FINAL

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CORRECTIVE ACTION PLAN PROGRESS REPORT FOR CALENDAR YEAR 2004

FOR THE

3d Inf Div (Mech)

SOLID WASTE MANAGEMENT UNIT 27F: 3D ENGINEER BRIGADE, NORTHWEST OF BUILDING 1340 AT FORT STEWART, GEORGIA

Prepared for

U.S. ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT

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Delivery Order 0047

April 2005

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REGULATORY AUTHORITY
Resource Conservation and Recovery Act
Title II, Subtitle C, Section 3004;
42 *U.S.C.* 6901 et seq.; 40 *CFR* 264

Prepared for
U.S. Army Corps of Engineers
Savannah District
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Prepared by
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April 2005

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

contributed to the preparation of this document and should not be considered an eligible contractor for its review.

CERTIFICATION

This *Corrective Action Plan Progress Report for Calendar Year 2004 for the Solid Waste Management Unit 27F: 3d Engineer Brigade Northwest of Building 1340 at Fort Stewart, Georgia*, has been prepared in accordance with Title 40, *Code of Federal Regulations,* Part 264 and Hazardous Waste Facility Permit No. HW-045(S&T), as renewed August 14, 1997.

The undersigned certifies that I am a qualified groundwater scientist who has received a baccalaureate or postgraduate degree in the natural sciences or engineering and that I have sufficient training and experience in groundwater hydrology 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.

GEORGIA REGISTERED 22851 PROFESSIONAL ENGINEER P. A. STOLL

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Technical Manager
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FIGURES

TABLES

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ACRONYMS

AT123D	Analytical Transient 1-, 2-, 3-Dimensional
BGS	below ground surface
BHHRA	baseline human health risk assessment
CAP	Corrective Action Plan
COC	constituent of concern
COPC	constituent of potential concern
CY	calendar year
DPT	direct-push technology
GA EPD	Georgia Environmental Protection Division
HHCOC	human health constituent of concern
HI	hazard index
MCL	maximum contaminant level
MDC	maximum detected concentration
MNA	monitored natural attenuation
OWS	oil/water separator
RBC	risk-based concentration
RCRA	Resource Conservation and Recovery Act
RFI	RCRA facility investigation
RL	remedial level
SAIC	Science Applications International Corporation
SRC	site-related constituent
SVOC	semivolatile organic compound
SWMU	solid waste management unit
USACE	U. S. Army Corps of Engineers
VOC	volatile organic compound

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1.0 INTRODUCTION

This report presents results from the groundwater monitoring for calendar year (CY) 2004 for Solid Waste Management Unit (SWMU) 27F: 3d Engineer Brigade, Northwest of Building 1340 at Fort Stewart, Georgia. This report was prepared in accordance with the requirements of the addendum for SWMU 27F to the revised final Phase II Resource Conservation and Recovery Act (RCRA) facility investigation (RFI) report for 16 SWMUs (SAIC 2001) and the final Corrective Action Plan (CAP) for the site (SAIC 2004). The revised final Phase II RFI for 16 SWMUs was issued in April 2000 (SAIC 2000).

This report has been prepared by Science Applications International Corporation (SAIC) for the U. S. Army Corps of Engineers (USACE), Savannah District under contract DACA21-02-D-0004, delivery order 0047. The groundwater sampling was conducted in accordance with the Sampling and Analysis Plan for 16 SWMUs (SAIC 1997), which was developed in accordance with USACE Guidance EM 200-1-3.

1.1 SITE BACKGROUND AND OPERATIONAL HISTORY

SWMU 27F, northwest of Building 1340, is one of two oil/water separators (OWSs) that support the vehicle maintenance activities of the 3d Engineer Brigade and one of 32 OWSs distributed across 29 sites that support the vehicle maintenance facilities within the garrison area (Figure 1). The OWS is located along the northwestern boundary of the motor pool area, approximately 200 ft northwest of Building 1340 (Figure 2). The OWS was closed in 2001. The closure consisted of placing plywood over the metal grates covering the OWS and plugging the drains located at the adjacent, covered maintenance pad from which the OWS received wastewater. Maintenance activities for military vehicles are performed at the maintenance pad. Floor drains from the maintenance pad are piped to the OWS; however, as part of the closure activities, these drains were plugged. The effluent from the OWS discharged to the Industrial Wastewater Treatment Plant, and the oil was pumped out of the holding unit and burned at the Central Energy Plant. No surface water or sediment pathways exist at this site.

1.2 SUMMARY OF PHASE I AND II RESOURCE CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATIONS

A Phase I RFI was conducted at SWMU 27F, northwest of Building 1340, in January 1998 [see the revised final Phase II RFI report (SAIC 2000) for the results]. During the Phase I RFI, direct-push technology (DPT) techniques were used to collect four soil and groundwater samples at the site. These samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and lead. The Phase I RFI concluded that the vertical and horizontal extents of potential groundwater contamination had not been determined and recommended additional groundwater screening and the installation of shallow and possibly deep groundwater monitoring wells at the site (upgradient and downgradient).

A Phase II RFI was conducted in October 1999 consisting of initial screening using DPT techniques followed by the installation of 11 monitoring wells (8 shallow and 3 deep) at the site. One shallow and one deep monitoring well (MW1/MW2) were installed upgradient (background). In addition, a recovery well (MW12) was installed to recover potential free product identified on a clay lens encountered at approximately 8 ft below ground surface (BGS) (Figure 2).

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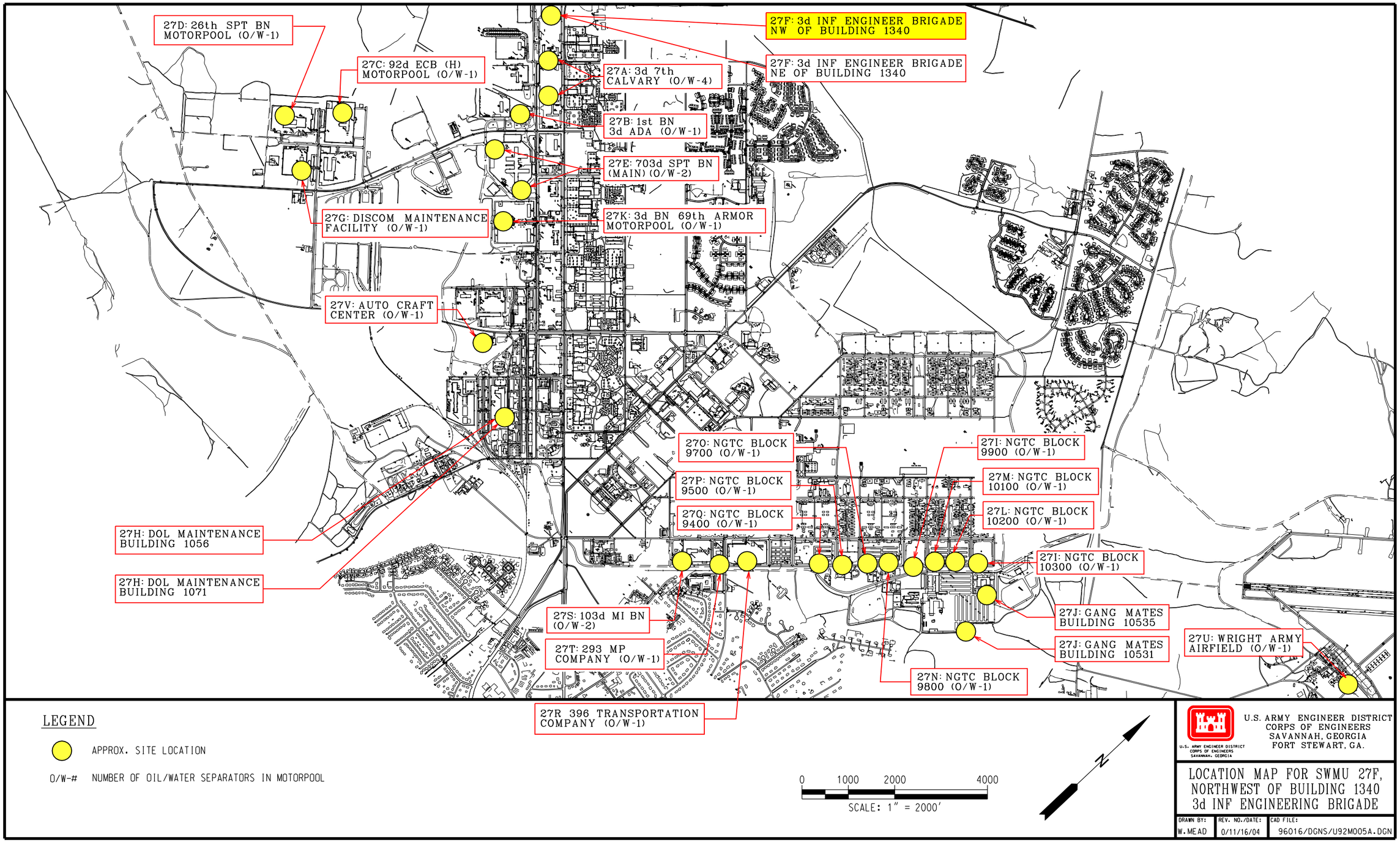

Figure 1. Location Map for SWMU 27F, Northwest of Building 1340

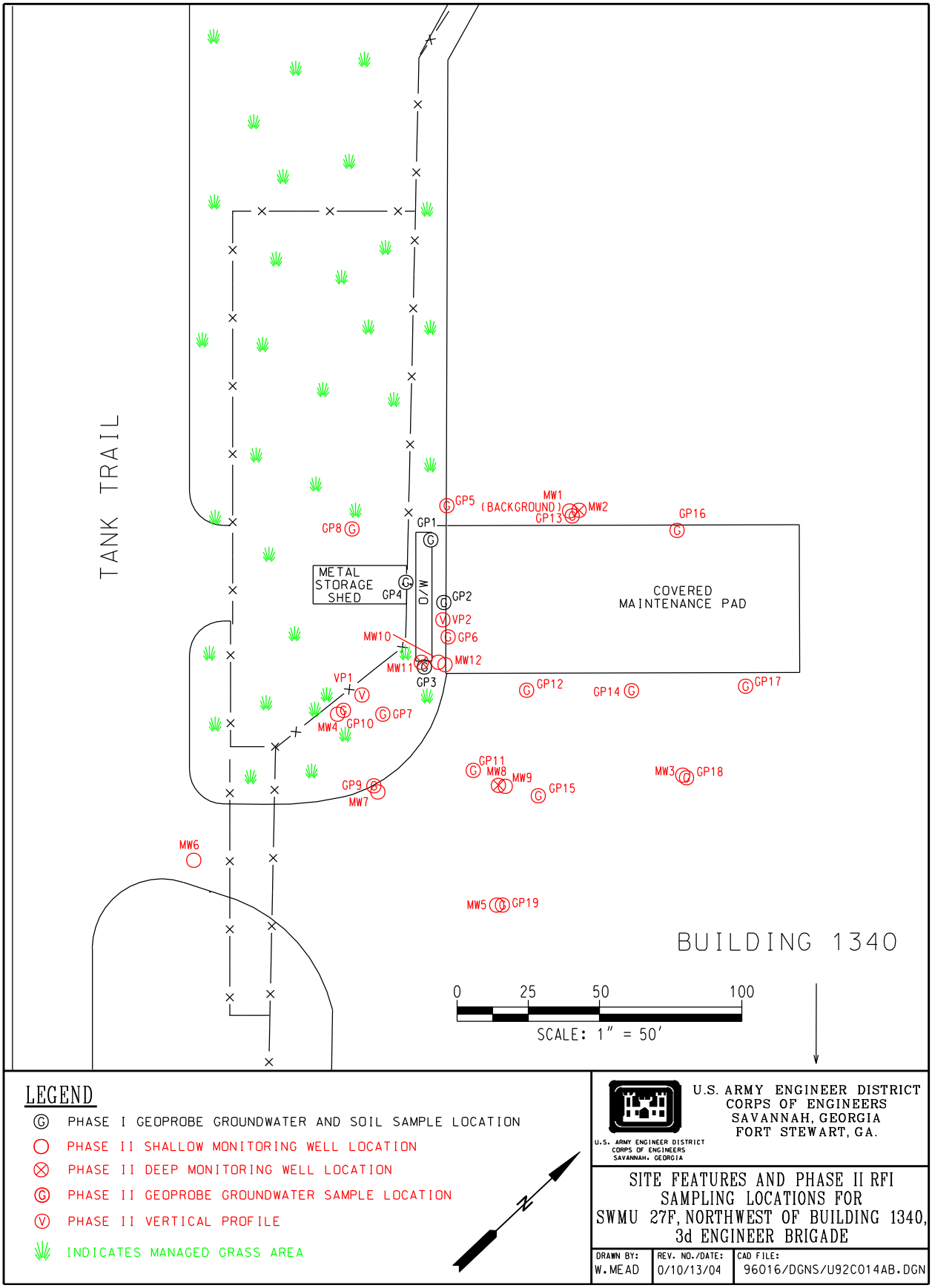

Figure 2. Site Features and Phase II RFI Sampling Locations at SWMU 27F, Northwest of Building 1340

The Phase II RFI concluded that benzo(*a*)pyrene was a human health constituent of concern (HHCOC) in surface soil. The extent of benzo(*a*)pyrene in surface soil was confined to a single location near the OWS. In addition, benzene and bis(2-ethylhexyl)phthalate were identified as HHCOCs in groundwater. The bis(2-etheylhexyl)phthalate concentration was believed to be the result of field or laboratory contamination.

To further define the extent of groundwater contamination, Fort Stewart recommended the installation of six new shallow monitoring wells (MW13 through MW18) downgradient of the source area and the re-sampling of the groundwater at all new and existing monitoring wells prior to the development of the CAP. The six new wells were installed in December 2000 (Figure 3). Thirteen shallow monitoring wells [six of which were installed in accordance with the recommendations of the final revised final Phase II RFI report (SAIC 2000)] and four deep monitoring wells were low-flow sampled in January 2001 as part of the supplemental data collection (Figure 3). The groundwater samples were analyzed for VOCs and SVOCs. In addition, MW12, the monitoring well installed above the clay layer that occurs at approximately 8 ft BGS, was checked for free product. Floating product was identified in MW12. Approximately 0.05 ft of a thick, black, viscous material was indicated in MW12 during the measurement of the water level in May 2001. The material was removed with an absorbent sock. The material did not readily recharge in MW12. The free product identified in MW12 is believed to be residual soil contamination from either overflows from the adjacent OWS and/or the removed waste-oil underground storage tank. Small quantities of heavy petroleum products are trapped within the soil matrix and are slowly migrating to groundwater with time.

Five VOCs (2-butanone, 4-methyl-2-pentanone, benzene, ethylbenzene, and total xylenes) were detected in shallow groundwater at SWMU 27F and considered to be site-related constituents (SRCs). Benzene also exceeded its maximum contaminant level (MCL) of 5 µg/L.

Five SVOCs (2-methylnaphthalene, 4-methylphenol, carbazole, fluorene, and naphthalene) were detected in shallow groundwater at SWMU 27F. No VOCs or SVOCs were detected in the deep groundwater during the supplemental sampling at SWMU 27F.

The Phase II investigation concluded that benzene and carbazole were considered to be constituents of concern (COCs) in groundwater at SWMU 27F. The following constituents were considered to be COCs in surface soil: arsenic, benzo(*a*)anthracene, benzo(*a*)pyrene, benzo(*b*)fluoranthene, and dibenzo(*a,h*)anthracene. Remedial levels (RLs) were set for each COC. The RLs for soil and groundwater are presented in Tables 1 and 2, respectively. The maximum detected concentrations (MDCs) of arsenic, benzo(*a*)anthracene, benzo(*b*)fluoranthene, and dibenzo(*a,h*)anthracene in soil and carbazole in groundwater were below their respective RLs. Benzo(*a*)pyrene in surface soil and benzene in groundwater were identified as COCs at SWMU 27F requiring remediation. The Phase II estimated areal extents of soil and groundwater contamination at SWMU 27F are presented in Figure 4.

1.3 CORRECTIVE ACTION PLAN FOR SWMU 27F

In accordance with the recommendations of the Phase II RFI, a CAP was developed for SWMU 27F to evaluate potential remedial alternatives to address HHCOCs in surface soil [benzo(*a*)pyrene] and groundwater (benzene) (SAIC 2004).

Corrective action technologies were identified for benzo(*a*)pyrene in surface soil and benzene in groundwater at SWMU 27F. The screened technologies for surface soil and groundwater were combined to form remedial alternatives to meet the remedial response objectives for soil and groundwater. The remedial response objectives for SWMU 27F were to reduce the present concentrations of the site COCs

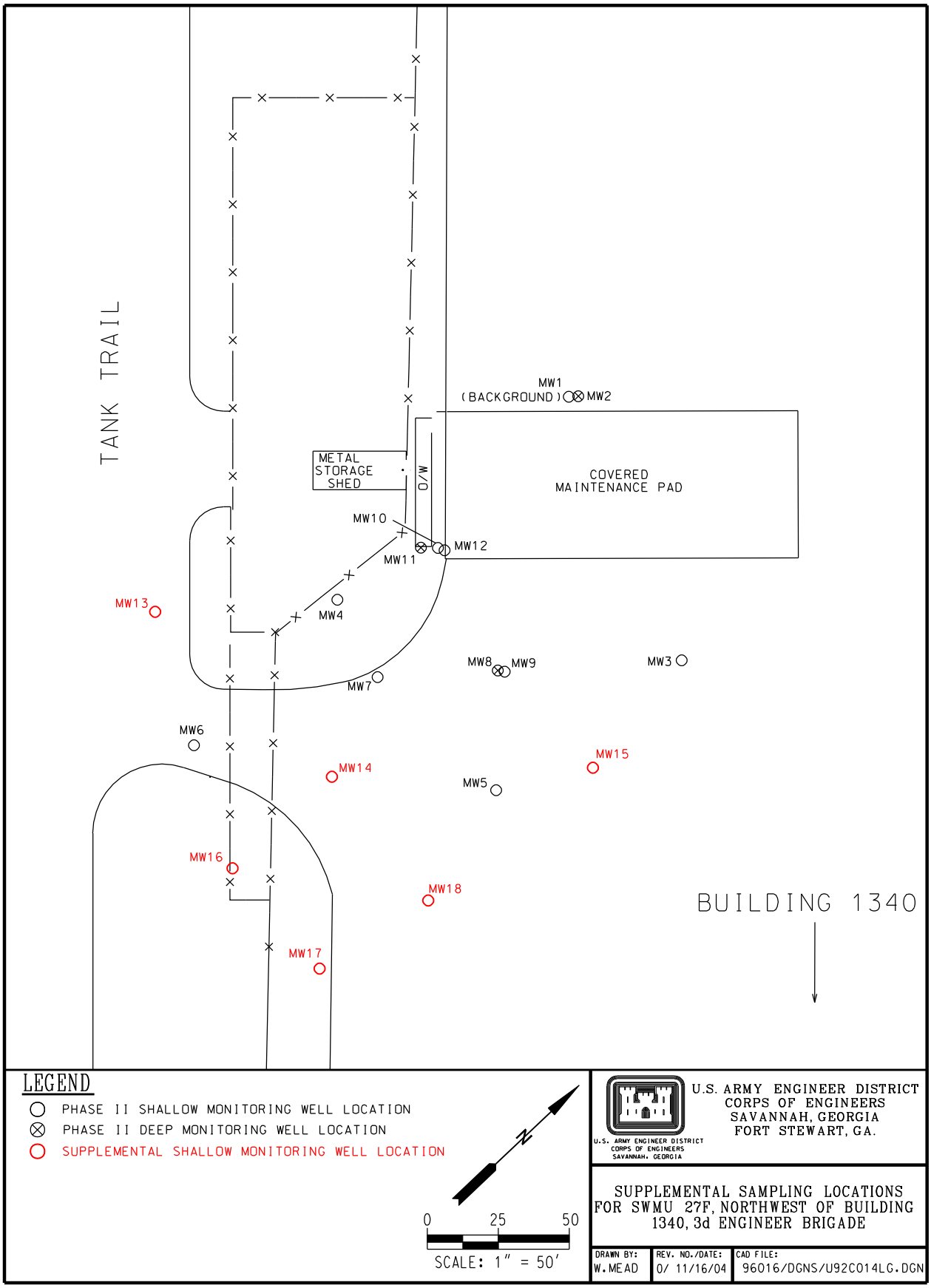

Figure 3. Supplemental Sampling Locations for SWMU 27F, Northwest of Building 1340

Table 1. Remedial Levels for Surface Soil, SWMU 27F, Northwest of Building 1340

COC	Units	Maximum Detected Concentration	Risk-Based Remedial Levels		Surface Soil Background Concentration
			ILCR		
			1×10^{-6}	1×10^{-5}	
Arsenic	mg/kg	4.40	1.01	**10.12**	2.1
Benzo(*a*)anthracene	mg/kg	3.94	0.89	**8.93**	0
Benzo(*a*)pyrene	mg/kg	2.43	0.09	**0.89**	0
Benzo(*b*)fluoranthene	mg/kg	2.88	0.89	**8.93**	0
Dibenzo(*a*,*h*)anthracene	mg/kg	0.54	0.09	**0.89**	0

COC = Constituent of concern.
ILCR = Incremental lifetime cancer risk.
SWMU = Solid waste management unit.
Bold indicates values are recommended remedial levels.

Table 2. Remedial Levels for Groundwater, SWMU 27F, Northwest of Building 1340

COC	Maximum Detected Concentration	Units	Risk-Based Remedial Levels		Maximum Contaminant Level	Quantification Limits
			ILCR			
			1×10^{-6}	1×10^{-5}		
Benzene	61	µg/L	NA	NA	**5**	2
Carbazole	5.7	µg/L	3.5	**34.9**	ND	9.6

COC = Constituent of concern.
ILCR = Incremental lifetime cancer risk.
NA = Not applicable; remedial level for groundwater defaults to the maximum contaminant level.
ND = No data; this constituent does not have a maximum contaminant level.
SWMU = Solid waste management unit.
Bold indicates values are recommended remedial levels.

in soil [benzo(*a*)pyrene] and groundwater (benzene) to the RLs presented in the revised final addendum (SAIC 2001) to the revised final Phase II RFI report (SAIC 2000). In addition, MW12 would be monitored during the performance of the selected remedy to determine if the 0.05 ft of thick, black, viscous material represents an active source of potential contamination.

The three remedial alternatives were

- Alternative 1: monitored natural attenuation (MNA) for surface soil and groundwater;
- Alternative 2: MNA for surface soil and specialized bacteria addition for groundwater; and
- Alternative 3: excavation for surface soil and enhanced bioremediation with oxygen injection for groundwater.

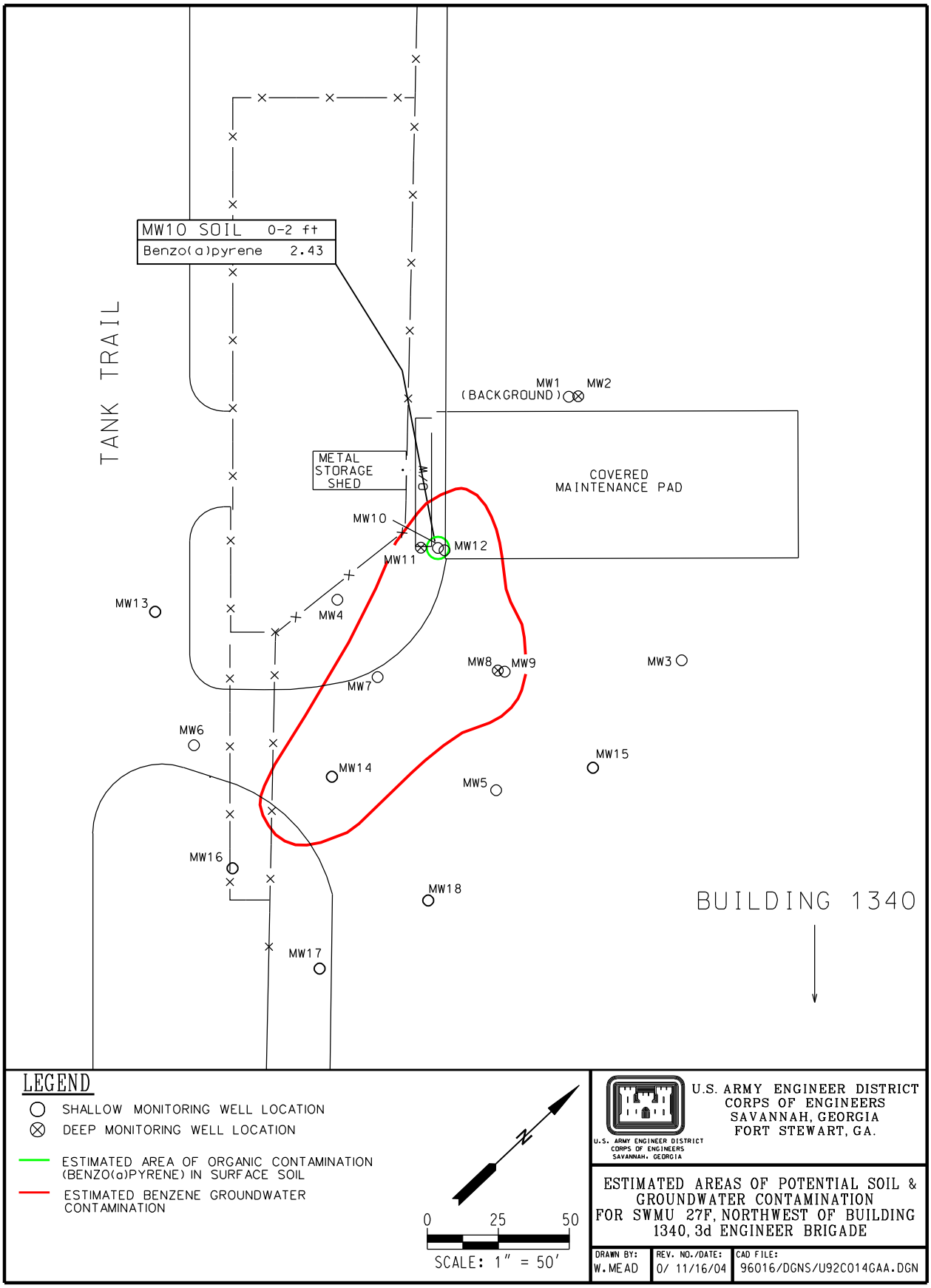

Figure 4. Estimated Areas of Potential Soil and Groundwater Contamination, SWMU 27F, Northwest of Building 1340

The selected corrective action alternative for treatment of soil and groundwater was MNA. This alternative was selected for remediation because it would effectively achieve the RLs in a reasonable period of time and would do so cost-effectively. Modeling predicted that MNA would achieve the soil RL in approximately 2 years from October 1999. Modeling also predicted that MNA would achieve the groundwater RLs in less than 6 years from January 2001. An additional year was added as a contingency.

