 0812291-03

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1229103

Level: (low/med) LOW Date Sampled: _____

% Moisture: not dec. _____ Date Analyzed: 01/02/09 00:37

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q	Rev Qual	
67-64-1	Acetone	0.84	10		U	UJ	5b
71-43-2	Benzene	0.11	1.0		U	U	
75-27-4	Bromodichloromethane	0.10	1.0		U		
75-25-2	Bromoform	0.10	1.0		U		
74-83-9	Bromomethane	0.32	2.0		U		
78-93-3	2-Butanone	1.0	10		U		
75-15-0	Carbon disulfide	0.13	1.0		U		
56-23-5	Carbon tetrachloride	0.15	1.0		U		
108-90-7	Chlorobenzene	0.10	1.0	0.21	JB	U	6d 6a, 11a
75-00-3	Chloroethane	0.18	2.0		U	UJ	
67-66-3	Chloroform	0.11	1.0		U	U	
74-87-3	Chloromethane	0.29	2.0		U		
110-82-7	Cyclohexane	0.20	2.0		U		
124-48-1	Dibromochloromethane	0.10	1.0		U		
96-12-8	1,2-Dibromo-3-chloropropane	0.11	2.0		U		
106-93-4	1,2-Dibromoethane	0.10	1.0		U		
95-50-1	1,2-Dichlorobenzene	0.10	1.0		U		
541-73-1	1,3-Dichlorobenzene	0.13	1.0		U		
106-46-7	1,4-Dichlorobenzene	0.10	1.0		U		
75-71-8	Dichlorodifluoromethane	0.22	2.0		U		
75-34-3	1,1-Dichloroethane	0.12	1.0		U		
107-06-2	1,2-Dichloroethane	0.10	1.0		U		
75-35-4	1,1-Dichloroethene	0.15	1.0		U		
156-59-2	cis-1,2-Dichloroethene	0.13	1.0		U		
156-60-5	trans-1,2-Dichloroethene	0.13	1.0		U		
78-87-5	1,2-Dichloropropane	0.10	1.0		U		
10061-01-5	cis-1,3-Dichloropropene	0.11	1.0		U		
10061-02-6	trans-1,3-Dichloropropene	0.10	1.0		U		
100-41-4	Ethylbenzene	0.13	1.0		U		
591-78-6	2-Hexanone	0.30	5.0		U		
98-82-8	Isopropylbenzene	0.15	1.0		U		
79-20-9	Methyl acetate	0.30	1.0		U		
75-09-2	Methylene chloride	0.14	2.0	0.30	JB	U	6a 6d
108-87-2	Methyl cyclohexane	0.17	1.0		U	U	
1634-04-4	MTBE	0.10	1.0		U		
108-10-1	4-Methyl-2-pentanone	0.29	5.0		U		
100-42-5	Styrene	0.10	1.0		U		
79-34-5	1,1,2,2-Tetrachloroethane	0.10	1.0		U		
127-18-4	Tetrachloroethene	0.15	1.0		U		

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

08354G02

Lab Name: EMPIRICAL LABS Contract: SES

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SES.V12291

Matrix: (soil/water) WATER Lab Sample ID: 0812291-03

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1229103

Level: (low/med) LOW Date Sampled: _____

% Moisture: not dec. _____ Date Analyzed: 01/02/09 00:37

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	MDL	RL	CONC	Q	Raw Qual
108-88-3	Toluene	0.10	1.0		U	U
120-82-1	1,2,4-Trichlorobenzene	0.10	1.0		U	
71-55-6	1,1,1-Trichloroethane	0.17	1.0		U	
79-00-5	1,1,2-Trichloroethane	0.10	1.0		U	
79-01-6	Trichloroethene	0.13	1.0		U	
76-13-1	Trichlorotrifluoroethane	0.18	1.0		U	
75-69-4	Trichlorofluoromethane	0.17	2.0		U	
75-01-4	Vinyl chloride	0.18	2.0		U	
1330-20-7	Xylene(total)	0.22	1.0		U	