The conceptual design for MNA consisted of the following:

- Land-use restrictions to prohibit disturbance of surface and subsurface soil, use of groundwater, hunting, recreational activities, and construction within the property boundaries.

- MNA of surface soil located around MW10. Only two soil-sampling events were expected to be required.

- MNA of groundwater. During the MNA period, 13 shallow surficial groundwater wells (MW1, MW3, MW4, MW5, MW6, MW7, MW9, MW10, MW14, MW15, MW16, MW17, and MW18) would be sampled biannually (every 2 years) to verify the benzene concentrations are declining, that concentrations of other potential SRCs not detected to date do not present a risk to human health and are not increasing with time, and that active biodegradation is occurring.

- With the Georgia Environmental Protection Division's (GA EPD's) concurrence, all groundwater monitoring wells would be abandoned when concentrations were below RLs and the remediation was determined to be complete.

The CAP and its selected alternative were issued to GA EPD on July 23, 2002, for its review. Comments were received from GA EPD in August of 2004. A revised final CAP was reissued in November 2004.

1.4 CALENDAR YEAR 2002 SAMPLING EVENT

The first annual sampling event was conducted by SAIC in September 2002 and consisted of the collection of 2 surface soil samples from the area surrounding MW10 and groundwater sampling from 13 shallow monitoring wells. The results of this sampling event were presented in the CAP Progress Report for CY 2002 for SWMU 27F dated January 2003 (SAIC 2003).

During the sampling event, two surface soil samples were collected from around MW10 using a hand auger and analyzed for SVOCs. Four SVOCs [benzo(*a*)pyrene, fluoranthene, indeno(1,2,3-*cd*)pyrene, and pyrene] were detected in the surface soil sample SS02 at concentrations of 0.092, 0.0576, 0.0489, and 0.0677 mg/kg, respectively. No SVOCs were detected at the SS01 location. Benzo(*a*)pyrene, fluoranthene, indeno(1,2,3-*cd*)pyrene, and pyrene were considered SRCs in surface soil because they were detected above reference background criteria. The maximum concentrations of fluoranthene, indeno(1,2,3-*cd*)pyrene, and pyrene were below the maximum concentrations detected during the Phase II RFI; therefore, in accordance with the protocol and decision flowchart approved by GA EPD for evaluating SRCs identified in media collected after the establishment of RLs through either an RFI report and/or a CAP (see Appendix A), these constituents do not require further evaluation. The maximum concentration of benzo(*a*)pyrene was below its RL (0.89 mg/kg) established in the addendum to the revised final RFI report (SAIC 2001). The RL for benzo(*a*)pyrene in surface soil has been met; therefore, no further investigation/corrective action is required. In addition, because benzo(*a*)pyrene was not detected above the RL during this initial soil sampling, this sampling event was recommended to represent the final/confirmatory soil sampling, as recommended by the CAP (SAIC 2004).

Groundwater samples were collected from the 13 shallow monitoring wells (MW1, MW3, MW4, MW5, MW6, MW7, MW9, MW10, MW14, MW15, MW16, MW17, and MW18) using a low-flow sampling technique and analyzed for VOCs, SVOCs, and natural attenuation parameters. Five VOCs (1,2-dichloroethene; benzene; ethylbenzene; toluene; and total xylenes) were estimated or detected in downgradient groundwater at SWMU 27F during the CY 2002 sampling. Of these, only benzene was a site COC in groundwater from the RFI. A RL of 5 µg/L was established in the Phase II RFI. Benzene concentrations continue to exceed the RL and will be remediated under the corrective action proposed in the CAP (SAIC 2004). Nine SVOCs, including three polynuclear aromatic hydrocarbons (acenaphthene, fluorene, and phenanthrene), a phthalate [bis(2-ethylhexyl)phthalate], carbazole, dibenzofuran, naphthalene, 2-methylnaphthalene, and 4-methylphenol were detected or estimated in groundwater during the CY 2002 sampling. Of these, only carbazole was considered a COC in groundwater. A RL of 34.9 µg/L was derived. The MDC of carbazole (4.4 µg/L) was below the approved RL of 34.9 µg/L; therefore, the corrective action for carbazole has been achieved. 2-Methylnaphthalene was not identified as a groundwater COC in the revised final Phase II RFI addendum report (SAIC 2001); however, the maximum detection of 33.4 µg/L was slightly higher than the CY 2001 maximum detection of 31.9 µg/L. In accordance with the protocol for evaluating constituents in groundwater after approval of the RFI report or CAP (Appendix A), a single elevated value requires confirmation of the result during the next groundwater-monitoring sampling event before it can be established as a COC requiring the development of a RL; therefore, 2-methylnaphthalene will continue to be monitored under the corrective action proposed in the CAP (SAIC 2004). Naphthalene was not identified as a groundwater COC in the revised final Phase II RFI addendum report (SAIC 2001) or the CAP (SAIC 2004); however, the maximum detection of 45.9 µg/L was slightly higher than the CY 2001 maximum detection of 37.2 µg/L. According to the protocol for evaluating constituents in groundwater after approval of the RFI report (Appendix A), a single elevated value requires confirmation of the results during the next groundwater-monitoring sampling event. Therefore, naphthalene will continue to be monitored under the corrective action proposed in the CAP (SAIC 2004).

1.5 REPORT ORGANIZATION

The report organization presented in this section provides an outline of the information required by the groundwater monitoring for CY 2004. This report is organized as follows:

- Chapter 1.0: site background, operational history, and summary of Phase I and II RFIs; supplemental sampling for CYs 1998, 1999, and 2001; the CAP and performance soil and groundwater monitoring for CY 2002;
- Chapter 2.0: CY 2004 groundwater sampling and evaluation;
- Chapter 3.0: update of the fate and transport model;
- Chapter 4.0: conclusions and recommendations; and
- Chapter 5.0: references.

Appendix A contains the protocol approved by GA EPD for establishing RLs after GA EPD has approved the RFI and CAP. Appendix B contains the chain-of-custody forms and the analytical results for the CY 2004 groundwater monitoring at SWMU 27F.

2.0 GROUNDWATER SAMPLING AND EVALUATION

Thirteen shallow monitoring wells (MW1, MW3, MW4, MW5, MW6, MW7, MW9, MW10, MW14, MW15, MW16, MW17, and MW18) at SWMU 27F were low-flow sampled between August 19 and 20, 2004. Figure 5 shows the locations of these monitoring wells. MW1 (upgradient) represents the shallow surficial groundwater background well. The groundwater samples were analyzed for VOCs, SVOCs, and natural attenuation parameters. SVOCs were included because they were detected in groundwater [but below risk-based concentrations (RBCs); EPA 2002] and because they are characteristic of the material or waste oil disposed of at the now-abandoned OWS, the presumed source of the contamination.

Conductivity, pH, temperature, dissolved oxygen, and oxidation-reduction potential were measured during well purging for the collection of all groundwater samples. In addition, ferrous iron was analyzed during groundwater sampling collection using a Hach Kit. Table 3 summarizes the field data collected during the groundwater sampling at SWMU 27F. Measurements of water levels were taken at all of the monitoring wells. Water level measurements and groundwater elevations are presented in Table 4. Free product was measured in MW12 and MW4 using a free product level meter.

Table 3. Field Parameter Measurements During Groundwater Sampling (August 2004), SWMU 27F, Northwest of Building 1340

Field Readings at Monitoring Wells								
Location	**Date**	**pH (s.u.)**	**Conductivity (mS/cm)**	**Temperature (°C)**	**Turbidity (NTUs)**	**DO (mg/L)**	**Redox (mV)**	**Ferrous Iron (mg/L)**
27F-MW1	08/18/04	4.07	0.055	27.59	9.2	0.75	257	1.5
27F-MW3	08/18/04	4.40	0.029	30.08	9.7	1.44	246	0.5
27F-MW4	08/20/04	5.01	0.087	27.59	8.9	0.57	139	3.5
27F-MW5	08/19/04	4.02	0.052	29.19	9.6	2.81	62	1.0
27F-MW6	08/19/04	4.06	0.065	25.68	9.0	1.06	79	0.6
27F-MW7	08/20/04	4.61	0.061	27.53	9.8	0.58	142	4.5
27F-MW9	08/19/04	4.15	0.046	28.50	8.3	1.57	253	0.5
27F-MW10	08/19/04	4.30	0.060	27.28	9.9	0.87	232	2.5
27F-MW14	08/20/04	4.04	0.059	29.92	9.5	0.46	27	2.8
27F-MW15	08/20/04	4.07	0.052	28.78	7.9	0.43	16	0.6
27F-MW16	08/19/04	5.47	0.123	29.71	7.9	3.01	50	0.4
27F-MW17	08/20/04	4.68	0.082	28.30	9.5	0.48	40	0.2
27F-MW18	08/19/04	4.30	0.067	29.27	9.8	0.67	28	6.4

DO = Dissolved oxygen.
NTU = Nephelometric turbidity unit.
Redox = Oxidation-reduction potential.
s.u. = Standard unit.
SWMU = Solid waste management unit.

2.1 GROUNDWATER SURFACE ELEVATIONS AND DIRECTION

The water level measurements (see Table 4) from the monitoring wells were used to develop shallow and deep groundwater potentiometric maps for SWMU 27F. Figures 6 and 7 present the groundwater elevations and the potentiometric map for the shallow and deep surficial groundwater, respectively. The shallow and deep surficial groundwater flow was primarily to the south/southeast, with an average horizontal hydraulic gradient of 0.00124 and 0.00162 ft/ft, respectively.

Table 4. Water-Level Data for Monitoring Wells (August 2004), SWMU 27F, Northwest of Building 1340

Well	Date	Screened Interval (ft BGS)	Depth to Water (ft below MP)	Elevation of Measuring Point (ft AMSL)	Elevation of Potentiometric Surface (ft AMSL)
27F-MW1	08/19/04	9.30 to 19.30	7.56	69.16	61.60
27F-MW2	08/19/04	28.80 to 38.80	7.65	69.27	61.62
27F-MW3	08/19/04	10.40 to 20.40	6.95	68.45	61.50
27F-MW4	08/19/04	5.90 to 15.90	6.38	68.02	61.64
27F-MW5	08/19/04	8.80 to 18.80	6.55	67.99	61.44
27F-MW6	08/19/04	8.70 to 18.70	6.50	67.88	61.38
27F-MW7	08/19/04	10.00 to 20.00	6.70	68.14	61.44
27F-MW8	08/19/04	30.90 to 40.90	6.87	68.34	61.47
27F-MW9	08/19/04	10.30 to 20.30	7.01	68.46	61.45
27F-MW10	08/19/04	11.00 to 21.00	7.17	68.70	61.53
27F-MW11	08/19/04	29.40 to 39.40	7.13	68.66	61.53
27F-MW12	08/19/04	5.00 to 9.70	6.61	68.74	62.13
27F-MW13	08/19/04	4.10 to 14.10	NA	67.26	NA
27F-MW14	08/19/04	2.90 to 12.90	6.35	67.76	61.41
27F-MW15	08/19/04	3.80 to 13.80	6.58	68.03	61.45
27F-MW16	08/19/04	5.0 to 15.0	4.98	67.64	62.66
27F-MW17	08/19/04	4.90 to 14.90	6.70	69.08	62.38
27F-MW18	08/19/04	4.90 to 14.90	6.07	67.49	61.42

AMSL = Above mean sea level.
BGS = Below ground surface.
MP = Measuring point (top of casing).
NA = Not available.
SWMU = Solid waste management unit.

2.2 FREE PRODUCT MEASUREMENTS

Free product was measured in two wells: MW4 and MW12. Free product has been sporadically indicated in MW12 and is believed to be residual soil contamination from either overflows from the adjacent OWS and/or the removed waste-oil underground storage tank. Small quantities of heavy petroleum products are trapped within the soil matrix and are slowly migrating to groundwater with time. Free product was measured at 0.14 in. in MW4 and at 0.05 in. in MW12. Absorbent socks were in both MW12 and MW4.

2.3 GROUNDWATER ANALYTICAL RESULTS

The results from the chemical analysis of groundwater are presented in Table 5 and Figure 5. The complete analytical results and chain-of-custody forms are presented in Appendix B. SRCs in groundwater were determined using the protocol discussed in Chapter 5.0 of the revised final Phase II RFI report (SAIC 2000). Organic constituents were identified as SRCs if they were simply detected (because organic constituents are generally from anthropogenic sources).

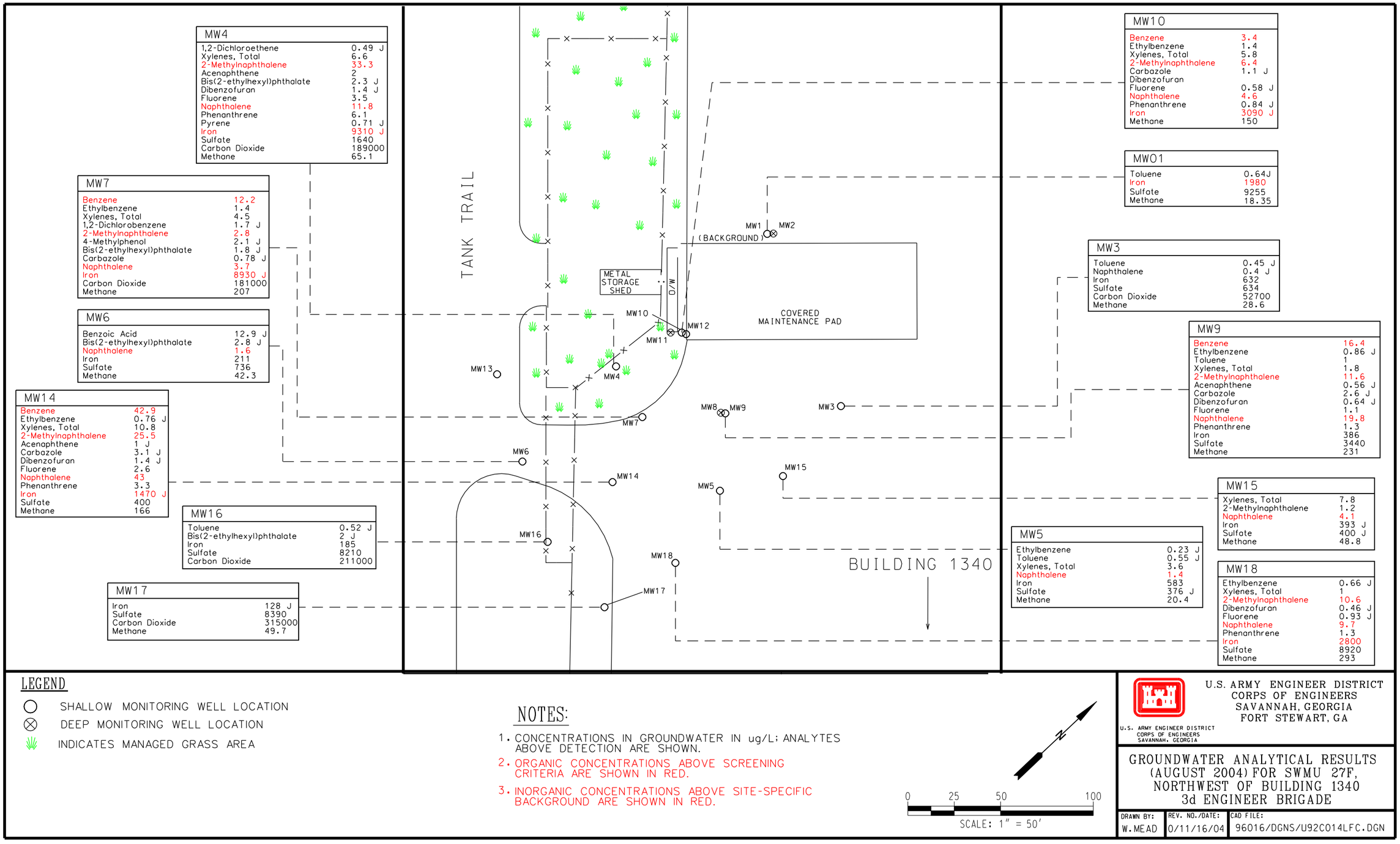

Figure 5. Summary of Groundwater Analytical Results for August 2004, SWMU 27F, Northwest of Building 1340

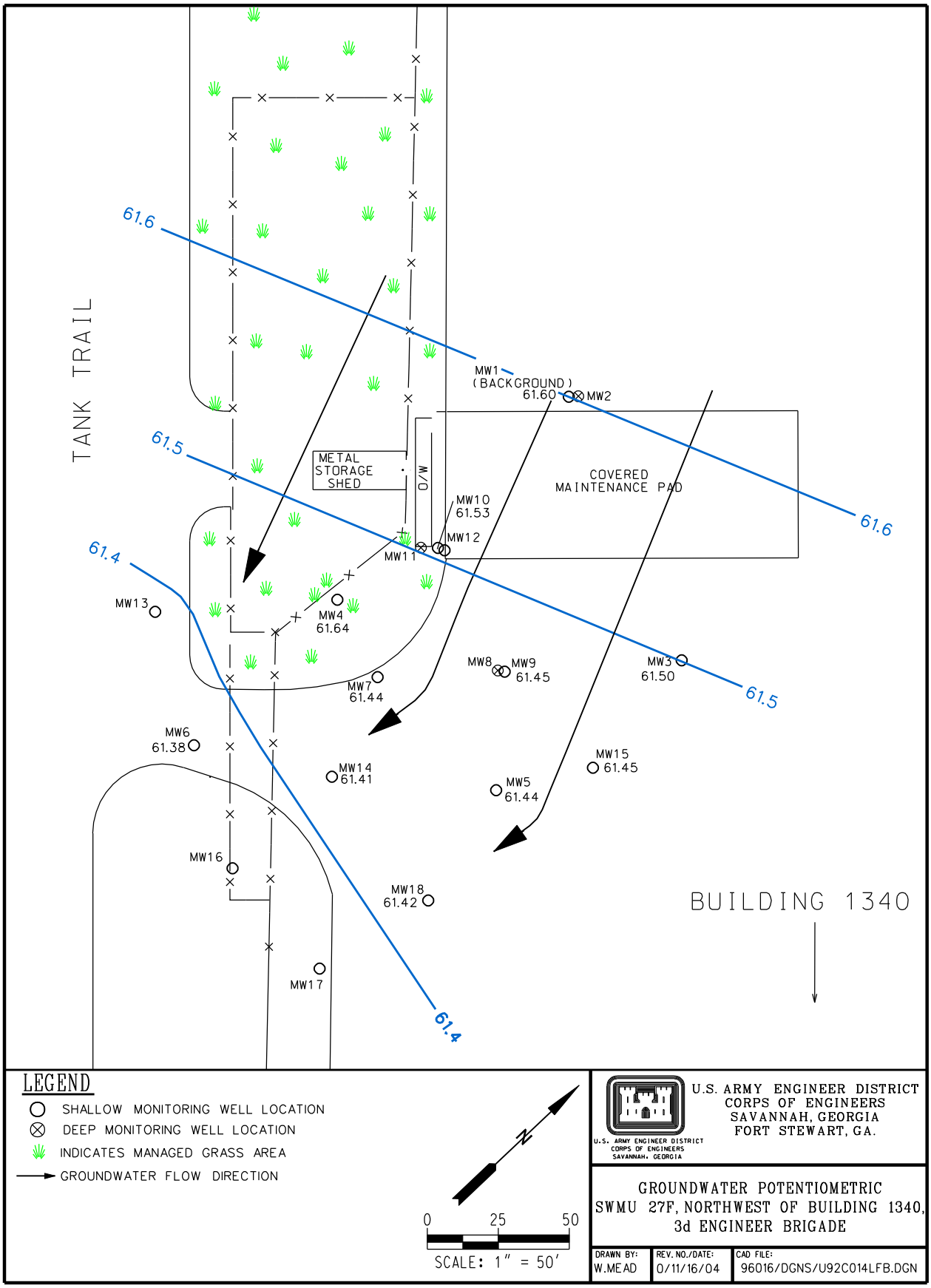

Figure 6. Groundwater Potentiometric Surface Map for Shallow Wells for CY 2004, SWMU 27F, Northwest of Building 1340

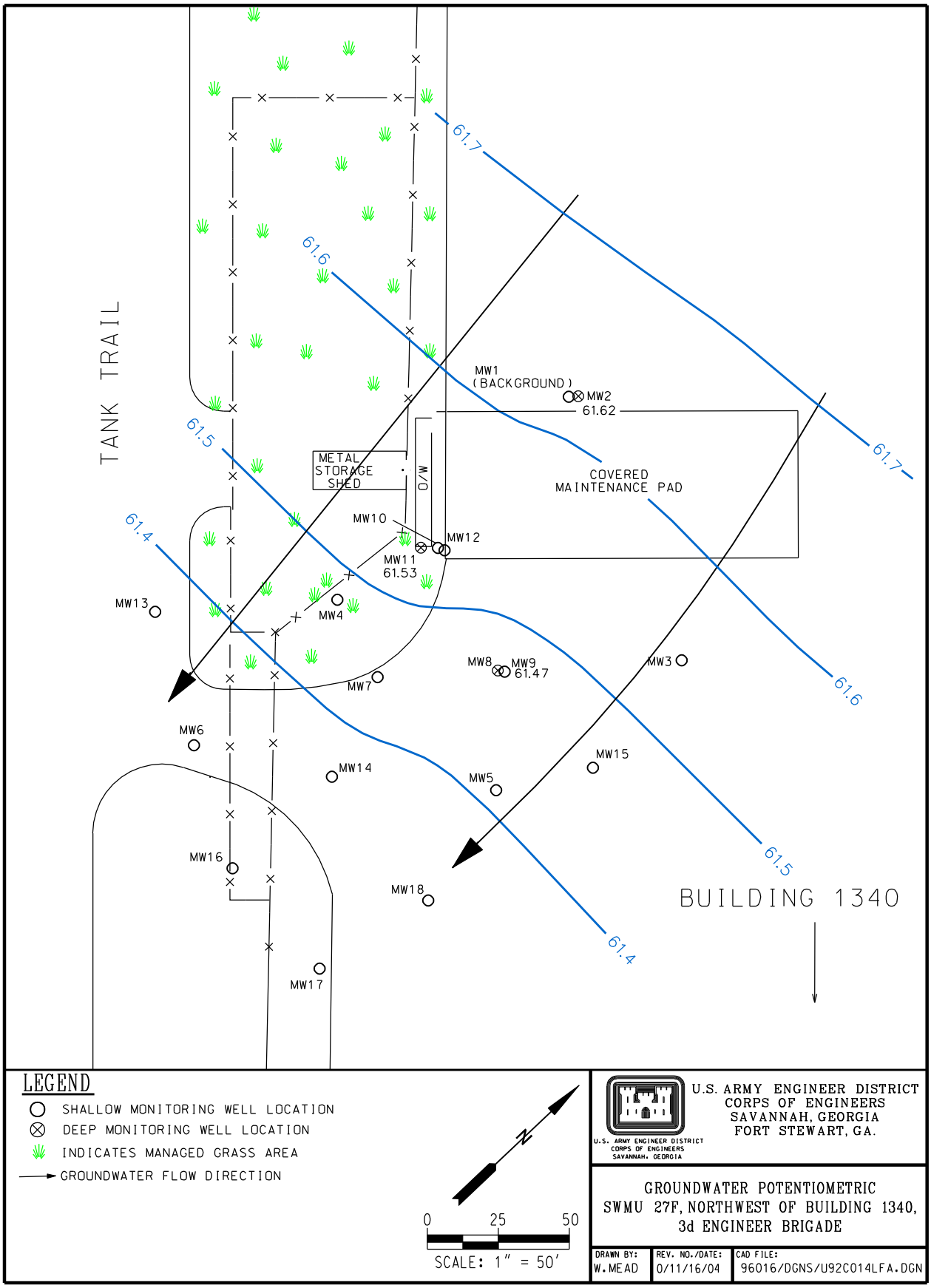

Figure 7. Groundwater Potentiometric Surface Map for Deep Wells for CY 2004, SWMU 27F, Northwest of Building 1340

Table 5. Summary of Analytes Detected in Groundwater (August 2004), SWMU 27F, Northwest of Building 1340

Station	Remedial Level from RFI	EPA Region 3 Tap Water RBC (HQ = 0.1, 10E-6)	RBC Type	Federal MCL	MW1[a]	MW3	MW4	MW5	MW6	MW7	MW9
Sample ID					**7J4174**	**7J4374**	**7J4474**	**7J4574**	**7J4674**	**7J4774**	**7J4974**
Date					**08/19/04**	**08/19/04**	**08/20/04**	**08/19/04**	**08/19/04**	**08/20/04**	**08/19/04**
Volatile Organic Compounds (µg/L)											
1,2-Dichloroethene	None	5.48	N	70	<1 U	<1 U	0.49 J	<1 U	<1 U	<1 U	<1 U
Benzene	5	0.34	C	5	<1 U	<1 U	<1 U	<1 U	<1 U	**12.2**	**16.4**
Ethylbenzene	None[b]	134	N	700	<1 U	<1 U	<1 U	0.23 J	<1 U	1.4	0.86 J
Toluene	None[b]	74.7	N	1,000	0.64 J	0.45 J	<1 U	0.55 J	<1 U	<2.2 U	1
Xylenes, Total	None[b]	21.26	N	10,000	<1 U	<1 U	6.6	3.6	<1 U	4.5	1.8
Semivolatile Organic Compounds (µg/L)											
1,2-Dichlorobenzene	None[b]	26.82	N	600	<9.6 U	<10.8 U	<11.1 U	<10.5 U	<10.6 U	1.7 J	<9.6 U
2-Methylnaphthalene	None[b]	2.43	N		<0.96 U	<1.1 U	**33.3**	<1 U	<1.1 U	**2.8**	**11.6**
4-Methylphenol	None[b]	18.25	N		<9.6 U	<10.8 U	<11.1 U	<10.5 U	<10.6 U	2.1 J	<9.6 U
Acenaphthene	None[b]	36.5	N		<0.96 U	<1.1 U	2	<1 U	<1.1 U	<1.2 U	0.56 J
Benzoic Acid	None[b]	14,600	N		<19.2 U	<21.5 U	<22.2 U	<21 U	12.9 J	<24.1 U	<19.2 U
Bis(2-ethylhexyl)phthalate	None[b]	4.78	C	6	<9.6 U	<10.8 U	2.3 J	<10.5 U	2.8 J	1.8 J	<9.6 U
Carbazole	None[b]	3.35	C		<9.6 U	<10.8 U	<11.1 U	<10.5 U	<10.6 U	0.78 J	2.6 J
Dibenzofuran	None[b]	1.22	N		<9.6 U	<10.8 U	1.4 J	<10.5 U	<10.6 U	<12 U	0.64 J
Fluorene	None[b]	24.33	N		<0.96 U	<1.1 U	3.5	<1 U	<1.1 U	<1.2 U	1.1
Naphthalene	None[b]	0.65	N		<0.96 U	0.4 J	**11.8**	**1.4**	**1.6**	**3.7**	**19.8**
Phenanthrene	None[b]	18.25	N		<0.96 U	<1.1 U	6.1	<1 U	<1.1 U	<1.2 U	1.3
Pyrene	None[b]	18.25	N		<0.96 U	<1.1 U	0.71 J	<1 U	<1.1 U	<1.2 U	<0.96 U
Miscellaneous (µg/L)											
Iron	None[b]	1,095	N		**1,980**	632	**9,310 J**	583	211	**8,930 J**	386
Sulfate	None[b]				925 J	634	1,640	376 J	736	<400 U	3,440
Carbon Dioxide	None[b]				<1,000 U	52,700	189,000	<1,000 U	<1,000 U	181,000	<1,000 U
Methane	None[b]				18.3 J	28.6	65.1	20.4	42.3	207	231

Table 5. Summary of Analytes Detected in Groundwater (August 2004), SWMU 27F, Northwest of Building 1340 (continued)

Station	Remedial Level from RFI	EPA Region 3 Tap Water RBC (HQ = 0.1, 10E-6)	RBC Type	Federal MCL	MW10	MW14	MW15	MW16	MW17	MW18
Sample ID					7J4A74	7J4E74	7J4F74	7J4G74	7J4H74	7J4J74
Date					08/20/04	08/20/04	08/20/04	08/19/04	08/20/04	08/19/04
Volatile Organic Compounds (µg/L)										
1,2-Dichloroethene	None[b]	5.48	N	70	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Benzene	5	0.34	C	5	**3.4**	**42.9**	<1 U	<1 U	<1 U	<1 U
Ethylbenzene	None[b]	134	N	700	1.4	0.76 J	<1 U	<1 U	<1 U	0.66 J
Toluene	None[b]	74.7	N	1,000	<2.7 U	<1 U	<1 U	0.52 J	<1 U	<1 U
Xylenes, Total	None[b]	21.26	N	10,000	5.8	10.8	7.8	<1 U	<1 U	1
Semivolatile Organic Compounds (µg/L)										
1,2-Dichlorobenzene	None[b]	26.82	N	600	<11.1 U	<10.5 U	<10.5 U	<10.6 U	<10.5 U	<10.4 U
2-Methylnaphthalene	None[b]	2.43	N		**6.4**	**25.5**	1.2	<1.1 U	<1 U	**10.6**
4-Methylphenol	None[b]	18.25	N		<11.1 U	<10.5 U	<10.5 U	<10.6 U	<10.5 U	<10.4 U
Acenaphthene	None[b]	36.5	N		<1.1 U	1 J	<1 U	<1.1 U	<1 U	<1 U
Benzoic Acid	None[b]	14,600	N		<22.2 U	<21 U	<21 U	<21.3 U	<21 U	<20.8 U
Bis(2-ethylhexyl)phthalate	None[b]	4.78	C	6	<11.1 U	<10.5 U	<10.5 U	2 J	<10.5 U	<10.4 U
Carbazole	None[b]	3.35	C		1.1 J	3.1 J	<10.5 U	<10.6 U	<10.5 U	<10.4 U
Dibenzofuran	None[b]	1.22	N		<11.1 U	1.4 J	<10.5 U	<10.6 U	<10.5 U	0.46 J
Fluorene	None[b]	24.33	N		0.58 J	2.6	<1 U	<1.1 U	<1 U	0.93 J
Naphthalene	None[b]	0.65	N		**4.6**	**43**	**4.1**	<1.1 U	<1 U	**9.7**
Phenanthrene	None[b]	18.25	N		0.84 J	3.3	<1 U	<1.1 U	<1 U	1.3
Pyrene	None[b]	18.25	N		<1.1 U	<1 U	<1 U	<1.1 U	<1 U	<1 U
Miscellaneous (µg/L)										
Iron	None[b]	1,095	N		**3,090 J**	**1,470 J**	393 J	185	128 J	**2,800**
Sulfate	None[b]				<400 U	400	400 J	8,210	8,390	8,920
Carbon Dioxide	None[b]				<20,000 U	<20,000 U	<20,000 U	211,000	315,000	<1,000 U
Methane	None[b]				150	166	48.8	<20 U	49.7	293

[a]Site-specific background location.
[b]No remedial level established in RFI because constituent not identified as COC.
C = Carcinogenic.
COC = Constituent of concern.
EPA = U.S. Environmental Protection Agency.
HQ = Hazard quotient.
ID = Identifier.
J= Estimated value.
MCL = Maximum contaminant level.
N = Noncarcinogenic.
RBC = Risk-based concentration.
RFI = Resource Conservation and Recovery Act facility investigation.
SWMU = Solid waste management unit.
U = Undetected value.
Bold indicates concentrations above screening criteria.

VOCs. Five VOCs (1,2-dichloroethene; benzene; ethylbenzene; toluene; and total xylenes) were estimated or detected in downgradient groundwater at SWMU 27F during the CY 2004 sampling. Benzene, ethylbenzene, and/or total xylenes were detected in 11 wells (MW1, MW3, MW4, MW5, MW7, MW9, MW10, MW14, MW15, MW16, and MW18). 1,2-Dichloroethene was estimated in only MW4. No VOCs were detected in MW6 or MW17.

1,2-Dichloroethene was estimated in one downgradient groundwater sample at a concentration of 0.49J μg/L at MW4.

Benzene was detected or estimated in 4 of 12 downgradient groundwater samples at concentrations ranging from 3.4 μg/L at MW10 to 42.9 μg/L at MW14. Benzene was detected above its MCL (5 μg/L) at wells MW7, MW9, and MW14.

Ethylbenzene was detected or estimated in 6 of 12 downgradient groundwater samples. The concentrations of ethylbenzene in the shallow aquifer ranged from 0.23J μg/L at MW5 to 1.4 μg/L at wells MW7 and MW10.

Toluene was estimated in 4 of 12 downgradient groundwater samples at concentrations ranging from 0.45J μg/L at MW3 to 1 μg/L at MW9. Toluene was detected in the background well (MW1) at a concentration of 0.64J μg/L.

Total xylenes were detected in 8 of 12 downgradient groundwater samples at concentrations ranging from 1 μg/L at MW18 to 10.8 μg/L at MW14.

Benzene; ethylbenzene; total xylenes; 1,2-dichloroethene; and toluene are considered to be SRCs from the CY 2004 groundwater sampling.

SVOCs. Twelve SVOCs (1,2-dichlorobenzene; 2-methylnaphthalene; 4-methylphenol; acenaphthene; benzoic acid; bis(2-ethylhexyl)phthalate; carbazole; dibenzofuran; fluorene; naphthalene; phenanthrene; and pyrene) were detected or estimated in groundwater during the CY 2004 sampling. The following constituents were detected in only one groundwater sample: 1,2-dichlorobenzene (1.7J μg/L at MW7); 4-methylphenol (2.1J μg/L at MW7); benzoic acid (12.9J μg/L at MW6); and pyrene (0.71J μg/L at MW4).

2-Methylnaphthalene was detected in 7 of 12 downgradient groundwater samples at concentrations ranging from 1.2 μg/L at MW15 to 33.3 μg/L at MW4.

Acenaphthene was detected or estimated in 3 of 12 downgradient groundwater samples at concentrations of 0.56J μg/L at MW9, 1J μg/L at MW14, and 2 μg/L at MW4.

Bis(2-ethylhexyl)phthalate was detected or estimated in 4 of 12 downgradient groundwater samples at concentrations ranging from 1.8J μg/L at MW17 to 2.8J μg/L at MW7.

Carbazole was estimated in 4 of 12 downgradient groundwater samples at concentrations ranging from 0.78J μg/L at MW7 to 3.1J μg/L at MW14.

Dibenzofuran was estimated in 4 of 12 downgradient groundwater samples at concentrations ranging from 0.46J μg/L at MW18 to 1.4J μg/L MW4 and MW14.

Fluorene was detected or estimated in 5 of 12 downgradient groundwater samples at concentrations ranging from 0.58J μg/L at MW10 to 3.5 μg/L at MW4.

Naphthalene was detected or estimated in 10 of 12 downgradient groundwater samples at concentrations ranging from 0.4J µg/L at MW3 to 43 µg/L at MW14.

Phenanthrene was detected or estimated in 5 of 12 downgradient groundwater samples at concentrations ranging from 0.84J µg/L at MW10 to 6.1 µg/L at MW4.

SVOCs were not detected in MW1 (site-specific background location) or MW17.

All 12 of the SVOCs detected in groundwater during the CY 2004 sampling [1,2-dichlorobenzene; 2-methylnaphthalene; 4-methylphenol; acenaphthene; benzoic acid; bis(2-ethylhexyl)phthalate; carbazole; dibenzofuran; fluorene; naphthalene; phenanthrene; and pyrene] are considered to be SRCs from the CY 2004 groundwater sampling.

Natural Attenuation Parameters. The groundwater samples were analyzed for the following natural attenuation parameters during CY 2004 sampling: iron, sulfate, sulfide, carbon dioxide, nitrate, nitrite, and methane.

Iron, the only metal analyzed, was detected in all 12 downgradient groundwater samples at concentrations ranging from 128J µg/L at MW17 to 9,310J µg/L at MW4. The concentrations at MW7 (8,930J µg/L) and MW4 (9,310J µg/L) exceed the U. S. Environmental Protection Agency Region III RBC of 4,378 µg/L (Table 5). Iron was also detected in the site-specific background location (MW1) at a concentration of 1,980 µg/L.

Sulfate was detected or estimated in 10 of 12 downgradient groundwater samples at concentrations ranging from 376J µg/L at MW5 to 8,920 µg/L at MW18. Sulfate was also estimated in the site-specific background location (MW1) at a concentration of 925J µg/L.

Carbon dioxide was detected in 5 of 13 downgradient groundwater samples at concentrations ranging from 52,700 µg/L at MW3 to 315,000 µg/L at MW17.

Methane was detected in 11 of 12 downgradient groundwater samples at concentrations ranging from 20.4 µg/L at MW5 to 293 µg/L at MW18. Methane was also estimated in the site-specific background location (MW1) at a concentration of 18.3 µg/L.

Nitrate, nitrite, and sulfide were all non-detected at a detection limit of <100 µg/L.

2.4 GROUNDWATER ANALYSIS

The analysis of the groundwater analytical data presented in this section followed the protocol and decision flowchart approved by GA EPD for evaluating SRCs identified in groundwater collected after the establishment of RLs through either an RFI report and/or a CAP (Appendix A). SRCs in groundwater from the CY 2004 sampling event included 5 VOCs and 12 SVOCs. The VOCs were 1,2-dichloroethene; benzene; ethylbenzene; toluene; and total xylenes. The SVOCs were 1,2-dichlorobenzene; 2-methylnaphthalene; 4-methylphenol; acenaphthene; benzoic acid; bis(2-ethylhexyl)phthalate; carbazole; dibenzofuran; fluorene; naphthalene; phenanthrene; and pyrene. The results of the SRC evaluation are summarized in Table 6 and are discussed below.

Table 6. Evaluation of Site-Related Constituents in Groundwater, SWMU 27F, Northwest of Building 1340

Analyte	Maximum Detect from RFI	Maximum Detect 2004	Station at Maximum Detect 2004	EPA Region 3 Tap Water	Maximum Detect >RBC	Present Remedial Level	New COC?	Justification
Volatile Organic Compounds (µg/L)								
1,2-Dichloroethene	ND	0.49	MW4	5.48	No	None	No	Concentration above previous maximum; however, concentration does not exceed EPA Region 3 RBC. Therefore, no further action required
Benzene	61	42.9	MW14	0.34	Yes	5	No	Remedial level exists. Continue remediation proposed in CAP
Ethylbenzene	7	1.4	MW7	134	No	None[a]	No	Concentration below previous maximum from RFI; therefore, no further evaluation is required
Toluene	ND	1	MW9	74.70	No	None	No	Concentration above previous maximum; however, concentration does not exceed EPA Region 3 RBC. Therefore, no further action required
Xylenes, Total	38.5	10.8	MW14	21.26	No	None[a]	No	Concentration below previous maximum from RFI; therefore, no further evaluation is required
Semivolatile Organic Compounds (µg/L)								
1,2-Dichlorobenzene	ND	1.7	MW7	26.82	No	None	No	Concentration above previous maximum; however, concentration does not exceed EPA Region 3 RBC. Therefore, no further action required
2-Methylnaphthalene	31.9	33.3	MW4	2.43	Yes	None[a]	Yes	Concentration slightly above previous maximum and EPA Region 3 RBC. Groundwater will be monitored as part of corrective action
4-Methylphenol	21.3	2.1	MW7	18.25	No	None[a]	No	Concentration below previous maximum from RFI; therefore, no further evaluation is required
Acenaphthene	ND	2	MW4	36.50	No	None	No	Concentration above previous maximum; however, concentration does not exceed EPA Region 3 RBC. Therefore, no further action required
Benzoic Acid	ND	12.9	MW6	14600	No	None	No	Concentration above previous maximum; however, concentration does not exceed EPA Region 3 RBC. Therefore, no further action required
Bis(2-ethylhexyl)phthalate	ND	2.8	MW6	4.78	No	None	No	Concentration above previous maximum; however, concentration does not exceed EPA Region 3 RBC. Therefore, no further action required

Table 6. Evaluation of Site-Related Constituents in Groundwater, SWMU 27F, Northwest of Building 1340 (continued)

Analyte	Maximum Detect from RFI	Maximum Detect 2004	Station at Maximum Detect 2004	EPA Region 3 Tap Water	Maximum Detect >RBC	Present Remedial Level	New COC?	Justification
Carbazole	5.7	3.1	MW14	3.35	No	34.9	No	Concentration below previous maximum and remedial level established in the RFI. Therefore, no further action required
Dibenzofuran	ND	1.4	MW4	1.22	Yes	None	Yes	Concentration above previous maximum and EPA Region 3 RBC. Groundwater will be monitored as part of corrective action
Fluorene	2.1	3.5	MW4	24.33	No	None[a]	No	Concentration above previous maximum; however, concentration does not exceed EPA Region 3 RBC. Therefore, no further action required
Naphthalene	37.2	43	MW14	0.65	Yes	None[a]	Yes	Concentration slightly above previous maximum and EPA Region 3 RBC. Groundwater will be monitored as part of corrective action
Phenanthrene	ND	6.1	MW4	18.25	No	None	No	Concentration above previous maximum; however, concentration does not exceed EPA Region 3 RBC. Therefore, no further action required
Pyrene	ND	0.71	MW4	18.25	No	None	No	Concentration above previous maximum; however, concentration does not exceed EPA Region 3 RBC. Therefore, no further action required

[a]No remedial level was established in the Phase II Resource Conservation and Recovery Act facility investigation because the human health baseline risk assessment indicated that the calculated risk was below the incremental lifetime cancer risk of 1×10^{-6} and the hazard index of 1.0; therefore, the constituent was not a risk driver and was dismissed.

CAP = Corrective Action Plan.
COC = Constituent of concern.
EPA = U.S. Environmental Protection Agency.
ND = Not detected.
RBC = Risk-based concentration.
RFI = Resource Conservation and Recovery Act (RCRA) facility investigation.
SRC = Site-related constituent.
SWMU = Solid waste management unit.

1,2-Dichloroethene. 1,2-Dichloroethene was not previously detected in groundwater. 1,2-Dichloroethene was detected below its Region III RBC; therefore, no further evaluation is required.

Benzene. Benzene was identified as a groundwater COC in the revised final Phase II RFI addendum report (SAIC 2001) and the CAP (SAIC 2004). A RL of 5 µg/L was established in the Phase II RFI. Benzene concentrations continue to exceed the RL and will continue to be remediated under the corrective action proposed in the CAP (SAIC 2004).

Ethylbenzene. Ethylbenzene was detected below the concentration of the maximum concentration detected in the Phase II RI; therefore, no further evaluation is required.

Toluene. Toluene was not previously detected in groundwater. Toluene was detected below its Region III RBC; therefore, no further evaluation is required.

Total Xylenes. Total xylenes were detected below the concentration of the maximum concentration detected in the Phase II RI; therefore, no further evaluation is required.

1,2-Dichlorobenzene. 1,2-Dichlorobezene was not previously detected in groundwater. 1,2-Dichlorobezene was detected below its Region III RBC; therefore, no further evaluation is required.

2-Methylnaphthalene. 2-Methylnaphthalene was not identified as a groundwater COC in the revised final Phase II RFI addendum report (SAIC 2001); however, 2-methylnaphthalene was identified as a constituent of potential concern (COPC) but was dismissed during the baseline human health risk assessment (BHHRA) because the calculated risk for a concentration of 31.9 µg/L was below the hazard index (HI) of 0.1 for the following receptors: future on- and off-site installation worker, resident child or resident adult, and future on-site trespasser juvenile (SAIC 2001). 2-Methylnaphthalene does not represent a carcinogenic risk. During the CY 2004 sampling, the maximum detection of 2-methynaphthalene was 33.3 µg/L compared to 31.9 µg/L during the Phase II RFI (Table 6). There was no significant difference in the maximum detections of 2-methylnaphthalene between CY 2004 and the Phase II RFI. In accordance with the protocol for evaluating constituents in groundwater after approval of the RFI report or CAP (Appendix A), two consecutive detections of a constituent above previous maximum concentrations and the EPA Region III RBC for tap water would require the development of an RL and its potential designation as a COC. However, since there is no statistical difference between the measurements, the risk for the CY 2004 maximum concentration (33.3 µg/L) is still below an HI of 0.1. Therefore, 2-methylnaphthalene does not represent a risk to human health. The concentration of 2-methylnaphthalene will continue to be monitored under the corrective action proposed in the CAP.

4-Methylphenol. 4-Methylphenol was detected below the concentration of the maximum concentration identified in the Phase II RI; therefore, no further evaluation is required.

Acenaphthene. Acenaphthene was not previously detected in groundwater. Acenaphthene was detected below its Region III RBC; therefore, no further evaluation is required.

Benzoic Acid. Benzoic acid was not previously detected in groundwater. Benzoic acid was detected below its Region III RBC; therefore, no further evaluation is required.

Bis(2-ethylhexyl)phthalate. Bis(2-ethylhexyl)phthalate was not previously detected in groundwater. Bis(2-ethylhexyl)phthalate was detected below its Region III RBC; therefore, no further evaluation is required.

Carbazole. Carbazole was identified as a groundwater COC in the revised final Phase II RFI addendum report (SAIC 2001) and in the CAP (SAIC 2002). A RL of 34.9 µg/L was derived. The maximum estimated concentration of carbazole (3.1J µg/L) was below the established RL of 34.9 µg/L and the maximum concentration detected in the RFI (5.7 µg/L); therefore, the corrective action for carbazole has been achieved.

Dibenzofuran. Dibenzofuran was not previously detected in groundwater. Dibenzofuran was detected above its Region III RBC; therefore, no further evaluation is required. In accordance with the protocol established after the issuance of the RFI or CAP (Appendix A), the next groundwater-sampling event will confirm if dibenzofuran is a concern.

Fluorene. Fluorene was detected above the previous MDC during the Phase II RI. Fluorene was detected an order of magnitude below the EPA Region III RBC; therefore, no further evaluation is required.

Naphthalene. Naphthalene was not identified as a groundwater COC in the revised final Phase II RFI addendum report (SAIC 2001) or the CAP (SAIC 2004); however, it was identified as a COPC but dismissed during the BHHRA because the calculated risk for a concentration of 37.2 µg/L was below the HI of 0.1 for the following receptors: future on- and off-site installation worker, resident child or resident adult, and future on-site trespasser juvenile (SAIC 2001). Naphthalene does not represent a carcinogenic risk. During the CY 2004 sampling, the maximum detection of naphthalene was 43 µg/L compared to 37.2 µg/L during the Phase II RFI. There is essentially no statistical difference between CY 2004 and Phase II RFI. In accordance with the protocol for evaluating constituents in groundwater after approval of the RFI report or CAP (Appendix A), two consecutive detections of a constituent above previous maximum concentrations and the EPA Region III RBC for tap water would require the development of an RL and its potential designation as a COC. However, since there is no statistical difference between the measurements, the risk for the CY 2004 maximum concentration (43 µg/L) is still below an HI of 0.1. Therefore, naphthalene does not represent a risk to human health. The concentration of naphthalene will continue to be monitored under the corrective action proposed in the CAP.

Phenanthrene. Phenanthrene was not previously detected in groundwater. Phenanthrene was detected below its Region III RBC; therefore, no further evaluation is required.

Pyrene. Pyrene was not previously detected in groundwater. Pyrene was detected below its Region III RBC; therefore, no further evaluation is required.

It should be noted that a full suite for VOCs and SVOCs are analyzed as part of the monitoring program for the natural attenuation alternative; therefore, any potential COCs are continually monitored as part of the corrective action.

3.0 UPDATE OF THE FATE AND TRANSPORT MODEL

Fate and transport modeling was used to evaluate MNA as the selected remedial alternative for soil and groundwater contamination for the CAP at SWMU 27F, and the results were presented in Section 2.15 and Appendix G of that report (SAIC 2004). At the time of the issuance of the CAP, the sampling data used in the fate and transport analysis were analytical data obtained up to January 2001. Since that time, groundwater results collected in CY 2002 (SAIC 2003) and this most recent data presented in this report (CY 2004) were used to validate and/or update the transport model, as necessary.

As discussed in Chapter 2, SRCs in groundwater from the CY 2004 sampling event included 5 VOCs and 12 SVOCs. The VOCs were 1,2-dichloroethene; benzene; ethylbenzene; toluene; and total xylenes. The SVOCs were 1,2-dichlorobenzene; 2-methylnaphthalene; 4-methylphenol; acenaphthene; benzoic acid; bis(2-ethylhexyl)phthalate; carbazole; dibenzofuran; fluorene; naphthalene; phenanthrene; and pyrene. Of these, only benzene, 2-methylnaphthalene, and dibenzofuran were considered to be of potential concern. Benzene is a COC with an established RL of 5 μg/L. Benzene has been the primary constituent modeled since it is the most mobile of the contaminants at SWMU 27F. 2-Methylnaphthalene has been detected slightly above concentrations detected in the RFI but at concentrations that are not statistically different than the maximum detect from the RFI. Dibenzofuran has only been detected once and at a concentration slightly above its Region III RBC for tap water. Therefore, the modeling was only updated for benzene, the primary COC in the groundwater and the most mobile. Table 7 presents a summary of the inputs for both the previous (CY 2002) and the current (CY 2004) modeling for benzene in groundwater. The groundwater results for benzene from CY 2004 were used to validate and/or update the transport model, as discussed below.

Table 7. Summary of Input Parameter Used for AT123D Modeling, SWMU 27F, Northwest of Building 1340

Parameter	Benzene	
	CY 2002 Modeling	CY 2004 Modeling
Release rate (mg/hour)	Variable (1.7 to 4.9)	Variable (1.4 to 7.5)
Plume size (m × m)	10 × 6	17 × 6
Bulk density (g/cc)	1.69	1.69
Effective porosity (%)	20	20
Hydraulic conductivity (m/hour)	0.055	0.055
Hydraulic gradient (m/m)	0.0054	0.00184
Kd (L/kg)	0.5589	0.5589
Longitudinal dispersivity (m)	10	15
Transverse dispersivity (m)	3	5
Vertical dispersivity (m)	1	1.5
Molecular diffusion (m^2/hour)	3.53E-06	3.53E-06
Biodegradation rate ($hour^{-1}$)	4.01E-05	4.01E-05

AT123D = Analytical Transient 1-, 2-, 3-Dimensional (model).
CY = Calendar year.
SWMU = Solid waste management unit.

The maximum groundwater concentration of benzene at this site was observed to be 42.9 μg/L (MW14) from the August 2004 groundwater sampling. However, the concentration was predicted to be 51 μg/L based the Analytical Transient 1-, 2-, 3-Dimensional (AT123D) model calibrated against the September 2002 sampling results. Therefore, the AT123D model was recalibrated to this new concentration with the revised horizontal hydraulic gradient observed during CY 2004 sampling. Although the concentration in MW14 decreased significantly as compared to the model prediction, concentrations in other wells (MW7, MW9, and MW10) almost doubled. To account for contamination in these wells, the source size had to be increased, thereby increasing the source loading. Therefore, the model was calibrated by adjusting the loading rates and the source size. As with the previous modeling results (SAIC 2003), the updated modeling indicates that benzene migration from SWMU 27F will not be of concern at the nearest receptor location (man-made drainage ditch, approximately 450 ft southwest of the site). Based on the updated fate and transport modeling, the benzene concentration is not expected to

ever exceed its RL (MCL) beyond 50 ft downgradient from MW 14 (Table 8). The updated modeling results also indicate that the groundwater concentration of benzene at this site will be reduced to below its MCL within 8 years (from September 2002) (Figure 8), which is a slightly longer timeframe than that predicted in the CAP Progress Report for CY 2002 (i.e., 6.5 years from September 2002; Table 9). The natural attenuation time has slightly increased mainly because the hydraulic gradient has decreased, thereby decreasing the dilution due to advection.

Table 8. Dilution and Attenuation Factors, SWMU 27F, Northwest of Building 1340

Distance to Receptor (ft)	Predicted Maximum Concentration of Benzene in Groundwater	
	(mg/L)	DAF
0.00	56.3	1.00
3	47.0	1.20
7	38.7	1.45
10	32.0	1.76
13	26.7	2.11
16	22.4	2.51
20	18.9	2.98
23	16.0	3.52
26	13.7	4.11
30	11.7	4.8
33	10.0	5.6
39	7.4	7.6
49	4.8	11.8
66	2.3	25
89	0.8	70
98	0.5	120

DAF = Dilution attenuation factor.
SWMU = Solid waste management unit.

Table 9. Summary of Results from Previous and Updated Modeling, SWMU 27F, Northwest of Building 1340

COPCs	Previous Modeling		Updated Modeling	
	Concern at Receptor?	Natural Attenuation Time (Years from September 2002)	Concern at Receptor?	Natural Attenuation Time (Years from September 2002)
Benzene	No	6.5	No	8.0

COPC = Constituent of potential concern.
SWMU = Solid waste management unit.

It should be noted that free product was observed in MW4 and MW12 during the August 2004 sampling. If this free product is not removed then it might act as a continuous source, thereby creating a separate plume around MW12 and MW4. Therefore, concentrations in some of the wells may increase in the future.

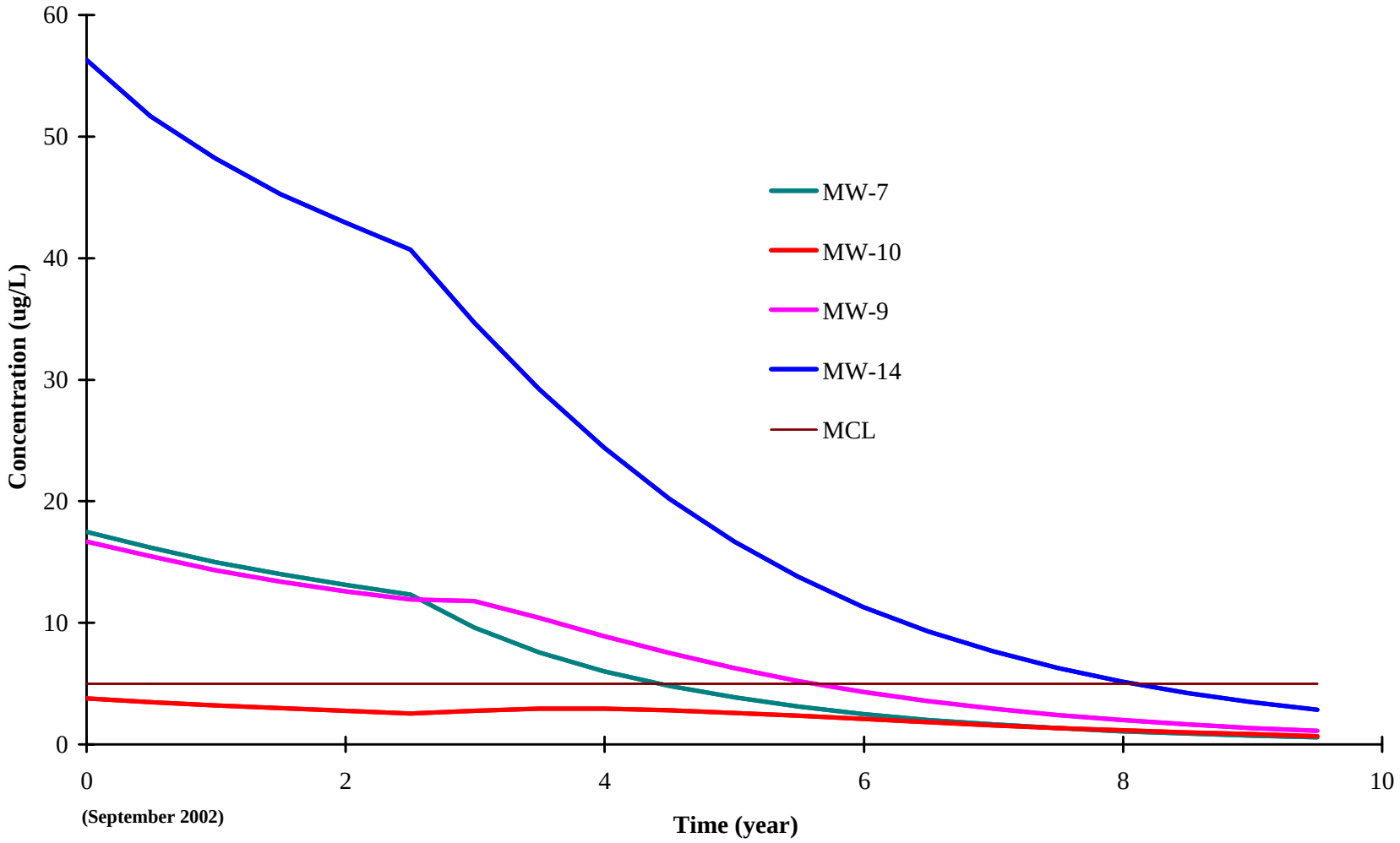

Figure 8. Predicted Concentration of Benzene in Groundwater Below the Source Using AT123D Modeling, SWMU 27F, Northwest of Building 1340

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 CONCLUSIONS

Groundwater samples were collected during the CY 2004 sampling event in accordance with the selected remedial alternative recommended for SWMU 27F (SAIC 2004). The conclusions below are presented by medium sampled during the CY 2004 event.

4.1.1 Groundwater Results for Calendar Year 2004

Constituents detected in groundwater during the CY 2004 groundwater-sampling event included 5 VOCs and 12 SVOCs. The VOCs were 1,2-dichloroethene; benzene; ethylbenzene; toluene; and total xylenes. The SVOCs were 1,2-dichlorobenzene; 2-methylnaphthalene; 4-methylphenol; acenaphthene; benzoic acid; bis(2-ethylhexyl)phthalate; carbazole; dibenzofuran; fluorene; naphthalene; phenanthrene; and pyrene. Benzene and carbazole have established RLs developed in the Phase II RFI report of 5 and 34.9 µg/L, respectively. The concentration of benzene remains above its RL; therefore, corrective action is not complete for that constituent. The maximum concentration of carbazole (3.1J µg/L) was below its RL (34.9 µg/L) and the maximum concentration detected in the RFI (5.7 µg/L); therefore, corrective action for this constituent is considered complete. Of the remaining constituents, only three, 2-methylnaphthalene, naphthalene, and dibenzofuran, were detected above Region III RBCs. Dibenzofuran (1.4 µg/L) was detected only slightly above its EPA Region III RBC (1.22 µg/L) during the CY 2004 sampling event and will be confirmed by the next groundwater-sampling event. 2-Methylnaphthalene and naphthalene continue to be sporadically detected at monitoring wells at levels slightly higher than the maximum concentration detected during the RFI and above the Region III RBC for tap water. However, the concentrations are not high enough to exceed an HI of 0.1; therefore, 2-methylnaphthalene and naphthalene do not represent a risk to human health.

Table 10 presents the concentrations of benzene, carbazole, 2-methylnaphthalene, and naphthalene in shallow groundwater since 1999. Benzene and carbazole were selected because they are COCs in groundwater. 2-Methylnaphthalene and naphthalene were selected because they continue to be sporadically detected and at concentrations only slightly higher than the maximum concentration detected during the RFI and above the Region III RBC for tap water. Table 10 indicates that benzene tends to be decreasing or staying relatively constant at low concentrations in most of the monitoring wells. Wells MW9 and MW14 have the most predominant change in concentration. In MW14, benzene has decreased from a concentration of 79.1 µg/L in CY 2000 to 42.9 µg/L in CY 2004. However, in MW9, the benzene concentration has increased from 4.4 µg/L in CY 2002 to 16.4 µg/L in CY 2004. Figure 9 presents the estimated nature and extent of benzene contamination based on CY 2004 groundwater sampling. Carbazole has never been detected above its RL.

As discussed previously, 2-methylnaphthalene and naphthalene do not presently represent a risk to human health; however, their concentrations are indicating an increasing trend and migration. The location of the maximum concentration has changed. During the Phase II RFI, the maximum concentration of 2-methylnaphthalene and naphthalene was detected at MW14. The detected concentration of 2-methylnaphthalene in MW14 in CY 2004 was lower than the detected concentration during the Phase I RFI and in CY 2002; thus, indicating a decreasing trend at this location. MW4, a well located slightly side-gradient to the former OWS, has shown a slight increase in the concentration of 2-methylnaphthalene from the Phase II RFI. The concentration was 15.6 µg/L in 2001 and has increased to 33.4 and 33.3 µg/L in CY 2002 and CY 2004, respectively. The maximum concentrations of 2-methylnaphthalene and naphthalene remain essentially the same; however, their plume has migrated more to the southwest of the site.

Table 10. Concentrations of Benzene, Carbazole, 2-Methylnaphthalene, and Naphthalene in Shallow Groundwater Since 1999 at SWMU 27F, Northwest of Building 1340

Station	Remedial Level	MW1	MW1	MW1	7J-MW1	7J-MW3	7J-MW3	7J-MW3	7J-MW3	7J-MW4
Sample ID		7J4171	7J4172	7J4173	7J4174	7J4371	7J4372	7J4373	7J4374	7J4471
Date		11/02/99	01/05/01	09/19/02	08/19/04	11/01/99	01/05/01	09/20/02	08/19/04	11/01/99
Benzene	5									
2-Methylnaphthalene	None[a]					4.1 J				
Carbazole	34.9									
Naphthalene	None[a]					4.4 J	1	1 J	0.4 J	

Station	Remedial Level	7J-MW4	7J-MW4	7J-MW4	7J-MW5	7J-MW5	7J-MW5	7J-MW5	7J-MW6	7J-MW6
Sample ID		7J4472	7J4473	7J4474	7J4571	7J4572	7J4573	7J4574	7J4671	7J4672
Date		01/06/01	09/20/02	08/20/04	11/02/99	01/05/01	09/19/02	08/19/04	11/01/99	01/07/01
Benzene	5	1.5	0.53 J							0.17 J
2-Methylnaphthalene	None[a]	15.6	33.4	33.3						
Carbazole	34.9		1.2 J							
Naphthalene	None[a]	11	15.5	11.8				1.4		

Station	Remedial Level	7J-MW6	7J-MW6	7J-MW7	7J-MW7	7J-MW7	7J-MW7	7J-MW9	7J-MW9	7J-MW9
Sample ID		7J4673	7J4674	7J4771	7J4772	7J4773	7J4774	7J4971	7J4972	7J4973
Date		09/20/02	08/19/04	11/01/99	01/06/01	09/19/02	08/20/04	11/02/99	01/05/01	09/19/02
Benzene	5				**31.4**	4.3	**12.2**	4.6	**5.8**	4.4
2-Methylnaphthalene	None[a]				7.4	1.3	2.8		2.3	1.4
Carbazole	34.9						0.78 J			
Naphthalene	None[a]	0.16 J	1.6			1.4	3.7		3.6	3.2

Table 10. Concentrations of Benzene, Carbazole, 2-Methylnaphthalene, and Naphthalene in Shallow Groundwater Since 1999 at SWMU 27F, Northwest of Building 1340 (continued)

Station	Remedial Level	7J-MW9	7J-MW10	7J-MW10	7J-MW10	7J-MW10	7J-MW13	7J-MW13	7J-MW14	7J-MW14
Sample ID		**7J4974**	**7J4A71**	**7J4A72**	**7J4A73**	**7J4A74**	**7J4D71**	**7J4D72**	**7J4E71**	**7J4E72**
Date		**08/19/04**	**11/01/99**	**01/07/01**	**09/23/02**	**08/20/04**	**11/29/00**	**01/07/01**	**11/30/00**	**01/06/01**
Benzene	5	**16.4**	**8.5**	2.4	2.9	3.4			**79.1**	**61**
2-Methylnaphthalene	None[a]	11.6	10.8 J	1.7	4.1	6.4	NA		NA	31.9
Carbazole	34.9	2.6 J				1.1 J	NA		NA	5.7 J
Naphthalene	None[a]	19.8	6.4 J	1.2	2.6	4.6	NA		NA	37.2

Station	Remedial Level	7J-MW14	7J-MW14	7J-MW15	7J-MW15	7J-MW15	7J-MW15	7J-MW16	7J-MW16	7J-MW16
Sample ID		**7J4E73**	**7J4E74**	**7J4F71**	**7J4F72**	**7J4F73**	**7J4F74**	**7J4G71**	**7J4G72**	**7J4G73**
Date		**09/19/02**	**08/20/04**	**11/29/00**	**01/06/01**	**09/19/02**	**08/20/04**	**12/05/00**	**01/06/01**	**09/20/02**
Benzene	5	**57.3**	**42.9**					2.1	0.28 J	
2-Methylnaphthalene	None[a]	32	25.5	NA			1.2	NA		
Carbazole	34.9	4.4 J	3.1 J	NA				NA		
Naphthalene	None[a]	45.9	43	NA			4.1	NA		

Station	Remedial Level	7J-MW16	7J-MW17	7J-MW17	7J-MW17	7J-MW17	7J-MW18	7J-MW18	7J-MW18	7J-MW18
Sample ID		**7J4G74**	**7J4H71**	**7J4H72**	**7J4H73**	**7J4H74**	**7J4J71**	**7J4J72**	**7J4J73**	**7J4J74**
Date		**08/19/04**	**12/05/00**	**01/06/01**	**09/19/02**	**08/20/04**	**12/05/00**	**01/08/01**	**09/19/02**	**08/19/04**
Benzene	5		2						0.38 J	
2-Methylnaphthalene	None[a]		NA				NA		5.1	10.6
Carbazole	34.9		NA				NA			
Naphthalene	None[a]		NA		1 J		NA	3.8	4.9	9.7

[a]No remedial level was established in the Phase II Resource Conservation and Recovery Act facility investigation because the human health baseline risk assessment indicated that the calculated risk was below the incremental lifetime cancer risk of 1×10^{-6} and the hazard index of 1.0; therefore, the constituent was not a risk driver and was dismissed.
ID = Identifier.
J = Estimated value.
NA = Not available.
RBC = Risk-based concentration.
SWMU = Solid waste management unit.
Bold indicates concentration exceeds remedial level.

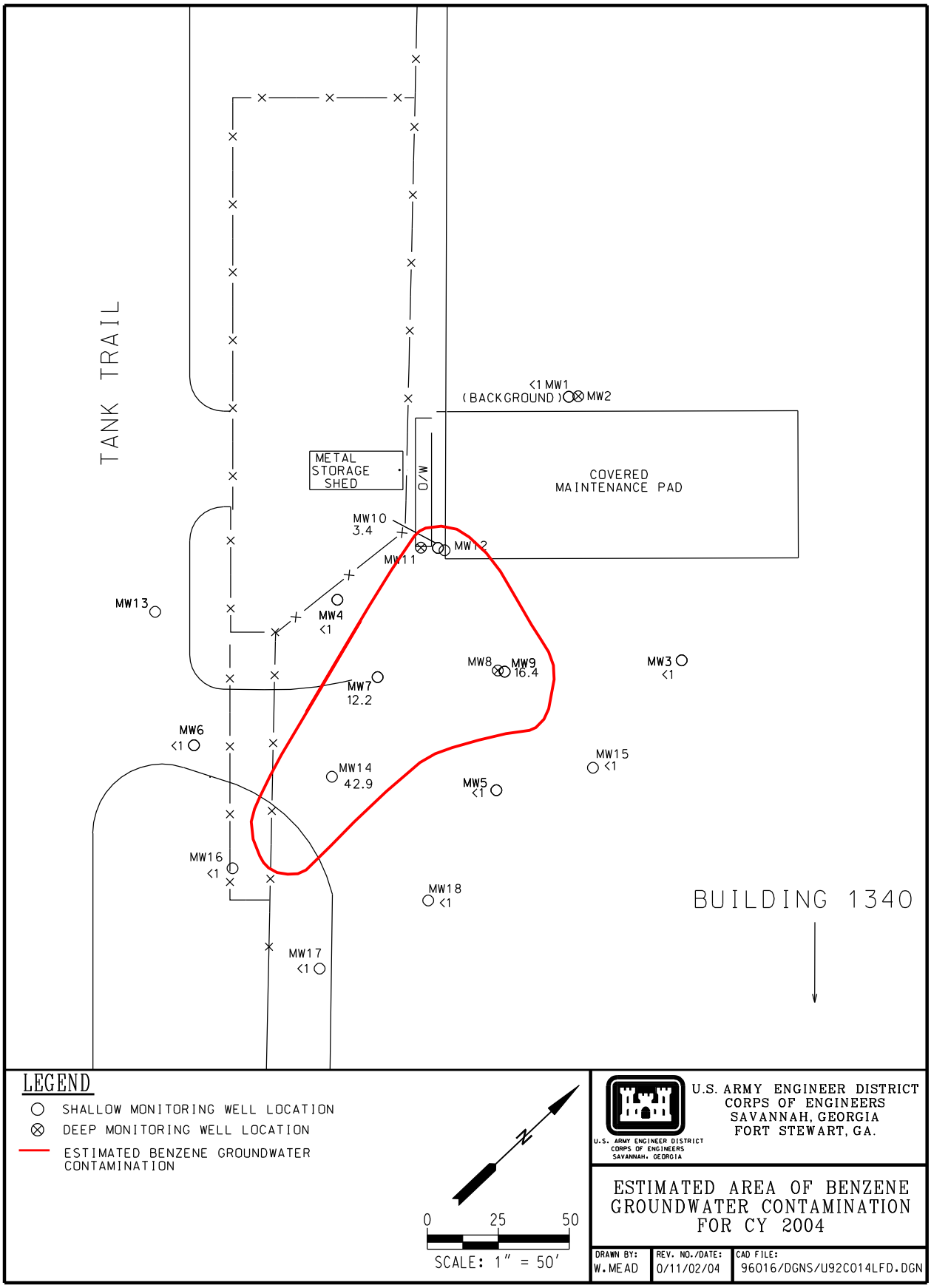

Figure 9. Estimated Area of Benzene Groundwater Contamination for CY 2004, SWMU 27F, Northwest of Building 1340

Free product was measured in MW4 and MW12 during the CY 2004 groundwater-sampling event. The accumulation of free product is slow and is probably the result of residual contamination in the soil being flushed out. At present, the small amount of free product has not changed the concentrations of contaminants in groundwater.

4.1.2 Update of the Fate and Transport Model

The modeling performed in the CAP for SWMU 27F to evaluate the fate and transport and natural attenuation of benzene was calibrated/verified with the CY 2004 groundwater concentrations. The updated fate and transport modeling indicated that benzene would not impact the nearest receptor location (man-made drainage ditch approximately 450 ft southwest of the site). In addition, the modeling determined that the concentrations of benzene would be reduced to below its RL by natural attenuation processes within approximately 8 years from January 2002 (Table 10), which is a slightly longer timeframe than that predicted in the CAP (i.e., 6.5 years from January 2001). This slight increase in natural attenuation time is primarily due to a decrease in the hydraulic gradient, thereby decreasing the dilution due to advection.

4.2 RECOMMENDATIONS

Free product was measured in MW4 and MW12 during the CY 2004 groundwater-sampling event. The accumulation of free product is slow and is probably the result of residual contamination in the soil being flushed out. The quantities generated do not warrant active removal techniques. Passive techniques would be sufficient to remove the quantities accumulating in the two wells. Absorbent socks should be placed in MW4 and MW12 and removed quarterly.

The CAP for SWMU 27F proposed biannual (every 2 years) groundwater monitoring. Given the accumulation of measurable quantities of free product in MW12 and MW4, it is recommended that the biannual groundwater monitoring frequency of the 14 shallow monitoring wells be continued. Wells MW1 (background), MW3, MW4, MW5, MW6, MW7, MW9, MW10, MW13, MW14, MW15, MW16, MW17, and MW18 are located within, downgradient of, or near the contaminant plumes (Figure 9) at SWMU 27F and represent an effective groundwater network to monitor the characteristics and potential migration of the contaminant plume at SWMU 27F. MW13, a shallow groundwater well, has been added to the groundwater-sampling network. MW13 has not been included in this sampling scenario in the past because benzene contamination had not extended side-gradient to this location or other locations closer to the potential source. However, 2-methynaphthalene and naphthalene have been detected above EPA Region III RBCs in side-gradient monitoring wells nearer the potential source. Therefore, MW13 has been added to the groundwater network to ensure contamination has not migrated to this location. The groundwater should be sampled using low-flow techniques and analyzed for VOCs, SVOCs, and natural attenuation parameters. The results of the biannual groundwater sampling will be submitted biannually to GA EPD in a CAP progress report until RLs have been achieved.

The results of the next biannual groundwater-sampling event (CY 2006) will confirm the timeframe for achieving RLs for benzene and whether naphthalene and 2-methylnaphthalene represent a risk to human health and require the development of RLs.

5.0 REFERENCES

EPA (U. S. Environmental Protection Agency) 2002. *EPA Region III Risk-based Concentration Table*, EPA Region III, Hazardous Site Cleanup Division, <http://www.epa.gov/reg3hwmd/risk/riskmenu.htm.>

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

SAIC (Science Applications International Corporation) 1997. *Sampling and Analysis Plan for Phase II RCRA Facility Investigation of 16 Solid Waste Management Units at Fort Stewart, Georgia* (Revised Final), October.

SAIC 2000. *Phase II RCRA Facility Investigation Report for 16 Solid Waste Management Units at Fort Stewart, Georgia* (Revised Final), April.

SAIC 2001. *Addendum for SWMU 27F: 3d Engineer Brigade, Northwest of Building 1340 to the Revised Final Phase II RCRA Facility Investigation Report for 16 Solid Waste Management Units at Fort Stewart, Georgia* (Revised Final), June.

SAIC 2003. *Corrective Action Plan Progress Report for Calendar Year 2002 for the Solid Waste Management Unit 27F: 3d Engineer Brigade, Northwest of Building 1340 at Fort Stewart, Georgia* (Final), January.

SAIC 2004. *Corrective Action Plan for the 3d Engineering Brigade, Northwest of Building 1340 (Solid Waste Management Unit 27F) at Fort Stewart Military Reservation, Fort Stewart, Georgia* (Revised Final), November.

APPENDIX A

PROTOCOL FOR ESTABLISHING REMEDIAL LEVELS

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Longaker, Jeff

From: Brent Rabon [brent_rabon@mail.dnr.state.ga.us]
Sent: Friday, May 04, 2001 3:06 PM
To: LittleDERA@aol.com
Subject: Re: Written Description which accompanies flowchart

Protocol.doc

Melanie, GA EPD has reviewed the Protocol proposed by Fort Stewart in your e-mail and facsimile (Little to Rabon) dated 30 April 2001 and 2 May 2001, respectively. Based upon that review and in order to expedite resolution of this issue, I have modified your version of the Written Description to accompany the flowchart (See attachment) and propose that some text be added (in bold) and deleted (struck out). Please note that modification of the hazardous constituents definition in the Written Description will also require modification of the one (1) applicable block in the flowchart.

The majority of the requested modifications are an attempt to make the proposal more generic for SWMUs which are not addressed by the Phase II RFI Report for 16 SWMUs dated April 2000 (e.g., SWMU 13). I do realize, however, that Fort Stewart may elect to modify the text in order to be more SWMU-specific when including this Protocol into a Corrective Action Plan.

Please do not hesitate to contact me should you have any questions concerning this e-mail.

Thank you,
Brent

>>> <LittleDERA@aol.com> 04/30/01 04:39PM >>>
See attached. Thanks, Melanie

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PROTOCOL FOR EVALUATING ADDITIONALLY DETECTED CONSTITUENTS IN GROUNDWATER AFTER APPROVAL OF A RCRA FACILITY INVESTIGATION REPORT

A.1 INTRODUCTION

Groundwater monitoring is typically suggested for solid waste management units (SWMUs) that have been recommended for a corrective action other than institutional controls to determine either the groundwater characteristics prior to development of the Corrective Action Plan (CAP) and/or as part of the remedial alternative [e.g., monitored natural attenuation (MNA)] recommended in the CAP. Additional groundwater monitoring might result in more constituents being detected in groundwater and/or constituents being detected at concentrations higher than those evaluated in the Georgia Environmental Protection Division (GEPD)–approved Resource Conservation and Recovery Act (RCRA) facility investigation (RFI) report. Constituents identified as constituents of potential concern (COPCs) in the RFI report are evaluated in human health and ecological risk assessments, and their risk is quantified. COPCs determined to present a risk to human health and/or the environment are identified as constituents of concern (COCs), and remedial levels are developed. COCs indicated at concentrations above remedial levels (and the source media of the COCs) are identified in the CAP as constituents requiring remedial action. The following presents the potential methodology for evaluating additional constituents and/or constituents detected at concentrations higher than those previously detected and that might not have indicated risk or for which a remedial level might not have been developed in the Phase II RFI.

A.2 PROTOCOL

Groundwater sampling and monitoring results will be evaluated to determine if significant changes are occurring in the types and concentrations of constituents present in the groundwater. An evaluation protocol has been developed to assess the potential increases in the groundwater concentrations of constituents not identified as COCs in the GEPD–approved RFI report. The accompanying decision chart (Figure A-1) presents the decision points required in the evaluation.

Identification. Initially the data will be evaluated to determine what constituents, if any, have increased concentrations in groundwater but were not addressed as COCs in the RFI, which would include constituents that were not detected during the RFI groundwater sampling. The maximum detected concentration from the monitoring data will be compared to the maximum detected concentration listed in the RFI. If the concentration is elevated (i.e., greater than the maximum detected concentration reported in the RFI), further evaluation will be required to determine if this constituent should be addressed under the remedial action. All constituents not previously detected will be evaluated further.

Confirmation. Given that groundwater concentrations are likely to fluctuate, a single elevated value does not indicate that the concentration of the constituent is increasing over time. The value might be a statistical aberration or the result of a temporary change in environmental conditions. If the elevated concentration represents a single event, confirmation of the results is required, and no further evaluation of the constituent should be undertaken until the sampling results have been confirmed during the next groundwater monitoring sampling event.

Screening. Upon confirmation of the sampling results, the maximum concentration will be screened using the U.S. Environmental Protection Agency Region III risk-based concentrations (RBCs) for tap

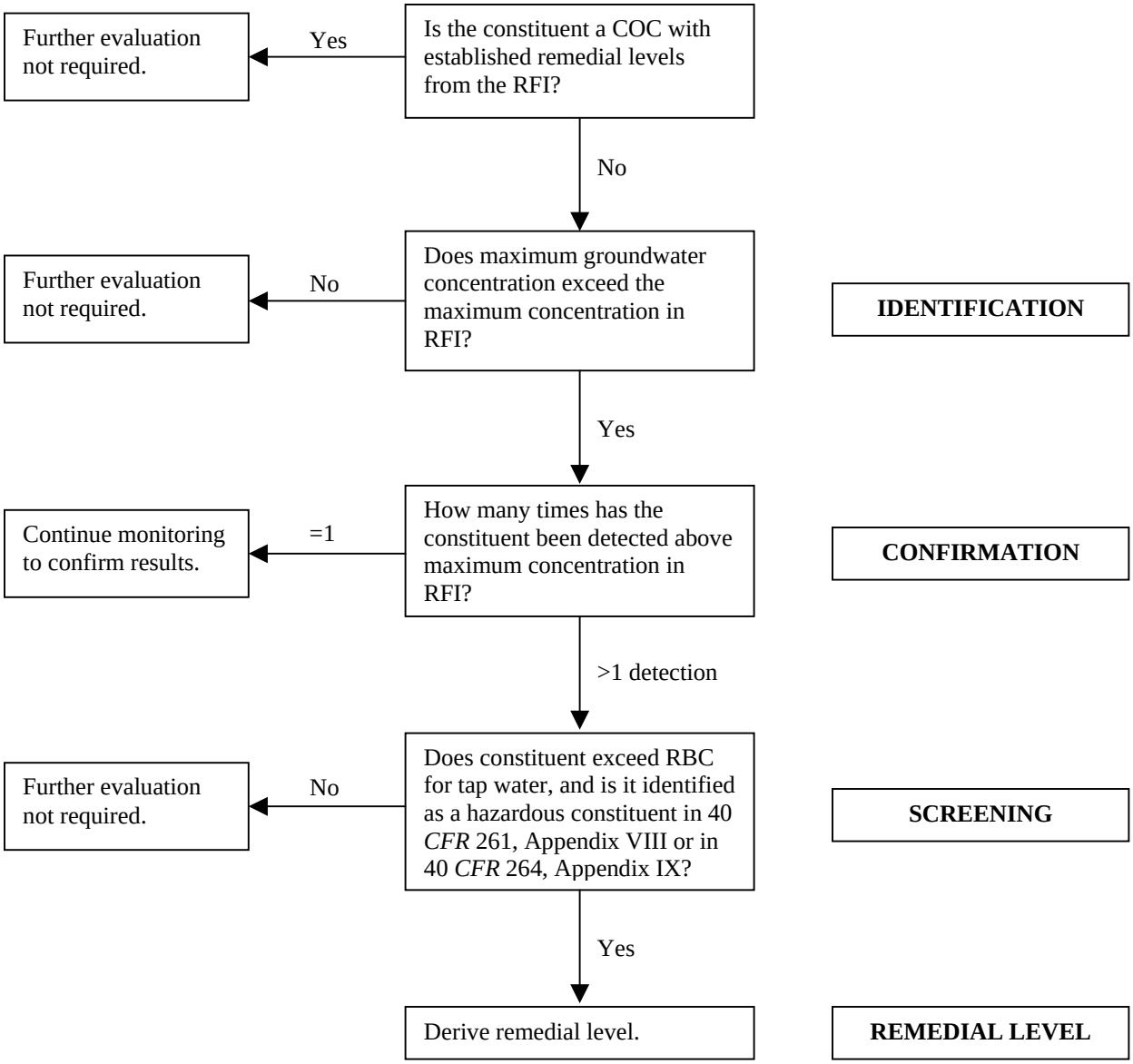

Figure A-1. Protocol for Developing Remedial Level

water as described in Section 7.3.2 ("Screening Values for Groundwater") of the revised final Phase II RFI report for 16 SWMUs at Fort Stewart, Georgia (SAIC 2000). These screening values were used in the Phase II RFI to identify human health COPCs in groundwater and will identify those constituents that might have an adverse effect on human health. In addition, if the constituent is not listed in Title 40, *Code of Federal Regulations (CFR),* Part 261, Appendix VIII or in 40 *CFR* 264, Appendix IX [see the definition of hazardous constituents in Section I.E of the Fort Stewart Hazardous Waste Facility Permit #HW-045(S&T)]**,** then it will not be considered a hazardous constituent and will be eliminated.

Remedial Level Development. A remedial level will be derived for each constituent with a maximum concentration that exceeds the RBC. The remedial level will be derived using the protocols established for that site in the Phase II RFI. If a risk-based remedial level is derived for the constituent, the total risk for exposure to groundwater constituent concentrations equal to the remedial levels should not exceed a hazard index of 3 or an incremental lifetime cancer risk of 1×10^{-4} (GEPD 1996).

Documentation. Groundwater monitoring data collected to determine present characteristics prior to development of the CAP will be evaluated under the section "Supplemental Data Evaluation" in the CAP. The supplemental data evaluation will be presented as an appendix and summarized in Chapter 2.0 of the CAP. The evaluation of potential additional constituents and/or the detection of constituents at concentrations greater than previously reported and potential remedial level development will be presented in the supplemental data evaluation in the CAP.

Groundwater monitoring data collected as part of the selected and implemented remedial alternative will be reported to GEPD in CAP progress reports. The reporting period will be dictated by the remedial alternative being implemented. For example, MNA typically has an annual reporting schedule, while active remedial action alternatives (e.g., in situ chemical oxidation) may be reported after the performance of the remedial alternative and at subsequent intervals thereafter. The reports to be issued and the reporting schedule will be documented in the CAP. The evaluation of potential additional constituents and/or the detection of constituents at concentrations greater than previously reported and potential remedial level development will be presented in the CAP progress reports. This protocol will be presented and established in the operations and maintenance plan and MNA checklist (if MNA is selected), both of which will be appendices to the CAP.

A.3 REFERENCES

GEPD (Georgia Environmental Protection Division) 1996. *Guidance for Selecting Media Remediation Levels at RCRA Solid Waste Management Units,* Atlanta, Georgia, November.

SAIC (Science Applications International Corporation) 2000. *Phase II RCRA Facility Investigation Report for 16 Solid Waste Management Units at Fort Stewart, Georgia* (Revised Final), Oak Ridge, Tennessee, April.

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APPENDIX B

ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY FORMS

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STATE OF GEORGIA
ENVIRONMENTAL LABORATORY ACCREDITATION

	Name of Laboratory:	**General Engineering Laboratories, Inc.**
	Address:	P.O. Box 30712 2040 Savage Road Charleston, SC 29407
	Contact:	Bob Pullano
	Telephone number:	(843) 556-8171
	Fax number:	(843) 766-1178
#1	Accrediting Authority:	**State of South Carolina**
	Accreditation Number:	SC-10120001
	Effective Date:	Extension granted while recertification in process; January 27, 2003
	Expiration Date:	March 26, 2005
	Accreditation Scope:	SDWA, CWA, RCRA, CERCLA
#2	Accrediting Authority:	**State of Florida**
	Accreditation Number:	E-87156
	Effective Date:	July 1, 2001 (initial and reaccredited on July 1 each year thereafter)
	Expiration Date:	June 30, 2005
	Accreditation Scope:	SDWA, CWA, RCRA, CERCLA

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ANALYTICAL RESULTS

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Fort Stewart - SWMU 27F

Station: 7J-MW-01 **Northing:** 684433.2503 **Easting:** 821537.7857
Coord System: GA83East **Method:**

Station: 7J-MW-01
Sample ID: 7J4174 **Media:** Groundwater
Date Collected: 08/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Common Anions	**General Engineering Laboratory**							
EPA 300.0	Nitrate	0.0341	MG/L	U	UJ	I02	0.0341	1
	Nitrite	0.0542	MG/L	U	UJ	I02	0.0542	1
	Sulfate	0.925	MG/L		J	I02	0.193	1
General Chemistry	**General Engineering Laboratory**							
SM4500-CO2	Carbon Dioxide	1	MG/L	U	U		1	1
EPA 376.2	Sulfide	0.0248	MG/L	U	U		0.0248	1
Inorganics	**General Engineering Laboratory**							
SW846 6010	Iron	1980	UG/L		=		4.37	1
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	1,2,4-Trichlorobenzene	9.6	UG/L	U	U		9.6	1
	1,2-Dichlorobenzene	9.6	UG/L	U	U		9.6	1
	1,3-Dichlorobenzene	9.6	UG/L	U	U		9.6	1
	1,4-Dichlorobenzene	9.6	UG/L	U	U		9.6	1
	2,4,5-Trichlorophenol	9.6	UG/L	U	U		9.6	1
	2,4,6-Trichlorophenol	9.6	UG/L	U	U		9.6	1
	2,4-Dichlorophenol	9.6	UG/L	U	U		9.6	1
	2,4-Dimethylphenol	9.6	UG/L	U	U		9.6	1
	2,4-Dinitrophenol	19.2	UG/L	U	U		19.2	1
	2,4-Dinitrotoluene	9.6	UG/L	U	U		9.6	1
	2,6-Dinitrotoluene	9.6	UG/L	U	U		9.6	1
	2-Chloronaphthalene	0.96	UG/L	U	U		0.96	1
	2-Chlorophenol	9.6	UG/L	U	U		9.6	1
	2-Methyl-4,6-dinitrophenol	9.6	UG/L	U	U		9.6	1
	2-Methylnaphthalene	0.96	UG/L	U	U		0.96	1
	2-Methylphenol	9.6	UG/L	U	U		9.6	1
	2-Nitroaniline	9.6	UG/L	U	U		9.6	1
	2-Nitrophenol	9.6	UG/L	U	U		9.6	1
	3,3'-Dichlorobenzidine	9.6	UG/L	U	U		9.6	1
	3-Nitroaniline	9.6	UG/L	U	U		9.6	1
	4-Bromophenyl phenyl ether	9.6	UG/L	U	U		9.6	1
	4-Chloro-3-methylphenol	9.6	UG/L	U	U		9.6	1
	4-Chloroaniline	9.6	UG/L	U	U		9.6	1
	4-Chlorophenyl phenyl ether	9.6	UG/L	U	U		9.6	1
	4-Methylphenol	9.6	UG/L	U	U		9.6	1
	4-Nitroaniline	9.6	UG/L	U	U		9.6	1
	4-Nitrophenol	9.6	UG/L	U	U		9.6	1
	Acenaphthene	0.96	UG/L	U	U		0.96	1
	Acenaphthylene	0.96	UG/L	U	U		0.96	1
	Anthracene	0.96	UG/L	U	U		0.96	1
	Benz(a)anthracene	0.96	UG/L	U	U		0.96	1
	Benzenemethanol	9.6	UG/L	U	U		9.6	1
	Benzo(a)pyrene	0.96	UG/L	U	U		0.96	1
	Benzo(b)fluoranthene	0.96	UG/L	U	U		0.96	1
	Benzo(ghi)perylene	0.96	UG/L	U	U		0.96	1
	Benzo(k)fluoranthene	0.96	UG/L	U	R	C04,C05	0.96	1
	Benzoic acid	19.2	UG/L	U	U		19.2	1
	Bis(2-chloroethoxy)methane	9.6	UG/L	U	U		9.6	1
	Bis(2-chloroethyl) ether	9.6	UG/L	U	U		9.6	1
	Bis(2-Chloroisopropyl)Ether	9.6	UG/L	U	U		9.6	1
	Bis(2-ethylhexyl)phthalate	9.6	UG/L	U	U		9.6	1
	Butyl benzyl phthalate	9.6	UG/L	U	U		9.6	1

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Station: 7J-MW-01
Sample ID: 7J4174 **Media:** Groundwater
Date Collected: 08/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	Carbazole	9.6	UG/L	U	U		9.6	1
	Chrysene	0.96	UG/L	U	U		0.96	1
	Di-n-butyl phthalate	9.6	UG/L	U	U		9.6	1
	Di-n-octylphthalate	9.6	UG/L	U	U		9.6	1
	Dibenz(a,h)anthracene	0.96	UG/L	U	U		0.96	1
	Dibenzofuran	9.6	UG/L	U	U		9.6	1
	Diethyl phthalate	9.6	UG/L	U	U		9.6	1
	Dimethyl phthalate	9.6	UG/L	U	U		9.6	1
	Diphenylamine	9.6	UG/L	U	U		9.6	1
	Fluoranthene	0.96	UG/L	U	U		0.96	1
	Fluorene	0.96	UG/L	U	U		0.96	1
	Hexachlorobenzene	9.6	UG/L	U	U		9.6	1
	Hexachlorobutadiene	9.6	UG/L	U	U		9.6	1
	Hexachlorocyclopentadiene	9.6	UG/L	U	U		9.6	1
	Hexachloroethane	9.6	UG/L	U	U		9.6	1
	Indeno(1,2,3-cd)pyrene	0.96	UG/L	U	U		0.96	1
	Isophorone	9.6	UG/L	U	U		9.6	1
	N-Nitroso-di-n-propylamine	9.6	UG/L	U	U		9.6	1
	Naphthalene	0.96	UG/L	U	U		0.96	1
	Nitrobenzene	9.6	UG/L	U	U		9.6	1
	Pentachlorophenol	9.6	UG/L	U	U		9.6	1
	Phenanthrene	0.96	UG/L	U	U		0.96	1
	Phenol	9.6	UG/L	U	U		9.6	1
	Pyrene	0.96	UG/L	U	U		0.96	1
Volatile Organic Gases	**General Engineering Laboratory**							
SW846 3810	Methane	18.3	UG/L	J	J		20	1
Volatile Organics	**General Engineering Laboratory**							
SW846 8260B	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1
	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1
	1,2-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloropropane	1	UG/L	U	U		1	1
	2-Butanone	5	UG/L	U	U		5	1
	2-Hexanone	5	UG/L	U	U		5	1
	4-Methyl-2-pentanone	5	UG/L	U	U		5	1
	Acetone	5	UG/L	J	U	F04,F06	5	1
	Benzene	1	UG/L	U	U		1	1
	Bromodichloromethane	1	UG/L	U	U		1	1
	Bromoform	1	UG/L	U	U		1	1
	Bromomethane	1	UG/L	U	U		1	1
	Carbon disulfide	5	UG/L	U	U		5	1
	Carbon tetrachloride	1	UG/L	U	U		1	1
	Chlorobenzene	1	UG/L	U	U		1	1
	Chloroethane	1	UG/L	U	U		1	1
	Chloroform	1	UG/L	U	U		1	1
	Chloromethane	1	UG/L	U	U		1	1
	cis-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Dibromochloromethane	1	UG/L	U	U		1	1
	Ethylbenzene	1	UG/L	U	U		1	1
	Methylene chloride	5	UG/L	U	U		5	1
	Styrene	1	UG/L	U	U		1	1
	Tetrachloroethene	1	UG/L	U	U		1	1

SW846 8260B	Toluene	0.64	UG/L	J	J	1	1
	trans-1,3-Dichloropropene	1	UG/L	U	U	1	1
	Trichloroethene	1	UG/L	U	U	1	1
	Vinyl chloride	1	UG/L	U	U	1	1
	Xylenes, Total	1	UG/L	U	U	1	1

Station: 7J-MW-03 **Northing:** 684392.9915 **Easting:** 821630.442
Coord System: GA83East **Method:**

Station: 7J-MW-03
Sample ID: 7J4374 **Media:** Groundwater
Date Collected: 08/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Common Anions	**General Engineering Laboratory**							
EPA 300.0	Nitrate	0.0341	MG/L	U	U		0.0341	1
	Nitrite	0.0542	MG/L	U	U		0.0542	1
	Sulfate	0.634	MG/L		=		0.193	1
General Chemistry	**General Engineering Laboratory**							
SM4500-CO2	Carbon Dioxide	52.7	MG/L		=		1	1
EPA 376.2	Sulfide	0.0248	MG/L	U	U		0.0248	1
Inorganics	**General Engineering Laboratory**							
SW846 6010	Iron	632	UG/L		=		4.37	1
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	1,2,4-Trichlorobenzene	10.8	UG/L	U	U		10.8	1
	1,2-Dichlorobenzene	10.8	UG/L	U	U		10.8	1
	1,3-Dichlorobenzene	10.8	UG/L	U	U		10.8	1
	1,4-Dichlorobenzene	10.8	UG/L	U	U		10.8	1
	2,4,5-Trichlorophenol	10.8	UG/L	U	U		10.8	1
	2,4,6-Trichlorophenol	10.8	UG/L	U	U		10.8	1
	2,4-Dichlorophenol	10.8	UG/L	U	U		10.8	1
	2,4-Dimethylphenol	10.8	UG/L	U	U		10.8	1
	2,4-Dinitrophenol	21.5	UG/L	U	U		21.5	1
	2,4-Dinitrotoluene	10.8	UG/L	U	U		10.8	1
	2,6-Dinitrotoluene	10.8	UG/L	U	U		10.8	1
	2-Chloronaphthalene	1.1	UG/L	U	U		1.1	1
	2-Chlorophenol	10.8	UG/L	U	U		10.8	1
	2-Methyl-4,6-dinitrophenol	10.8	UG/L	U	U		10.8	1
	2-Methylnaphthalene	1.1	UG/L	U	U		1.1	1
	2-Methylphenol	10.8	UG/L	U	U		10.8	1
	2-Nitroaniline	10.8	UG/L	U	U		10.8	1
	2-Nitrophenol	10.8	UG/L	U	U		10.8	1
	3,3'-Dichlorobenzidine	10.8	UG/L	U	U		10.8	1
	3-Nitroaniline	10.8	UG/L	U	U		10.8	1
	4-Bromophenyl phenyl ether	10.8	UG/L	U	U		10.8	1
	4-Chloro-3-methylphenol	10.8	UG/L	U	U		10.8	1
	4-Chloroaniline	10.8	UG/L	U	U		10.8	1
	4-Chlorophenyl phenyl ether	10.8	UG/L	U	U		10.8	1
	4-Methylphenol	10.8	UG/L	U	U		10.8	1
	4-Nitroaniline	10.8	UG/L	U	U		10.8	1
	4-Nitrophenol	10.8	UG/L	U	U		10.8	1
	Acenaphthene	1.1	UG/L	U	U		1.1	1
	Acenaphthylene	1.1	UG/L	U	U		1.1	1
	Anthracene	1.1	UG/L	U	U		1.1	1
	Benz(a)anthracene	1.1	UG/L	U	U		1.1	1
	Benzenemethanol	10.8	UG/L	U	U		10.8	1
	Benzo(a)pyrene	1.1	UG/L	U	U		1.1	1
	Benzo(b)fluoranthene	1.1	UG/L	U	U		1.1	1
	Benzo(ghi)perylene	1.1	UG/L	U	U		1.1	1

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Station: 7J-MW-03
Sample ID: 7J4374 **Media:** Groundwater
Date Collected: 08/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	Benzo(k)fluoranthene	1.1	UG/L	U	R	C04,C05	1.1	1
	Benzoic acid	21.5	UG/L	U	U		21.5	1
	Bis(2-chloroethoxy)methane	10.8	UG/L	U	U		10.8	1
	Bis(2-chloroethyl) ether	10.8	UG/L	U	U		10.8	1
	Bis(2-Chloroisopropyl)Ether	10.8	UG/L	U	U		10.8	1
	Bis(2-ethylhexyl)phthalate	10.8	UG/L	U	U		10.8	1
	Butyl benzyl phthalate	10.8	UG/L	U	U		10.8	1
	Carbazole	10.8	UG/L	U	U		10.8	1
	Chrysene	1.1	UG/L	U	U		1.1	1
	Di-n-butyl phthalate	10.8	UG/L	U	U		10.8	1
	Di-n-octylphthalate	10.8	UG/L	U	U		10.8	1
	Dibenz(a,h)anthracene	1.1	UG/L	U	U		1.1	1
	Dibenzofuran	10.8	UG/L	U	U		10.8	1
	Diethyl phthalate	10.8	UG/L	U	U		10.8	1
	Dimethyl phthalate	10.8	UG/L	U	U		10.8	1
	Diphenylamine	10.8	UG/L	U	U		10.8	1
	Fluoranthene	1.1	UG/L	U	U		1.1	1
	Fluorene	1.1	UG/L	U	U		1.1	1
	Hexachlorobenzene	10.8	UG/L	U	U		10.8	1
	Hexachlorobutadiene	10.8	UG/L	U	U		10.8	1
	Hexachlorocyclopentadiene	10.8	UG/L	U	U		10.8	1
	Hexachloroethane	10.8	UG/L	U	U		10.8	1
	Indeno(1,2,3-cd)pyrene	1.1	UG/L	U	U		1.1	1
	Isophorone	10.8	UG/L	U	U		10.8	1
	N-Nitroso-di-n-propylamine	10.8	UG/L	U	U		10.8	1
	Naphthalene	0.4	UG/L	J	J		1.1	1
	Nitrobenzene	10.8	UG/L	U	U		10.8	1
	Pentachlorophenol	10.8	UG/L	U	U		10.8	1
	Phenanthrene	1.1	UG/L	U	U		1.1	1
	Phenol	10.8	UG/L	U	U		10.8	1
	Pyrene	1.1	UG/L	U	U		1.1	1
Volatile Organic Gases	**General Engineering Laboratory**							
SW846 3810	Methane	28.6	UG/L		=		20	1
Volatile Organics	**General Engineering Laboratory**							
SW846 8260B	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1
	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1
	1,2-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloropropane	1	UG/L	U	U		1	1
	2-Butanone	5	UG/L	U	U		5	1
	2-Hexanone	5	UG/L	U	U		5	1
	4-Methyl-2-pentanone	5	UG/L	U	U		5	1
	Acetone	5	UG/L	U	U		5	1
	Benzene	1	UG/L	U	U		1	1
	Bromodichloromethane	1	UG/L	U	U		1	1
	Bromoform	1	UG/L	U	U		1	1
	Bromomethane	1	UG/L	U	U		1	1
	Carbon disulfide	5	UG/L	U	U		5	1
	Carbon tetrachloride	1	UG/L	U	U		1	1
	Chlorobenzene	1	UG/L	U	U		1	1
	Chloroethane	1	UG/L	U	U		1	1
	Chloroform	1	UG/L	U	U		1	1

SW846 8260B	Chloromethane	1	UG/L	U	U	1	1
	cis-1,3-Dichloropropene	1	UG/L	U	U	1	1
	Dibromochloromethane	1	UG/L	U	U	1	1
	Ethylbenzene	1	UG/L	U	U	1	1
	Methylene chloride	5	UG/L	U	U	5	1
	Styrene	1	UG/L	U	U	1	1
	Tetrachloroethene	1	UG/L	U	U	1	1
	Toluene	0.45	UG/L	J	J	1	1
	trans-1,3-Dichloropropene	1	UG/L	U	U	1	1
	Trichloroethene	1	UG/L	U	U	1	1
	Vinyl chloride	1	UG/L	U	U	1	1
	Xylenes, Total	1	UG/L	U	U	1	1

Station: 7J-MW-04 **Northing:** 684325.3415 **Easting:** 821527.6047
Coord System: GA83East **Method:**

Station: 7J-MW-04
Sample ID: 7J4474 **Media:** Groundwater
Date Collected: 08/20/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Common Anions	**General Engineering Laboratory**							
EPA 300.0	Nitrate	0.1	MG/L	HU	UJ	A03	0.1	1
	Nitrite	0.1	MG/L	HU	UJ	A03	0.1	1
	Sulfate	1.64	MG/L		=		0.4	1
General Chemistry	**General Engineering Laboratory**							
SM4500-CO2	Carbon Dioxide	189	MG/L		=		20	1
EPA 376.2	Sulfide	0.1	MG/L	U	U		0.1	1
Inorganics	**General Engineering Laboratory**							
SW846 6010	Iron	9310	UG/L	E	J	E07	4.37	1
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	1,2,4-Trichlorobenzene	11.1	UG/L	U	U		11.1	1
	1,2-Dichlorobenzene	11.1	UG/L	U	U		11.1	1
	1,3-Dichlorobenzene	11.1	UG/L	U	U		11.1	1
	1,4-Dichlorobenzene	11.1	UG/L	JB	U	F01,F06	11.1	1
	2,4,5-Trichlorophenol	11.1	UG/L	U	U		11.1	1
	2,4,6-Trichlorophenol	11.1	UG/L	U	U		11.1	1
	2,4-Dichlorophenol	11.1	UG/L	U	U		11.1	1
	2,4-Dimethylphenol	11.1	UG/L	U	U		11.1	1
	2,4-Dinitrophenol	22.2	UG/L	U	U		22.2	1
	2,4-Dinitrotoluene	11.1	UG/L	U	U		11.1	1
	2,6-Dinitrotoluene	11.1	UG/L	U	U		11.1	1
	2-Chloronaphthalene	1.1	UG/L	U	U		1.1	1
	2-Chlorophenol	11.1	UG/L	U	U		11.1	1
	2-Methyl-4,6-dinitrophenol	11.1	UG/L	U	U		11.1	1
	2-Methylnaphthalene	33.3	UG/L		=		1.1	1
	2-Methylphenol	11.1	UG/L	U	U		11.1	1
	2-Nitroaniline	11.1	UG/L	U	U		11.1	1
	2-Nitrophenol	11.1	UG/L	U	U		11.1	1
	3,3'-Dichlorobenzidine	11.1	UG/L	U	U		11.1	1
	3-Nitroaniline	11.1	UG/L	U	U		11.1	1
	4-Bromophenyl phenyl ether	11.1	UG/L	U	U		11.1	1
	4-Chloro-3-methylphenol	11.1	UG/L	U	U		11.1	1
	4-Chloroaniline	11.1	UG/L	U	U		11.1	1
	4-Chlorophenyl phenyl ether	11.1	UG/L	U	U		11.1	1
	4-Methylphenol	11.1	UG/L	U	U		11.1	1
	4-Nitroaniline	11.1	UG/L	U	U		11.1	1
	4-Nitrophenol	11.1	UG/L	U	U		11.1	1
	Acenaphthene	2	UG/L		=		1.1	1

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Station: 7J-MW-04
Sample ID: 7J4474 **Media:** Groundwater
Date Collected: 08/20/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	Acenaphthylene	1.1	UG/L	U	U		1.1	1
	Anthracene	1.1	UG/L	U	U		1.1	1
	Benz(a)anthracene	1.1	UG/L	U	U		1.1	1
	Benzenemethanol	11.1	UG/L	U	U		11.1	1
	Benzo(a)pyrene	1.1	UG/L	U	U		1.1	1
	Benzo(b)fluoranthene	1.1	UG/L	U	U		1.1	1
	Benzo(ghi)perylene	1.1	UG/L	U	U		1.1	1
	Benzo(k)fluoranthene	1.1	UG/L	U	U		1.1	1
	Benzoic acid	22.2	UG/L	U	U		22.2	1
	Bis(2-chloroethoxy)methane	11.1	UG/L	U	U		11.1	1
	Bis(2-chloroethyl) ether	11.1	UG/L	U	U		11.1	1
	Bis(2-Chloroisopropyl)Ether	11.1	UG/L	U	U		11.1	1
	Bis(2-ethylhexyl)phthalate	2.3	UG/L	J	J		11.1	1
	Butyl benzyl phthalate	11.1	UG/L	U	U		11.1	1
	Carbazole	11.1	UG/L	U	U		11.1	1
	Chrysene	1.1	UG/L	U	U		1.1	1
	Di-n-butyl phthalate	11.1	UG/L	U	U		11.1	1
	Di-n-octylphthalate	11.1	UG/L	U	U		11.1	1
	Dibenz(a,h)anthracene	1.1	UG/L	U	U		1.1	1
	Dibenzofuran	1.4	UG/L	J	J		11.1	1
	Diethyl phthalate	11.1	UG/L	U	U		11.1	1
	Dimethyl phthalate	11.1	UG/L	U	U		11.1	1
	Diphenylamine	11.1	UG/L	U	U		11.1	1
	Fluoranthene	1.1	UG/L	U	U		1.1	1
	Fluorene	3.5	UG/L		=		1.1	1
	Hexachlorobenzene	11.1	UG/L	U	U		11.1	1
	Hexachlorobutadiene	11.1	UG/L	U	U		11.1	1
	Hexachlorocyclopentadiene	11.1	UG/L	U	U		11.1	1
	Hexachloroethane	11.1	UG/L	U	U		11.1	1
	Indeno(1,2,3-cd)pyrene	1.1	UG/L	U	U		1.1	1
	Isophorone	11.1	UG/L	U	U		11.1	1
	N-Nitroso-di-n-propylamine	11.1	UG/L	U	U		11.1	1
	Naphthalene	11.8	UG/L		=		1.1	1
	Nitrobenzene	11.1	UG/L	U	U		11.1	1
	Pentachlorophenol	11.1	UG/L	U	U		11.1	1
	Phenanthrene	6.1	UG/L		=		1.1	1
	Phenol	11.1	UG/L	U	U		11.1	1
	Pyrene	0.71	UG/L	J	J		1.1	1
Volatile Organic Gases	**General Engineering Laboratory**							
SW846 3810	Methane	65.1	UG/L		=		20	1
Volatile Organics	**General Engineering Laboratory**							
SW846 8260B	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1
	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1
	1,2-Dichloroethene	0.49	UG/L	J	J		1	1
	1,2-Dichloropropane	1	UG/L	U	U		1	1
	2-Butanone	5	UG/L	U	U		5	1
	2-Hexanone	5	UG/L	U	U		5	1
	4-Methyl-2-pentanone	5	UG/L	U	U		5	1
	Acetone	6.2	UG/L	B	U	F01,F07	5	1
	Benzene	1	UG/L	U	U		1	1
	Bromodichloromethane	1	UG/L	U	U		1	1

SW846 8260B	Bromoform	1	UG/L	U	U		1	1
	Bromomethane	1	UG/L	U	U		1	1
	Carbon disulfide	5	UG/L	U	U		5	1
	Carbon tetrachloride	1	UG/L	U	U		1	1
	Chlorobenzene	1	UG/L	U	U		1	1
	Chloroethane	1	UG/L	U	U		1	1
	Chloroform	1	UG/L	U	U		1	1
	Chloromethane	1	UG/L	U	U		1	1
	cis-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Dibromochloromethane	1	UG/L	U	U		1	1
	Ethylbenzene	1	UG/L	U	U		1	1
	Methylene chloride	5	UG/L	U	U		5	1
	Styrene	1	UG/L	U	U		1	1
	Tetrachloroethene	1	UG/L	U	U		1	1
	Toluene	1	UG/L	J	U	F04,F06	1	1
	trans-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Trichloroethene	1	UG/L	U	U		1	1
	Vinyl chloride	1	UG/L	U	U		1	1
	Xylenes, Total	6.6	UG/L		=		1	1

Station: 7J-MW-05 **Northing:** 684314.9375 **Easting:** 821614.3624
Coord System: GA83East **Method:**

Station: 7J-MW-05
Sample ID: 7J4574 **Media:** Groundwater
Date Collected: 08/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Common Anions	**General Engineering Laboratory**							
EPA 300.0	Nitrate	0.0341	MG/L	U	U		0.0341	1
	Nitrite	0.0542	MG/L	U	U		0.0542	1
	Sulfate	0.376	MG/L	J	J		0.193	1
General Chemistry	**General Engineering Laboratory**							
SM4500-CO2	Carbon Dioxide	1	MG/L	U	U		1	1
EPA 376.2	Sulfide	0.0248	MG/L	U	UJ	I02	0.0248	1
Inorganics	**General Engineering Laboratory**							
SW846 6010	Iron	583	UG/L		=		4.37	1
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	1,2,4-Trichlorobenzene	10.5	UG/L	U	U		10.5	1
	1,2-Dichlorobenzene	10.5	UG/L	U	U		10.5	1
	1,3-Dichlorobenzene	10.5	UG/L	U	U		10.5	1
	1,4-Dichlorobenzene	10.5	UG/L	U	U		10.5	1
	2,4,5-Trichlorophenol	10.5	UG/L	U	U		10.5	1
	2,4,6-Trichlorophenol	10.5	UG/L	U	U		10.5	1
	2,4-Dichlorophenol	10.5	UG/L	U	U		10.5	1
	2,4-Dimethylphenol	10.5	UG/L	U	U		10.5	1
	2,4-Dinitrophenol	21	UG/L	U	U		21	1
	2,4-Dinitrotoluene	10.5	UG/L	U	U		10.5	1
	2,6-Dinitrotoluene	10.5	UG/L	U	U		10.5	1
	2-Chloronaphthalene	1	UG/L	U	U		1	1
	2-Chlorophenol	10.5	UG/L	U	U		10.5	1
	2-Methyl-4,6-dinitrophenol	10.5	UG/L	U	U		10.5	1
	2-Methylnaphthalene	1	UG/L	U	U		1	1
	2-Methylphenol	10.5	UG/L	U	U		10.5	1
	2-Nitroaniline	10.5	UG/L	U	U		10.5	1
	2-Nitrophenol	10.5	UG/L	U	U		10.5	1
	3,3'-Dichlorobenzidine	10.5	UG/L	U	U		10.5	1
	3-Nitroaniline	10.5	UG/L	U	U		10.5	1
	4-Bromophenyl phenyl ether	10.5	UG/L	U	U		10.5	1

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Station: 7J-MW-05
Sample ID: 7J4574 **Media:** Groundwater
Date Collected: 08/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	4-Chloro-3-methylphenol	10.5	UG/L	U	U		10.5	1
	4-Chloroaniline	10.5	UG/L	U	U		10.5	1
	4-Chlorophenyl phenyl ether	10.5	UG/L	U	U		10.5	1
	4-Methylphenol	10.5	UG/L	U	U		10.5	1
	4-Nitroaniline	10.5	UG/L	U	U		10.5	1
	4-Nitrophenol	10.5	UG/L	U	U		10.5	1
	Acenaphthene	1	UG/L	U	U		1	1
	Acenaphthylene	1	UG/L	U	U		1	1
	Anthracene	1	UG/L	U	U		1	1
	Benz(a)anthracene	1	UG/L	U	U		1	1
	Benzenemethanol	10.5	UG/L	U	U		10.5	1
	Benzo(a)pyrene	1	UG/L	U	U		1	1
	Benzo(b)fluoranthene	1	UG/L	U	U		1	1
	Benzo(ghi)perylene	1	UG/L	U	U		1	1
	Benzo(k)fluoranthene	1	UG/L	U	R	C04,C05	1	1
	Benzoic acid	21	UG/L	U	U		21	1
	Bis(2-chloroethoxy)methane	10.5	UG/L	U	U		10.5	1
	Bis(2-chloroethyl) ether	10.5	UG/L	U	U		10.5	1
	Bis(2-Chloroisopropyl)Ether	10.5	UG/L	U	U		10.5	1
	Bis(2-ethylhexyl)phthalate	10.5	UG/L	U	U		10.5	1
	Butyl benzyl phthalate	10.5	UG/L	U	U		10.5	1
	Carbazole	10.5	UG/L	U	U		10.5	1
	Chrysene	1	UG/L	U	U		1	1
	Di-n-butyl phthalate	10.5	UG/L	U	U		10.5	1
	Di-n-octylphthalate	10.5	UG/L	U	U		10.5	1
	Dibenz(a,h)anthracene	1	UG/L	U	U		1	1
	Dibenzofuran	10.5	UG/L	U	U		10.5	1
	Diethyl phthalate	10.5	UG/L	U	U		10.5	1
	Dimethyl phthalate	10.5	UG/L	U	U		10.5	1
	Diphenylamine	10.5	UG/L	U	U		10.5	1
	Fluoranthene	1	UG/L	U	U		1	1
	Fluorene	1	UG/L	U	U		1	1
	Hexachlorobenzene	10.5	UG/L	U	U		10.5	1
	Hexachlorobutadiene	10.5	UG/L	U	U		10.5	1
	Hexachlorocyclopentadiene	10.5	UG/L	U	U		10.5	1
	Hexachloroethane	10.5	UG/L	U	U		10.5	1
	Indeno(1,2,3-cd)pyrene	1	UG/L	U	U		1	1
	Isophorone	10.5	UG/L	U	U		10.5	1
	N-Nitroso-di-n-propylamine	10.5	UG/L	U	U		10.5	1
	Naphthalene	1.4	UG/L		=		1	1
	Nitrobenzene	10.5	UG/L	U	U		10.5	1
	Pentachlorophenol	10.5	UG/L	U	U		10.5	1
	Phenanthrene	1	UG/L	U	U		1	1
	Phenol	10.5	UG/L	U	U		10.5	1
	Pyrene	1	UG/L	U	U		1	1
Volatile Organic Gases	**General Engineering Laboratory**							
SW846 3810	Methane	20.4	UG/L		=		20	1
Volatile Organics	**General Engineering Laboratory**							
SW846 8260B	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1
	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1
	1,2-Dichloroethene	1	UG/L	U	U		1	1

SW846 8260B	1,2-Dichloropropane	1	UG/L	U	U	1	1
	2-Butanone	5	UG/L	U	U	5	1
	2-Hexanone	5	UG/L	U	U	5	1
	4-Methyl-2-pentanone	5	UG/L	U	U	5	1
	Acetone	5	UG/L	U	U	5	1
	Benzene	1	UG/L	U	U	1	1
	Bromodichloromethane	1	UG/L	U	U	1	1
	Bromoform	1	UG/L	U	U	1	1
	Bromomethane	1	UG/L	U	U	1	1
	Carbon disulfide	5	UG/L	U	U	5	1
	Carbon tetrachloride	1	UG/L	U	U	1	1
	Chlorobenzene	1	UG/L	U	U	1	1
	Chloroethane	1	UG/L	U	U	1	1
	Chloroform	1	UG/L	U	U	1	1
	Chloromethane	1	UG/L	U	U	1	1
	cis-1,3-Dichloropropene	1	UG/L	U	U	1	1
	Dibromochloromethane	1	UG/L	U	U	1	1
	Ethylbenzene	0.23	UG/L	J	J	1	1
	Methylene chloride	5	UG/L	U	U	5	1
	Styrene	1	UG/L	U	U	1	1
	Tetrachloroethene	1	UG/L	U	U	1	1
	Toluene	0.55	UG/L	J	J	1	1
	trans-1,3-Dichloropropene	1	UG/L	U	U	1	1
	Trichloroethene	1	UG/L	U	U	1	1
	Vinyl chloride	1	UG/L	U	U	1	1
	Xylenes, Total	3.6	UG/L		=	1	1

Station: 7J-MW-06 **Northing:** 684253.3277 **Easting:** 821526.0826
Coord System: GA83East **Method:**

Station: 7J-MW-06
Sample ID: 7J4674 **Media:** Groundwater
Date Collected: 08/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Common Anions	**General Engineering Laboratory**							
EPA 300.0	Nitrate	0.0341	MG/L	U	U		0.0341	1
	Nitrite	0.0542	MG/L	U	U		0.0542	1
	Sulfate	0.736	MG/L		=		0.193	1
General Chemistry	**General Engineering Laboratory**							
SM4500-CO2	Carbon Dioxide	1	MG/L	U	U		1	1
EPA 376.2	Sulfide	0.0248	MG/L	U	U		0.0248	1
Inorganics	**General Engineering Laboratory**							
SW846 6010	Iron	211	UG/L		=		4.37	1
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	1,2,4-Trichlorobenzene	10.6	UG/L	U	U		10.6	1
	1,2-Dichlorobenzene	10.6	UG/L	U	U		10.6	1
	1,3-Dichlorobenzene	10.6	UG/L	U	U		10.6	1
	1,4-Dichlorobenzene	10.6	UG/L	U	U		10.6	1
	2,4,5-Trichlorophenol	10.6	UG/L	U	U		10.6	1
	2,4,6-Trichlorophenol	10.6	UG/L	U	U		10.6	1
	2,4-Dichlorophenol	10.6	UG/L	U	U		10.6	1
	2,4-Dimethylphenol	10.6	UG/L	U	U		10.6	1
	2,4-Dinitrophenol	21.3	UG/L	U	U		21.3	1
	2,4-Dinitrotoluene	10.6	UG/L	U	U		10.6	1
	2,6-Dinitrotoluene	10.6	UG/L	U	U		10.6	1
	2-Chloronaphthalene	1.1	UG/L	U	U		1.1	1
	2-Chlorophenol	10.6	UG/L	U	U		10.6	1
	2-Methyl-4,6-dinitrophenol	10.6	UG/L	U	U		10.6	1

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Station: 7J-MW-06
Sample ID: 7J4674 **Media:** Groundwater
Date Collected: 08/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	2-Methylnaphthalene	1.1	UG/L	U	U		1.1	1
	2-Methylphenol	10.6	UG/L	U	U		10.6	1
	2-Nitroaniline	10.6	UG/L	U	U		10.6	1
	2-Nitrophenol	10.6	UG/L	U	U		10.6	1
	3,3'-Dichlorobenzidine	10.6	UG/L	U	U		10.6	1
	3-Nitroaniline	10.6	UG/L	U	U		10.6	1
	4-Bromophenyl phenyl ether	10.6	UG/L	U	U		10.6	1
	4-Chloro-3-methylphenol	10.6	UG/L	U	U		10.6	1
	4-Chloroaniline	10.6	UG/L	U	U		10.6	1
	4-Chlorophenyl phenyl ether	10.6	UG/L	U	U		10.6	1
	4-Methylphenol	10.6	UG/L	U	U		10.6	1
	4-Nitroaniline	10.6	UG/L	U	U		10.6	1
	4-Nitrophenol	10.6	UG/L	U	U		10.6	1
	Acenaphthene	1.1	UG/L	U	U		1.1	1
	Acenaphthylene	1.1	UG/L	U	U		1.1	1
	Anthracene	1.1	UG/L	U	U		1.1	1
	Benz(a)anthracene	1.1	UG/L	U	U		1.1	1
	Benzenemethanol	10.6	UG/L	U	U		10.6	1
	Benzo(a)pyrene	1.1	UG/L	U	U		1.1	1
	Benzo(b)fluoranthene	1.1	UG/L	U	U		1.1	1
	Benzo(ghi)perylene	1.1	UG/L	U	U		1.1	1
	Benzo(k)fluoranthene	1.1	UG/L	U	U		1.1	1
	Benzoic acid	12.9	UG/L	J	J		21.3	1
	Bis(2-chloroethoxy)methane	10.6	UG/L	U	U		10.6	1
	Bis(2-chloroethyl) ether	10.6	UG/L	U	U		10.6	1
	Bis(2-Chloroisopropyl)Ether	10.6	UG/L	U	U		10.6	1
	Bis(2-ethylhexyl)phthalate	2.8	UG/L	J	J		10.6	1
	Butyl benzyl phthalate	10.6	UG/L	U	U		10.6	1
	Carbazole	10.6	UG/L	U	U		10.6	1
	Chrysene	1.1	UG/L	U	U		1.1	1
	Di-n-butyl phthalate	10.6	UG/L	U	U		10.6	1
	Di-n-octylphthalate	10.6	UG/L	U	U		10.6	1
	Dibenz(a,h)anthracene	1.1	UG/L	U	U		1.1	1
	Dibenzofuran	10.6	UG/L	U	U		10.6	1
	Diethyl phthalate	10.6	UG/L	U	U		10.6	1
	Dimethyl phthalate	10.6	UG/L	U	U		10.6	1
	Diphenylamine	10.6	UG/L	U	U		10.6	1
	Fluoranthene	1.1	UG/L	U	U		1.1	1
	Fluorene	1.1	UG/L	U	U		1.1	1
	Hexachlorobenzene	10.6	UG/L	U	U		10.6	1
	Hexachlorobutadiene	10.6	UG/L	U	U		10.6	1
	Hexachlorocyclopentadiene	10.6	UG/L	U	U		10.6	1
	Hexachloroethane	10.6	UG/L	U	U		10.6	1
	Indeno(1,2,3-cd)pyrene	1.1	UG/L	U	U		1.1	1
	Isophorone	10.6	UG/L	U	U		10.6	1
	N-Nitroso-di-n-propylamine	10.6	UG/L	U	U		10.6	1
	Naphthalene	1.6	UG/L		=		1.1	1
	Nitrobenzene	10.6	UG/L	U	U		10.6	1
	Pentachlorophenol	10.6	UG/L	U	U		10.6	1
	Phenanthrene	1.1	UG/L	U	U		1.1	1
	Phenol	10.6	UG/L	U	U		10.6	1
	Pyrene	1.1	UG/L	U	U		1.1	1
Volatile Organic Gases	**General Engineering Laboratory**							
SW846 3810	Methane	42.3	UG/L		=		20	1
Volatile Organics	**General Engineering Laboratory**							

SW846 8260B	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1
	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1
	1,2-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloropropane	1	UG/L	U	U		1	1
	2-Butanone	5	UG/L	U	U		5	1
	2-Hexanone	5	UG/L	U	U		5	1
	4-Methyl-2-pentanone	5	UG/L	U	U		5	1
	Acetone	5.5	UG/L		U	F04,F07	5	1
	Benzene	1	UG/L	U	U		1	1
	Bromodichloromethane	1	UG/L	U	U		1	1
	Bromoform	1	UG/L	U	U		1	1
	Bromomethane	1	UG/L	U	U		1	1
	Carbon disulfide	5	UG/L	U	U		5	1
	Carbon tetrachloride	1	UG/L	U	U		1	1
	Chlorobenzene	1	UG/L	U	U		1	1
	Chloroethane	1	UG/L	U	U		1	1
	Chloroform	1	UG/L	U	U		1	1
	Chloromethane	1	UG/L	U	U		1	1
	cis-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Dibromochloromethane	1	UG/L	U	U		1	1
	Ethylbenzene	1	UG/L	U	U		1	1
	Methylene chloride	5	UG/L	U	U		5	1
	Styrene	1	UG/L	U	U		1	1
	Tetrachloroethene	1	UG/L	U	U		1	1
	Toluene	1	UG/L	U	U		1	1
	trans-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Trichloroethene	1	UG/L	U	U		1	1
	Vinyl chloride	1	UG/L	U	U		1	1
	Xylenes, Total	1	UG/L	U	U		1	1

Station: 7J-MW-07 **Northing:** 684315.2029 **Easting:** 821556.6547
Coord System: GA83East **Method:**

Station: 7J-MW-07
Sample ID: 7J4774 **Media:** Groundwater
Date Collected: 08/20/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Common Anions	**General Engineering Laboratory**							
EPA 300.0	Nitrate	0.1	MG/L	HU	UJ	A03	0.1	1
	Nitrite	0.1	MG/L	HU	UJ	A03,I02	0.1	1
	Sulfate	0.4	MG/L	U	U		0.4	1
General Chemistry	**General Engineering Laboratory**							
SM4500-CO2	Carbon Dioxide	181	MG/L		=		20	1
EPA 376.2	Sulfide	0.1	MG/L	U	UJ	I02	0.1	1
Inorganics	**General Engineering Laboratory**							
SW846 6010	Iron	8930	UG/L	E	J	E07	4.37	1
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	1,2,4-Trichlorobenzene	12	UG/L	U	U		12	1
	1,2-Dichlorobenzene	1.7	UG/L	J	J		12	1
	1,3-Dichlorobenzene	12	UG/L	U	U		12	1
	1,4-Dichlorobenzene	12	UG/L	JB	U	F01,F06	12	1
	2,4,5-Trichlorophenol	12	UG/L	U	U		12	1
	2,4,6-Trichlorophenol	12	UG/L	U	U		12	1
	2,4-Dichlorophenol	12	UG/L	U	U		12	1

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Station: 7J-MW-07
Sample ID: 7J4774 **Media:** Groundwater
Date Collected: 08/20/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	2,4-Dimethylphenol	12	UG/L	U	U		12	1
	2,4-Dinitrophenol	24.1	UG/L	U	U		24.1	1
	2,4-Dinitrotoluene	12	UG/L	U	U		12	1
	2,6-Dinitrotoluene	12	UG/L	U	U		12	1
	2-Chloronaphthalene	1.2	UG/L	U	U		1.2	1
	2-Chlorophenol	12	UG/L	U	U		12	1
	2-Methyl-4,6-dinitrophenol	12	UG/L	U	U		12	1
	2-Methylnaphthalene	2.8	UG/L		=		1.2	1
	2-Methylphenol	12	UG/L	U	U		12	1
	2-Nitroaniline	12	UG/L	U	U		12	1
	2-Nitrophenol	12	UG/L	U	U		12	1
	3,3'-Dichlorobenzidine	12	UG/L	U	U		12	1
	3-Nitroaniline	12	UG/L	U	U		12	1
	4-Bromophenyl phenyl ether	12	UG/L	U	U		12	1
	4-Chloro-3-methylphenol	12	UG/L	U	U		12	1
	4-Chloroaniline	12	UG/L	U	U		12	1
	4-Chlorophenyl phenyl ether	12	UG/L	U	U		12	1
	4-Methylphenol	2.1	UG/L	J	J		12	1
	4-Nitroaniline	12	UG/L	U	U		12	1
	4-Nitrophenol	12	UG/L	U	U		12	1
	Acenaphthene	1.2	UG/L	U	U		1.2	1
	Acenaphthylene	1.2	UG/L	U	U		1.2	1
	Anthracene	1.2	UG/L	U	U		1.2	1
	Benz(a)anthracene	1.2	UG/L	U	U		1.2	1
	Benzenemethanol	12	UG/L	U	U		12	1
	Benzo(a)pyrene	1.2	UG/L	U	U		1.2	1
	Benzo(b)fluoranthene	1.2	UG/L	U	U		1.2	1
	Benzo(ghi)perylene	1.2	UG/L	U	U		1.2	1
	Benzo(k)fluoranthene	1.2	UG/L	U	U		1.2	1
	Benzoic acid	24.1	UG/L	U	U		24.1	1
	Bis(2-chloroethoxy)methane	12	UG/L	U	U		12	1
	Bis(2-chloroethyl) ether	12	UG/L	U	U		12	1
	Bis(2-Chloroisopropyl)Ether	12	UG/L	U	U		12	1
	Bis(2-ethylhexyl)phthalate	1.8	UG/L	J	J		12	1
	Butyl benzyl phthalate	12	UG/L	U	U		12	1
	Carbazole	0.78	UG/L	J	J		12	1
	Chrysene	1.2	UG/L	U	U		1.2	1
	Di-n-butyl phthalate	12	UG/L	U	U		12	1
	Di-n-octylphthalate	12	UG/L	U	U		12	1
	Dibenz(a,h)anthracene	1.2	UG/L	U	U		1.2	1
	Dibenzofuran	12	UG/L	U	U		12	1
	Diethyl phthalate	12	UG/L	U	U		12	1
	Dimethyl phthalate	12	UG/L	U	U		12	1
	Diphenylamine	12	UG/L	U	U		12	1
	Fluoranthene	1.2	UG/L	U	U		1.2	1
	Fluorene	1.2	UG/L	U	U		1.2	1
	Hexachlorobenzene	12	UG/L	U	U		12	1
	Hexachlorobutadiene	12	UG/L	U	U		12	1
	Hexachlorocyclopentadiene	12	UG/L	U	U		12	1
	Hexachloroethane	12	UG/L	U	U		12	1
	Indeno(1,2,3-cd)pyrene	1.2	UG/L	U	U		1.2	1
	Isophorone	12	UG/L	U	U		12	1
	N-Nitroso-di-n-propylamine	12	UG/L	U	U		12	1
	Naphthalene	3.7	UG/L		=		1.2	1
	Nitrobenzene	12	UG/L	U	U		12	1
	Pentachlorophenol	12	UG/L	U	U		12	1

Station: 7J-MW-07
Sample ID: 7J4774 **Media:** Groundwater
Date Collected: 08/20/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	Phenanthrene	1.2	UG/L	U	U		1.2	1
	Phenol	12	UG/L	U	U		12	1
	Pyrene	1.2	UG/L	U	U		1.2	1
Volatile Organic Gases	**General Engineering Laboratory**							
SW846 3810	Methane	207	UG/L		=		20	1
Volatile Organics	**General Engineering Laboratory**							
SW846 8260B	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1
	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1
	1,2-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloropropane	1	UG/L	U	U		1	1
	2-Butanone	5	UG/L	U	U		5	1
	2-Hexanone	5	UG/L	U	U		5	1
	4-Methyl-2-pentanone	5	UG/L	U	U		5	1
	Acetone	6.1	UG/L	B	U	F01,F07	5	1
	Benzene	12.2	UG/L		=		1	1
	Bromodichloromethane	1	UG/L	U	U		1	1
	Bromoform	1	UG/L	U	U		1	1
	Bromomethane	1	UG/L	U	U		1	1
	Carbon disulfide	5	UG/L	U	U		5	1
	Carbon tetrachloride	1	UG/L	U	U		1	1
	Chlorobenzene	1	UG/L	U	U		1	1
	Chloroethane	1	UG/L	U	U		1	1
	Chloroform	1	UG/L	U	U		1	1
	Chloromethane	1	UG/L	U	U		1	1
	cis-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Dibromochloromethane	1	UG/L	U	U		1	1
	Ethylbenzene	1.4	UG/L		=		1	1
	Methylene chloride	5	UG/L	U	U		5	1
	Styrene	1	UG/L	U	U		1	1
	Tetrachloroethene	1	UG/L	U	U		1	1
	Toluene	2.2	UG/L		U	F04,F07	1	1
	trans-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Trichloroethene	1	UG/L	U	U		1	1
	Vinyl chloride	1	UG/L	U	U		1	1
	Xylenes, Total	4.5	UG/L		=		1	1

Station: 7J-MW-09 **Northing:** 684347.3714 **Easting:** 821587.8497
Coord System: GA83East **Method:**

Station: 7J-MW-09
Sample ID: 7J4974 **Media:** Groundwater
Date Collected: 08/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Common Anions	**General Engineering Laboratory**							
EPA 300.0	Nitrate	0.0341	MG/L	U	U		0.0341	1
	Nitrite	0.0542	MG/L	U	U		0.0542	1
	Sulfate	3.44	MG/L		=		0.193	1

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General Chemistry	General Engineering Laboratory							
SM4500-CO2	Carbon Dioxide	1	MG/L	U	U		1	1
EPA 376.2	Sulfide	0.0248	MG/L	U	U		0.0248	1
Inorganics	**General Engineering Laboratory**							
SW846 6010	Iron	386	UG/L		=		4.37	1
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	1,2,4-Trichlorobenzene	9.6	UG/L	U	U		9.6	1
	1,2-Dichlorobenzene	9.6	UG/L	U	U		9.6	1
	1,3-Dichlorobenzene	9.6	UG/L	U	U		9.6	1
	1,4-Dichlorobenzene	9.6	UG/L	U	U		9.6	1
	2,4,5-Trichlorophenol	9.6	UG/L	U	U		9.6	1
	2,4,6-Trichlorophenol	9.6	UG/L	U	U		9.6	1
	2,4-Dichlorophenol	9.6	UG/L	U	U		9.6	1
	2,4-Dimethylphenol	9.6	UG/L	U	U		9.6	1
	2,4-Dinitrophenol	19.2	UG/L	U	U		19.2	1
	2,4-Dinitrotoluene	9.6	UG/L	U	U		9.6	1
	2,6-Dinitrotoluene	9.6	UG/L	U	U		9.6	1
	2-Chloronaphthalene	0.96	UG/L	U	U		0.96	1
	2-Chlorophenol	9.6	UG/L	U	U		9.6	1
	2-Methyl-4,6-dinitrophenol	9.6	UG/L	U	U		9.6	1
	2-Methylnaphthalene	11.6	UG/L		=		0.96	1
	2-Methylphenol	9.6	UG/L	U	U		9.6	1
	2-Nitroaniline	9.6	UG/L	U	U		9.6	1
	2-Nitrophenol	9.6	UG/L	U	U		9.6	1
	3,3'-Dichlorobenzidine	9.6	UG/L	U	U		9.6	1
	3-Nitroaniline	9.6	UG/L	U	U		9.6	1
	4-Bromophenyl phenyl ether	9.6	UG/L	U	U		9.6	1
	4-Chloro-3-methylphenol	9.6	UG/L	U	U		9.6	1
	4-Chloroaniline	9.6	UG/L	U	U		9.6	1
	4-Chlorophenyl phenyl ether	9.6	UG/L	U	U		9.6	1
	4-Methylphenol	9.6	UG/L	U	U		9.6	1
	4-Nitroaniline	9.6	UG/L	U	U		9.6	1
	4-Nitrophenol	9.6	UG/L	U	U		9.6	1
	Acenaphthene	0.56	UG/L	J	J		0.96	1
	Acenaphthylene	0.96	UG/L	U	U		0.96	1
	Anthracene	0.96	UG/L	U	U		0.96	1
	Benz(a)anthracene	0.96	UG/L	U	U		0.96	1
	Benzenemethanol	9.6	UG/L	U	U		9.6	1
	Benzo(a)pyrene	0.96	UG/L	U	U		0.96	1
	Benzo(b)fluoranthene	0.96	UG/L	U	U		0.96	1
	Benzo(ghi)perylene	0.96	UG/L	U	U		0.96	1
	Benzo(k)fluoranthene	0.96	UG/L	U	R	C04,C05	0.96	1
	Benzoic acid	19.2	UG/L	U	U		19.2	1
	Bis(2-chloroethoxy)methane	9.6	UG/L	U	U		9.6	1
	Bis(2-chloroethyl) ether	9.6	UG/L	U	U		9.6	1
	Bis(2-Chloroisopropyl)Ether	9.6	UG/L	U	U		9.6	1
	Bis(2-ethylhexyl)phthalate	9.6	UG/L	U	U		9.6	1
	Butyl benzyl phthalate	9.6	UG/L	U	U		9.6	1
	Carbazole	2.6	UG/L	J	J		9.6	1
	Chrysene	0.96	UG/L	U	U		0.96	1
	Di-n-butyl phthalate	9.6	UG/L	U	U		9.6	1
	Di-n-octylphthalate	9.6	UG/L	U	U		9.6	1
	Dibenz(a,h)anthracene	0.96	UG/L	U	U		0.96	1
	Dibenzofuran	0.64	UG/L	J	J		9.6	1
	Diethyl phthalate	9.6	UG/L	U	U		9.6	1
	Dimethyl phthalate	9.6	UG/L	U	U		9.6	1
	Diphenylamine	9.6	UG/L	U	U		9.6	1
	Fluoranthene	0.96	UG/L	U	U		0.96	1
	Fluorene	1.1	UG/L		=		0.96	1
	Hexachlorobenzene	9.6	UG/L	U	U		9.6	1
	Hexachlorobutadiene	9.6	UG/L	U	U		9.6	1

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Station: 7J-MW-09
Sample ID: 7J4974 **Media:** Groundwater
Date Collected: 08/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	Hexachlorocyclopentadiene	9.6	UG/L	U	U		9.6	1
	Hexachloroethane	9.6	UG/L	U	U		9.6	1
	Indeno(1,2,3-cd)pyrene	0.96	UG/L	U	U		0.96	1
	Isophorone	9.6	UG/L	U	U		9.6	1
	N-Nitroso-di-n-propylamine	9.6	UG/L	U	U		9.6	1
	Naphthalene	19.8	UG/L		=		0.96	1
	Nitrobenzene	9.6	UG/L	U	U		9.6	1
	Pentachlorophenol	9.6	UG/L	U	U		9.6	1
	Phenanthrene	1.3	UG/L		=		0.96	1
	Phenol	9.6	UG/L	U	U		9.6	1
	Pyrene	0.96	UG/L	U	U		0.96	1
Volatile Organic Gases	**General Engineering Laboratory**							
SW846 3810	Methane	231	UG/L		=		20	1
Volatile Organics	**General Engineering Laboratory**							
SW846 8260B	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1
	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1
	1,2-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloropropane	1	UG/L	U	U		1	1
	2-Butanone	5	UG/L	U	U		5	1
	2-Hexanone	5	UG/L	U	U		5	1
	4-Methyl-2-pentanone	5	UG/L	U	U		5	1
	Acetone	5	UG/L	J	U	F04,F06	5	1
	Benzene	16.4	UG/L		=		1	1
	Bromodichloromethane	1	UG/L	U	U		1	1
	Bromoform	1	UG/L	U	U		1	1
	Bromomethane	1	UG/L	U	U		1	1
	Carbon disulfide	5	UG/L	U	U		5	1
	Carbon tetrachloride	1	UG/L	U	U		1	1
	Chlorobenzene	1	UG/L	U	U		1	1
	Chloroethane	1	UG/L	U	U		1	1
	Chloroform	1	UG/L	U	U		1	1
	Chloromethane	1	UG/L	U	U		1	1
	cis-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Dibromochloromethane	1	UG/L	U	U		1	1
	Ethylbenzene	0.86	UG/L	J	J		1	1
	Methylene chloride	5	UG/L	U	U		5	1
	Styrene	1	UG/L	U	U		1	1
	Tetrachloroethene	1	UG/L	U	U		1	1
	Toluene	1	UG/L		=		1	1
	trans-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Trichloroethene	1	UG/L	U	U		1	1
	Vinyl chloride	1	UG/L	U	U		1	1
	Xylenes, Total	1.8	UG/L		=		1	1

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Station: 7J-MW-10 **Northing:** 684362.9094 **Easting:** 821540.8005
Coord System: GA83East **Method:**

Station: 7J-MW-10
Sample ID: 7J4A74 **Media:** Groundwater
Date Collected: 08/20/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Common Anions	**General Engineering Laboratory**							
EPA 300.0	Nitrate	0.1	MG/L	HU	UJ	A03	0.1	1
	Nitrite	0.1	MG/L	HU	UJ	A03	0.1	1
	Sulfate	0.4	MG/L	U	U		0.4	1
General Chemistry	**General Engineering Laboratory**							
SM4500-CO2	Carbon Dioxide	20	MG/L	U	U		20	1
EPA 376.2	Sulfide	0.1	MG/L	U	U		0.1	1
Inorganics	**General Engineering Laboratory**							
SW846 6010	Iron	3090	UG/L	E	J	E07	4.37	1
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	1,2,4-Trichlorobenzene	11.1	UG/L	U	U		11.1	1
	1,2-Dichlorobenzene	11.1	UG/L	U	U		11.1	1
	1,3-Dichlorobenzene	11.1	UG/L	U	U		11.1	1
	1,4-Dichlorobenzene	11.1	UG/L	JB	U	F01,F06	11.1	1
	2,4,5-Trichlorophenol	11.1	UG/L	U	U		11.1	1
	2,4,6-Trichlorophenol	11.1	UG/L	U	U		11.1	1
	2,4-Dichlorophenol	11.1	UG/L	U	U		11.1	1
	2,4-Dimethylphenol	11.1	UG/L	U	U		11.1	1
	2,4-Dinitrophenol	22.2	UG/L	U	U		22.2	1
	2,4-Dinitrotoluene	11.1	UG/L	U	U		11.1	1
	2,6-Dinitrotoluene	11.1	UG/L	U	U		11.1	1
	2-Chloronaphthalene	1.1	UG/L	U	U		1.1	1
	2-Chlorophenol	11.1	UG/L	U	U		11.1	1
	2-Methyl-4,6-dinitrophenol	11.1	UG/L	U	U		11.1	1
	2-Methylnaphthalene	6.4	UG/L		=		1.1	1
	2-Methylphenol	11.1	UG/L	U	U		11.1	1
	2-Nitroaniline	11.1	UG/L	U	U		11.1	1
	2-Nitrophenol	11.1	UG/L	U	U		11.1	1
	3,3'-Dichlorobenzidine	11.1	UG/L	U	U		11.1	1
	3-Nitroaniline	11.1	UG/L	U	U		11.1	1
	4-Bromophenyl phenyl ether	11.1	UG/L	U	U		11.1	1
	4-Chloro-3-methylphenol	11.1	UG/L	U	U		11.1	1
	4-Chloroaniline	11.1	UG/L	U	U		11.1	1
	4-Chlorophenyl phenyl ether	11.1	UG/L	U	U		11.1	1
	4-Methylphenol	11.1	UG/L	U	U		11.1	1
	4-Nitroaniline	11.1	UG/L	U	U		11.1	1
	4-Nitrophenol	11.1	UG/L	U	U		11.1	1
	Acenaphthene	1.1	UG/L	U	U		1.1	1
	Acenaphthylene	1.1	UG/L	U	U		1.1	1
	Anthracene	1.1	UG/L	U	U		1.1	1
	Benz(a)anthracene	1.1	UG/L	U	U		1.1	1
	Benzenemethanol	11.1	UG/L	U	U		11.1	1
	Benzo(a)pyrene	1.1	UG/L	U	U		1.1	1
	Benzo(b)fluoranthene	1.1	UG/L	U	U		1.1	1
	Benzo(ghi)perylene	1.1	UG/L	U	U		1.1	1
	Benzo(k)fluoranthene	1.1	UG/L	U	U		1.1	1
	Benzoic acid	22.2	UG/L	U	U		22.2	1
	Bis(2-chloroethoxy)methane	11.1	UG/L	U	U		11.1	1
	Bis(2-chloroethyl) ether	11.1	UG/L	U	U		11.1	1
	Bis(2-Chloroisopropyl)Ether	11.1	UG/L	U	U		11.1	1
	Bis(2-ethylhexyl)phthalate	11.1	UG/L	U	U		11.1	1
	Butyl benzyl phthalate	11.1	UG/L	U	U		11.1	1
	Carbazole	1.1	UG/L	J	J		11.1	1

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Station: 7J-MW-10
Sample ID: 7J4A74 **Media:** Groundwater
Date Collected: 08/20/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	Chrysene	1.1	UG/L	U	U		1.1	1
	Di-n-butyl phthalate	11.1	UG/L	U	U		11.1	1
	Di-n-octylphthalate	11.1	UG/L	U	U		11.1	1
	Dibenz(a,h)anthracene	1.1	UG/L	U	U		1.1	1
	Dibenzofuran	11.1	UG/L	U	U		11.1	1
	Diethyl phthalate	11.1	UG/L	U	U		11.1	1
	Dimethyl phthalate	11.1	UG/L	U	U		11.1	1
	Diphenylamine	11.1	UG/L	U	U		11.1	1
	Fluoranthene	1.1	UG/L	U	U		1.1	1
	Fluorene	0.58	UG/L	J	J		1.1	1
	Hexachlorobenzene	11.1	UG/L	U	U		11.1	1
	Hexachlorobutadiene	11.1	UG/L	U	U		11.1	1
	Hexachlorocyclopentadiene	11.1	UG/L	U	U		11.1	1
	Hexachloroethane	11.1	UG/L	U	U		11.1	1
	Indeno(1,2,3-cd)pyrene	1.1	UG/L	U	U		1.1	1
	Isophorone	11.1	UG/L	U	U		11.1	1
	N-Nitroso-di-n-propylamine	11.1	UG/L	U	U		11.1	1
	Naphthalene	4.6	UG/L		=		1.1	1
	Nitrobenzene	11.1	UG/L	U	U		11.1	1
	Pentachlorophenol	11.1	UG/L	U	U		11.1	1
	Phenanthrene	0.84	UG/L	J	J		1.1	1
	Phenol	11.1	UG/L	U	U		11.1	1
	Pyrene	1.1	UG/L	U	U		1.1	1
Volatile Organic Gases	**General Engineering Laboratory**							
SW846 3810	Methane	150	UG/L		=		20	1
Volatile Organics	**General Engineering Laboratory**							
SW846 8260B	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1
	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1
	1,2-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloropropane	1	UG/L	U	U		1	1
	2-Butanone	5	UG/L	U	U		5	1
	2-Hexanone	5	UG/L	U	U		5	1
	4-Methyl-2-pentanone	5	UG/L	U	U		5	1
	Acetone	7	UG/L	B	U	F01,F07	5	1
	Benzene	3.4	UG/L		=		1	1
	Bromodichloromethane	1	UG/L	U	U		1	1
	Bromoform	1	UG/L	U	U		1	1
	Bromomethane	1	UG/L	U	U		1	1
	Carbon disulfide	5	UG/L	U	U		5	1
	Carbon tetrachloride	1	UG/L	U	U		1	1
	Chlorobenzene	1	UG/L	U	U		1	1
	Chloroethane	1	UG/L	U	U		1	1
	Chloroform	1	UG/L	U	U		1	1
	Chloromethane	1	UG/L	U	U		1	1
	cis-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Dibromochloromethane	1	UG/L	U	U		1	1
	Ethylbenzene	1.4	UG/L		=		1	1
	Methylene chloride	5	UG/L	U	U		5	1
	Styrene	1	UG/L	U	U		1	1
	Tetrachloroethene	1	UG/L	U	U		1	1
	Toluene	2.7	UG/L		U	F04,F07	1	1

SW846 8260B	trans-1,3-Dichloropropene	1	UG/L	U	U	1	1
	Trichloroethene	1	UG/L	U	U	1	1
	Vinyl chloride	1	UG/L	U	U	1	1
	Xylenes, Total	5.8	UG/L		=	1	1

Station: 7J-MW-14 **Northing:** 684278.62558 **Easting:** 821569.03966 **Coord System:** GA83East **Method:**

Station: 7J-MW-14
Sample ID: 7J4E74 **Media:** Groundwater
Date Collected: 08/20/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Common Anions	**General Engineering Laboratory**							
EPA 300.0	Nitrate	0.1	MG/L	HU	UJ	A03	0.1	1
	Nitrite	0.1	MG/L	HU	UJ	A03	0.1	1
	Sulfate	0.4	MG/L		=		0.4	1
General Chemistry	**General Engineering Laboratory**							
SM4500-CO2	Carbon Dioxide	20	MG/L	U	U		20	1
EPA 376.2	Sulfide	0.1	MG/L	U	U		0.1	1
Inorganics	**General Engineering Laboratory**							
SW846 6010	Iron	1470	UG/L	E	J	E07	4.37	1
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	1,2,4-Trichlorobenzene	10.5	UG/L	U	U		10.5	1
	1,2-Dichlorobenzene	10.5	UG/L	U	U		10.5	1
	1,3-Dichlorobenzene	10.5	UG/L	U	U		10.5	1
	1,4-Dichlorobenzene	10.5	UG/L	JB	U	F01,F06	10.5	1
	2,4,5-Trichlorophenol	10.5	UG/L	U	U		10.5	1
	2,4,6-Trichlorophenol	10.5	UG/L	U	U		10.5	1
	2,4-Dichlorophenol	10.5	UG/L	U	U		10.5	1
	2,4-Dimethylphenol	10.5	UG/L	U	U		10.5	1
	2,4-Dinitrophenol	21	UG/L	U	U		21	1
	2,4-Dinitrotoluene	10.5	UG/L	U	U		10.5	1
	2,6-Dinitrotoluene	10.5	UG/L	U	U		10.5	1
	2-Chloronaphthalene	1	UG/L	U	U		1	1
	2-Chlorophenol	10.5	UG/L	U	U		10.5	1
	2-Methyl-4,6-dinitrophenol	10.5	UG/L	U	U		10.5	1
	2-Methylnaphthalene	25.5	UG/L		=		1	1
	2-Methylphenol	10.5	UG/L	U	U		10.5	1
	2-Nitroaniline	10.5	UG/L	U	U		10.5	1
	2-Nitrophenol	10.5	UG/L	U	U		10.5	1
	3,3'-Dichlorobenzidine	10.5	UG/L	U	U		10.5	1
	3-Nitroaniline	10.5	UG/L	U	U		10.5	1
	4-Bromophenyl phenyl ether	10.5	UG/L	U	U		10.5	1
	4-Chloro-3-methylphenol	10.5	UG/L	U	U		10.5	1
	4-Chloroaniline	10.5	UG/L	U	U		10.5	1
	4-Chlorophenyl phenyl ether	10.5	UG/L	U	U		10.5	1
	4-Methylphenol	10.5	UG/L	U	U		10.5	1
	4-Nitroaniline	10.5	UG/L	U	U		10.5	1
	4-Nitrophenol	10.5	UG/L	U	U		10.5	1
	Acenaphthene	1	UG/L	J	J		1	1
	Acenaphthylene	1	UG/L	U	U		1	1
	Anthracene	1	UG/L	U	U		1	1
	Benz(a)anthracene	1	UG/L	U	U		1	1
	Benzenemethanol	10.5	UG/L	U	U		10.5	1
	Benzo(a)pyrene	1	UG/L	U	U		1	1
	Benzo(b)fluoranthene	1	UG/L	U	U		1	1
	Benzo(ghi)perylene	1	UG/L	U	U		1	1

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Station: 7J-MW-14
Sample ID: 7J4E74 **Media:** Groundwater
Date Collected: 08/20/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	Benzo(k)fluoranthene	1	UG/L	U	U		1	1
	Benzoic acid	21	UG/L	U	U		21	1
	Bis(2-chloroethoxy)methane	10.5	UG/L	U	U		10.5	1
	Bis(2-chloroethyl) ether	10.5	UG/L	U	U		10.5	1
	Bis(2-Chloroisopropyl)Ether	10.5	UG/L	U	U		10.5	1
	Bis(2-ethylhexyl)phthalate	10.5	UG/L	U	U		10.5	1
	Butyl benzyl phthalate	10.5	UG/L	U	U		10.5	1
	Carbazole	3.1	UG/L	J	J		10.5	1
	Chrysene	1	UG/L	U	U		1	1
	Di-n-butyl phthalate	10.5	UG/L	U	U		10.5	1
	Di-n-octylphthalate	10.5	UG/L	U	U		10.5	1
	Dibenz(a,h)anthracene	1	UG/L	U	U		1	1
	Dibenzofuran	1.4	UG/L	J	J		10.5	1
	Diethyl phthalate	10.5	UG/L	U	U		10.5	1
	Dimethyl phthalate	10.5	UG/L	U	U		10.5	1
	Diphenylamine	10.5	UG/L	U	U		10.5	1
	Fluoranthene	1	UG/L	U	U		1	1
	Fluorene	2.6	UG/L		=		1	1
	Hexachlorobenzene	10.5	UG/L	U	U		10.5	1
	Hexachlorobutadiene	10.5	UG/L	U	U		10.5	1
	Hexachlorocyclopentadiene	10.5	UG/L	U	U		10.5	1
	Hexachloroethane	10.5	UG/L	U	U		10.5	1
	Indeno(1,2,3-cd)pyrene	1	UG/L	U	U		1	1
	Isophorone	10.5	UG/L	U	U		10.5	1
	N-Nitroso-di-n-propylamine	10.5	UG/L	U	U		10.5	1
	Naphthalene	43	UG/L		=		1	1
	Nitrobenzene	10.5	UG/L	U	U		10.5	1
	Pentachlorophenol	10.5	UG/L	U	U		10.5	1
	Phenanthrene	3.3	UG/L		=		1	1
	Phenol	10.5	UG/L	U	U		10.5	1
	Pyrene	1	UG/L	U	U		1	1
Volatile Organic Gases	**General Engineering Laboratory**							
SW846 3810	Methane	166	UG/L		=		20	1
Volatile Organics	**General Engineering Laboratory**							
SW846 8260B	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1
	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1
	1,2-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloropropane	1	UG/L	U	U		1	1
	2-Butanone	5	UG/L	U	U		5	1
	2-Hexanone	5	UG/L	U	U		5	1
	4-Methyl-2-pentanone	5	UG/L	U	U		5	1
	Acetone	6.2	UG/L	B	U	F01,F07	5	1
	Benzene	42.9	UG/L		=		1	1
	Bromodichloromethane	1	UG/L	U	U		1	1
	Bromoform	1	UG/L	U	U		1	1
	Bromomethane	1	UG/L	U	U		1	1
	Carbon disulfide	5	UG/L	U	U		5	1
	Carbon tetrachloride	1	UG/L	U	U		1	1
	Chlorobenzene	1	UG/L	U	U		1	1
	Chloroethane	1	UG/L	U	U		1	1
	Chloroform	1	UG/L	U	U		1	1

SW846 8260B	Chloromethane	1	UG/L	U	U		1	1
	cis-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Dibromochloromethane	1	UG/L	U	U		1	1
	Ethylbenzene	0.76	UG/L	J	J		1	1
	Methylene chloride	5	UG/L	U	U		5	1
	Styrene	1	UG/L	U	U		1	1
	Tetrachloroethene	1	UG/L	U	U		1	1
	Toluene	1	UG/L	J	U	F04,F06	1	1
	trans-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Trichloroethene	1	UG/L	U	U		1	1
	Vinyl chloride	1	UG/L	U	U		1	1
	Xylenes, Total	10.8	UG/L		=		1	1

Station: 7J-MW-15 **Northing:** 684344.1001 **Easting:** 821633.6974
Coord System: GA83East **Method:**

Station: 7J-MW-15
Sample ID: 7J4F74 **Media:** Groundwater
Date Collected: 08/20/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Common Anions	**General Engineering Laboratory**							
EPA 300.0	Nitrate	0.1	MG/L	HU	UJ	A03	0.1	1
	Nitrite	0.1	MG/L	HU	UJ	A03	0.1	1
	Sulfate	0.4	MG/L	J	J		0.4	1
General Chemistry	**General Engineering Laboratory**							
SM4500-CO2	Carbon Dioxide	20	MG/L	U	U		20	1
EPA 376.2	Sulfide	0.1	MG/L	U	U		0.1	1
Inorganics	**General Engineering Laboratory**							
SW846 6010	Iron	393	UG/L	E	J	E07	4.37	1
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	1,2,4-Trichlorobenzene	10.5	UG/L	U	U		10.5	1
	1,2-Dichlorobenzene	10.5	UG/L	U	U		10.5	1
	1,3-Dichlorobenzene	10.5	UG/L	U	U		10.5	1
	1,4-Dichlorobenzene	10.5	UG/L	JB	U	F01,F06	10.5	1
	2,4,5-Trichlorophenol	10.5	UG/L	U	U		10.5	1
	2,4,6-Trichlorophenol	10.5	UG/L	U	U		10.5	1
	2,4-Dichlorophenol	10.5	UG/L	U	U		10.5	1
	2,4-Dimethylphenol	10.5	UG/L	U	U		10.5	1
	2,4-Dinitrophenol	21	UG/L	U	U		21	1
	2,4-Dinitrotoluene	10.5	UG/L	U	U		10.5	1
	2,6-Dinitrotoluene	10.5	UG/L	U	U		10.5	1
	2-Chloronaphthalene	1	UG/L	U	U		1	1
	2-Chlorophenol	10.5	UG/L	U	U		10.5	1
	2-Methyl-4,6-dinitrophenol	10.5	UG/L	U	U		10.5	1
	2-Methylnaphthalene	1.2	UG/L		=		1	1
	2-Methylphenol	10.5	UG/L	U	U		10.5	1
	2-Nitroaniline	10.5	UG/L	U	U		10.5	1
	2-Nitrophenol	10.5	UG/L	U	U		10.5	1
	3,3'-Dichlorobenzidine	10.5	UG/L	U	U		10.5	1
	3-Nitroaniline	10.5	UG/L	U	U		10.5	1
	4-Bromophenyl phenyl ether	10.5	UG/L	U	U		10.5	1
	4-Chloro-3-methylphenol	10.5	UG/L	U	U		10.5	1
	4-Chloroaniline	10.5	UG/L	U	U		10.5	1
	4-Chlorophenyl phenyl ether	10.5	UG/L	U	U		10.5	1
	4-Methylphenol	10.5	UG/L	U	U		10.5	1
	4-Nitroaniline	10.5	UG/L	U	U		10.5	1
	4-Nitrophenol	10.5	UG/L	U	U		10.5	1
	Acenaphthene	1	UG/L	U	U		1	1

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Station: 7J-MW-15
Sample ID: 7J4F74 **Media:** Groundwater
Date Collected: 08/20/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	Acenaphthylene	1	UG/L	U	U		1	1
	Anthracene	1	UG/L	U	U		1	1
	Benz(a)anthracene	1	UG/L	U	U		1	1
	Benzenemethanol	10.5	UG/L	U	U		10.5	1
	Benzo(a)pyrene	1	UG/L	U	U		1	1
	Benzo(b)fluoranthene	1	UG/L	U	U		1	1
	Benzo(ghi)perylene	1	UG/L	U	U		1	1
	Benzo(k)fluoranthene	1	UG/L	U	U		1	1
	Benzoic acid	21	UG/L	U	U		21	1
	Bis(2-chloroethoxy)methane	10.5	UG/L	U	U		10.5	1
	Bis(2-chloroethyl) ether	10.5	UG/L	U	U		10.5	1
	Bis(2-Chloroisopropyl)Ether	10.5	UG/L	U	U		10.5	1
	Bis(2-ethylhexyl)phthalate	10.5	UG/L	U	U		10.5	1
	Butyl benzyl phthalate	10.5	UG/L	U	U		10.5	1
	Carbazole	10.5	UG/L	U	U		10.5	1
	Chrysene	1	UG/L	U	U		1	1
	Di-n-butyl phthalate	10.5	UG/L	U	U		10.5	1
	Di-n-octylphthalate	10.5	UG/L	U	U		10.5	1
	Dibenz(a,h)anthracene	1	UG/L	U	U		1	1
	Dibenzofuran	10.5	UG/L	U	U		10.5	1
	Diethyl phthalate	10.5	UG/L	U	U		10.5	1
	Dimethyl phthalate	10.5	UG/L	U	U		10.5	1
	Diphenylamine	10.5	UG/L	U	U		10.5	1
	Fluoranthene	1	UG/L	U	U		1	1
	Fluorene	1	UG/L	U	U		1	1
	Hexachlorobenzene	10.5	UG/L	U	U		10.5	1
	Hexachlorobutadiene	10.5	UG/L	U	U		10.5	1
	Hexachlorocyclopentadiene	10.5	UG/L	U	U		10.5	1
	Hexachloroethane	10.5	UG/L	U	U		10.5	1
	Indeno(1,2,3-cd)pyrene	1	UG/L	U	U		1	1
	Isophorone	10.5	UG/L	U	U		10.5	1
	N-Nitroso-di-n-propylamine	10.5	UG/L	U	U		10.5	1
	Naphthalene	4.1	UG/L		=		1	1
	Nitrobenzene	10.5	UG/L	U	U		10.5	1
	Pentachlorophenol	10.5	UG/L	U	U		10.5	1
	Phenanthrene	1	UG/L	U	U		1	1
	Phenol	10.5	UG/L	U	U		10.5	1
	Pyrene	1	UG/L	U	U		1	1
Volatile Organic Gases	**General Engineering Laboratory**							
SW846 3810	Methane	48.8	UG/L		=		20	1
Volatile Organics	**General Engineering Laboratory**							
SW846 8260B	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1
	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1
	1,2-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloropropane	1	UG/L	U	U		1	1
	2-Butanone	5	UG/L	U	U		5	1
	2-Hexanone	5	UG/L	U	U		5	1
	4-Methyl-2-pentanone	5	UG/L	U	U		5	1
	Acetone	5.9	UG/L	B	U	F01,F07	5	1
	Benzene	1	UG/L	U	U		1	1
	Bromodichloromethane	1	UG/L	U	U		1	1

SW846 8260B	Bromoform	1	UG/L	U	U		1	1
	Bromomethane	1	UG/L	U	U		1	1
	Carbon disulfide	5	UG/L	U	U		5	1
	Carbon tetrachloride	1	UG/L	U	U		1	1
	Chlorobenzene	1	UG/L	U	U		1	1
	Chloroethane	1	UG/L	U	U		1	1
	Chloroform	1	UG/L	U	U		1	1
	Chloromethane	1	UG/L	U	U		1	1
	cis-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Dibromochloromethane	1	UG/L	U	U		1	1
	Ethylbenzene	1	UG/L	U	U		1	1
	Methylene chloride	5	UG/L	U	U		5	1
	Styrene	1	UG/L	U	U		1	1
	Tetrachloroethene	1	UG/L	U	U		1	1
	Toluene	1	UG/L	J	U	F04,F06	1	1
	trans-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Trichloroethene	1	UG/L	U	U		1	1
	Vinyl chloride	1	UG/L	U	U		1	1
	Xylenes, Total	7.8	UG/L		=		1	1

Station: 7J-MW-16 **Northing:** 684231.1668 8 **Easting:** 821565.7414

Coord System: GA83East **Method:**

Station: 7J-MW-16
Sample ID: 7J4G74 **Media:** Groundwater
Date Collected: 08/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Common Anions	**General Engineering Laboratory**							
EPA 300.0	Nitrate	0.0341	MG/L	U	U		0.0341	1
	Nitrite	0.0542	MG/L	U	U		0.0542	1
	Sulfate	8.21	MG/L		=		0.193	1
General Chemistry	**General Engineering Laboratory**							
SM4500-CO2	Carbon Dioxide	211	MG/L		=		1	1
EPA 376.2	Sulfide	0.0248	MG/L	U	U		0.0248	1
Inorganics	**General Engineering Laboratory**							
SW846 6010	Iron	185	UG/L		=		4.37	1
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	1,2,4-Trichlorobenzene	10.6	UG/L	U	U		10.6	1
	1,2-Dichlorobenzene	10.6	UG/L	U	U		10.6	1
	1,3-Dichlorobenzene	10.6	UG/L	U	U		10.6	1
	1,4-Dichlorobenzene	10.6	UG/L	U	U		10.6	1
	2,4,5-Trichlorophenol	10.6	UG/L	U	U		10.6	1
	2,4,6-Trichlorophenol	10.6	UG/L	U	U		10.6	1
	2,4-Dichlorophenol	10.6	UG/L	U	U		10.6	1
	2,4-Dimethylphenol	10.6	UG/L	U	U		10.6	1
	2,4-Dinitrophenol	21.3	UG/L	U	U		21.3	1
	2,4-Dinitrotoluene	10.6	UG/L	U	U		10.6	1
	2,6-Dinitrotoluene	10.6	UG/L	U	U		10.6	1
	2-Chloronaphthalene	1.1	UG/L	U	U		1.1	1
	2-Chlorophenol	10.6	UG/L	U	U		10.6	1
	2-Methyl-4,6-dinitrophenol	10.6	UG/L	U	U		10.6	1
	2-Methylnaphthalene	1.1	UG/L	U	U		1.1	1
	2-Methylphenol	10.6	UG/L	U	U		10.6	1
	2-Nitroaniline	10.6	UG/L	U	U		10.6	1
	2-Nitrophenol	10.6	UG/L	U	U		10.6	1
	3,3'-Dichlorobenzidine	10.6	UG/L	U	U		10.6	1
	3-Nitroaniline	10.6	UG/L	U	U		10.6	1

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Station: 7J-MW-16
Sample ID: 7J4G74 **Media:** Groundwater
Date Collected: 08/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	4-Bromophenyl phenyl ether	10.6	UG/L	U	U		10.6	1
	4-Chloro-3-methylphenol	10.6	UG/L	U	U		10.6	1
	4-Chloroaniline	10.6	UG/L	U	U		10.6	1
	4-Chlorophenyl phenyl ether	10.6	UG/L	U	U		10.6	1
	4-Methylphenol	10.6	UG/L	U	U		10.6	1
	4-Nitroaniline	10.6	UG/L	U	U		10.6	1
	4-Nitrophenol	10.6	UG/L	U	U		10.6	1
	Acenaphthene	1.1	UG/L	U	U		1.1	1
	Acenaphthylene	1.1	UG/L	U	U		1.1	1
	Anthracene	1.1	UG/L	U	U		1.1	1
	Benz(a)anthracene	1.1	UG/L	U	U		1.1	1
	Benzenemethanol	10.6	UG/L	U	U		10.6	1
	Benzo(a)pyrene	1.1	UG/L	U	U		1.1	1
	Benzo(b)fluoranthene	1.1	UG/L	U	U		1.1	1
	Benzo(ghi)perylene	1.1	UG/L	U	U		1.1	1
	Benzo(k)fluoranthene	1.1	UG/L	U	U		1.1	1
	Benzoic acid	21.3	UG/L	U	U		21.3	1
	Bis(2-chloroethoxy)methane	10.6	UG/L	U	U		10.6	1
	Bis(2-chloroethyl) ether	10.6	UG/L	U	U		10.6	1
	Bis(2-Chloroisopropyl)Ether	10.6	UG/L	U	U		10.6	1
	Bis(2-ethylhexyl)phthalate	2	UG/L	J	J		10.6	1
	Butyl benzyl phthalate	10.6	UG/L	U	U		10.6	1
	Carbazole	10.6	UG/L	U	U		10.6	1
	Chrysene	1.1	UG/L	U	U		1.1	1
	Di-n-butyl phthalate	10.6	UG/L	U	U		10.6	1
	Di-n-octylphthalate	10.6	UG/L	U	U		10.6	1
	Dibenz(a,h)anthracene	1.1	UG/L	U	U		1.1	1
	Dibenzofuran	10.6	UG/L	U	U		10.6	1
	Diethyl phthalate	10.6	UG/L	U	U		10.6	1
	Dimethyl phthalate	10.6	UG/L	U	U		10.6	1
	Diphenylamine	10.6	UG/L	U	U		10.6	1
	Fluoranthene	1.1	UG/L	U	U		1.1	1
	Fluorene	1.1	UG/L	U	U		1.1	1
	Hexachlorobenzene	10.6	UG/L	U	U		10.6	1
	Hexachlorobutadiene	10.6	UG/L	U	U		10.6	1
	Hexachlorocyclopentadiene	10.6	UG/L	U	U		10.6	1
	Hexachloroethane	10.6	UG/L	U	U		10.6	1
	Indeno(1,2,3-cd)pyrene	1.1	UG/L	U	U		1.1	1
	Isophorone	10.6	UG/L	U	U		10.6	1
	N-Nitroso-di-n-propylamine	10.6	UG/L	U	U		10.6	1
	Naphthalene	1.1	UG/L	U	U		1.1	1
	Nitrobenzene	10.6	UG/L	U	U		10.6	1
	Pentachlorophenol	10.6	UG/L	U	U		10.6	1
	Phenanthrene	1.1	UG/L	U	U		1.1	1
	Phenol	10.6	UG/L	U	U		10.6	1
	Pyrene	1.1	UG/L	U	U		1.1	1
Volatile Organic Gases	**General Engineering Laboratory**							
SW846 3810	Methane	20	UG/L	U	U		20	1
Volatile Organics	**General Engineering Laboratory**							
SW846 8260B	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1
	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1

SW846 8260B	1,2-Dichloroethene	1 UG/L	U	U		1	1
	1,2-Dichloropropane	1 UG/L	U	U		1	1
	2-Butanone	5 UG/L	U	U		5	1
	2-Hexanone	5 UG/L	U	U		5	1
	4-Methyl-2-pentanone	5 UG/L	U	U		5	1
	Acetone	7.5 UG/L		U	F04,F07	5	1
	Benzene	1 UG/L	U	U		1	1
	Bromodichloromethane	1 UG/L	U	U		1	1
	Bromoform	1 UG/L	U	U		1	1
	Bromomethane	1 UG/L	U	U		1	1
	Carbon disulfide	5 UG/L	U	U		5	1
	Carbon tetrachloride	1 UG/L	U	U		1	1
	Chlorobenzene	1 UG/L	U	U		1	1
	Chloroethane	1 UG/L	U	U		1	1
	Chloroform	1 UG/L	U	U		1	1
	Chloromethane	1 UG/L	U	U		1	1
	cis-1,3-Dichloropropene	1 UG/L	U	U		1	1
	Dibromochloromethane	1 UG/L	U	U		1	1
	Ethylbenzene	1 UG/L	U	U		1	1
	Methylene chloride	5 UG/L	U	U		5	1
	Styrene	1 UG/L	U	U		1	1
	Tetrachloroethene	1 UG/L	U	U		1	1
	Toluene	0.52 UG/L	J	J		1	1
	trans-1,3-Dichloropropene	1 UG/L	U	U		1	1
	Trichloroethene	1 UG/L	U	U		1	1
	Vinyl chloride	1 UG/L	U	U		1	1
	Xylenes, Total	1 UG/L	U	U		1	1

Station: 7J-MW-17 **Northing:** 684226.5515 3 **Easting:** 821612.2886 8

Coord System: GA83East **Method:**

Station: 7J-MW-17
Sample ID: 7J4H74 **Media:** Groundwater
Date Collected: 08/20/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Common Anions	**General Engineering Laboratory**							
EPA 300.0	Nitrate	0.1	MG/L	HU	UJ	A03	0.1	1
	Nitrite	0.1	MG/L	HU	UJ	A03	0.1	1
	Sulfate	8.39	MG/L		=		0.4	1
General Chemistry	**General Engineering Laboratory**							
SM4500-CO2	Carbon Dioxide	315	MG/L		=		20	1
EPA 376.2	Sulfide	0.1	MG/L	U	U		0.1	1
Inorganics	**General Engineering Laboratory**							
SW846 6010	Iron	128	UG/L	E	J	E07	4.37	1
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	1,2,4-Trichlorobenzene	10.5	UG/L	U	U		10.5	1
	1,2-Dichlorobenzene	10.5	UG/L	U	U		10.5	1
	1,3-Dichlorobenzene	10.5	UG/L	U	U		10.5	1
	1,4-Dichlorobenzene	10.5	UG/L	JB	U	F01,F06	10.5	1
	2,4,5-Trichlorophenol	10.5	UG/L	U	U		10.5	1
	2,4,6-Trichlorophenol	10.5	UG/L	U	U		10.5	1
	2,4-Dichlorophenol	10.5	UG/L	U	U		10.5	1
	2,4-Dimethylphenol	10.5	UG/L	U	U		10.5	1
	2,4-Dinitrophenol	21	UG/L	U	U		21	1
	2,4-Dinitrotoluene	10.5	UG/L	U	U		10.5	1
	2,6-Dinitrotoluene	10.5	UG/L	U	U		10.5	1
	2-Chloronaphthalene	1	UG/L	U	U		1	1

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Station: 7J-MW-17
Sample ID: 7J4H74 **Media:** Groundwater
Date Collected: 08/20/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Validation Qual	Code	Detection Limit	Dilution
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	2-Chlorophenol	10.5	UG/L	U	U		10.5	1
	2-Methyl-4,6-dinitrophenol	10.5	UG/L	U	U		10.5	1
	2-Methylnaphthalene	1	UG/L	U	U		1	1
	2-Methylphenol	10.5	UG/L	U	U		10.5	1
	2-Nitroaniline	10.5	UG/L	U	U		10.5	1
	2-Nitrophenol	10.5	UG/L	U	U		10.5	1
	3,3'-Dichlorobenzidine	10.5	UG/L	U	U		10.5	1
	3-Nitroaniline	10.5	UG/L	U	U		10.5	1
	4-Bromophenyl phenyl ether	10.5	UG/L	U	U		10.5	1
	4-Chloro-3-methylphenol	10.5	UG/L	U	U		10.5	1
	4-Chloroaniline	10.5	UG/L	U	U		10.5	1
	4-Chlorophenyl phenyl ether	10.5	UG/L	U	U		10.5	1
	4-Methylphenol	10.5	UG/L	U	U		10.5	1
	4-Nitroaniline	10.5	UG/L	U	U		10.5	1
	4-Nitrophenol	10.5	UG/L	U	U		10.5	1
	Acenaphthene	1	UG/L	U	U		1	1
	Acenaphthylene	1	UG/L	U	U		1	1
	Anthracene	1	UG/L	U	U		1	1
	Benz(a)anthracene	1	UG/L	U	U		1	1
	Benzenemethanol	10.5	UG/L	U	U		10.5	1
	Benzo(a)pyrene	1	UG/L	U	U		1	1
	Benzo(b)fluoranthene	1	UG/L	U	U		1	1
	Benzo(ghi)perylene	1	UG/L	U	U		1	1
	Benzo(k)fluoranthene	1	UG/L	U	U		1	1
	Benzoic acid	21	UG/L	U	U		21	1
	Bis(2-chloroethoxy)methane	10.5	UG/L	U	U		10.5	1
	Bis(2-chloroethyl) ether	10.5	UG/L	U	U		10.5	1
	Bis(2-Chloroisopropyl)Ether	10.5	UG/L	U	U		10.5	1
	Bis(2-ethylhexyl)phthalate	10.5	UG/L	U	U		10.5	1
	Butyl benzyl phthalate	10.5	UG/L	U	U		10.5	1
	Carbazole	10.5	UG/L	U	U		10.5	1
	Chrysene	1	UG/L	U	U		1	1
	Di-n-butyl phthalate	10.5	UG/L	U	U		10.5	1
	Di-n-octylphthalate	10.5	UG/L	U	U		10.5	1
	Dibenz(a,h)anthracene	1	UG/L	U	U		1	1
	Dibenzofuran	10.5	UG/L	U	U		10.5	1
	Diethyl phthalate	10.5	UG/L	U	U		10.5	1
	Dimethyl phthalate	10.5	UG/L	U	U		10.5	1
	Diphenylamine	10.5	UG/L	U	U		10.5	1
	Fluoranthene	1	UG/L	U	U		1	1
	Fluorene	1	UG/L	U	U		1	1
	Hexachlorobenzene	10.5	UG/L	U	U		10.5	1
	Hexachlorobutadiene	10.5	UG/L	U	U		10.5	1
	Hexachlorocyclopentadiene	10.5	UG/L	U	U		10.5	1
	Hexachloroethane	10.5	UG/L	U	U		10.5	1
	Indeno(1,2,3-cd)pyrene	1	UG/L	U	U		1	1
	Isophorone	10.5	UG/L	U	U		10.5	1
	N-Nitroso-di-n-propylamine	10.5	UG/L	U	U		10.5	1
	Naphthalene	1	UG/L	U	U		1	1
	Nitrobenzene	10.5	UG/L	U	U		10.5	1
	Pentachlorophenol	10.5	UG/L	U	U		10.5	1
	Phenanthrene	1	UG/L	U	U		1	1
	Phenol	10.5	UG/L	U	U		10.5	1
	Pyrene	1	UG/L	U	U		1	1
Volatile Organic Gases	**General Engineering Laboratory**							

Station: 7J-MW-17
Sample ID: 7J4H74 **Media:** Groundwater
Date Collected: 08/20/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Volatile Organics	**General Engineering Laboratory**							
SW846 3810	Methane	49.7	UG/L		=		20	1
Volatile Organics	**General Engineering Laboratory**							
	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1
	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1
	1,2-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloropropane	1	UG/L	U	U		1	1
	2-Butanone	5	UG/L	U	U		5	1
	2-Hexanone	5	UG/L	U	U		5	1
	4-Methyl-2-pentanone	5	UG/L	U	U		5	1
	Acetone	6.3	UG/L	B	U	F01,F07	5	1
	Benzene	1	UG/L	U	U		1	1
	Bromodichloromethane	1	UG/L	U	U		1	1
	Bromoform	1	UG/L	U	U		1	1
	Bromomethane	1	UG/L	U	U		1	1
	Carbon disulfide	5	UG/L	U	U		5	1
	Carbon tetrachloride	1	UG/L	U	U		1	1
	Chlorobenzene	1	UG/L	U	U		1	1
	Chloroethane	1	UG/L	U	U		1	1
	Chloroform	1	UG/L	U	U		1	1
	Chloromethane	1	UG/L	U	U		1	1
	cis-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Dibromochloromethane	1	UG/L	U	U		1	1
	Ethylbenzene	1	UG/L	U	U		1	1
	Methylene chloride	5	UG/L	U	U		5	1
	Styrene	1	UG/L	U	U		1	1
	Tetrachloroethene	1	UG/L	U	U		1	1
	Toluene	1	UG/L	J	U	F04,F06	1	1
	trans-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Trichloroethene	1	UG/L	U	U		1	1
	Vinyl chloride	1	UG/L	U	U		1	1
	Xylenes, Total	1	UG/L	U	U		1	1

Station: 7J-MW-18 **Northing:** 684270.2279 **Easting:** 821623.6053 3
Coord System: GA83East **Method:**

Station: 7J-MW-18
Sample ID: 7J4J74 **Media:** Groundwater
Date Collected: 08/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Common Anions	**General Engineering Laboratory**							
EPA 300.0	Nitrate	0.0341	MG/L	U	U		0.0341	1
	Nitrite	0.0542	MG/L	U	U		0.0542	1
	Sulfate	8.92	MG/L		=		0.193	1
General Chemistry	**General Engineering Laboratory**							
SM4500-CO2	Carbon Dioxide	1	MG/L	U	U		1	1
EPA 376.2	Sulfide	0.0248	MG/L	U	U		0.0248	1
Inorganics	**General Engineering Laboratory**							
SW846 6010	Iron	2800	UG/L		=		4.37	1

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Semi-Volatile Organics	General Engineering Laboratory						
SW846 8270C	1,2,4-Trichlorobenzene	10.4 UG/L	U	U		10.4	1
	1,2-Dichlorobenzene	10.4 UG/L	U	U		10.4	1
	1,3-Dichlorobenzene	10.4 UG/L	U	U		10.4	1
	1,4-Dichlorobenzene	10.4 UG/L	U	U		10.4	1
	2,4,5-Trichlorophenol	10.4 UG/L	U	U		10.4	1
	2,4,6-Trichlorophenol	10.4 UG/L	U	U		10.4	1
	2,4-Dichlorophenol	10.4 UG/L	U	U		10.4	1
	2,4-Dimethylphenol	10.4 UG/L	U	U		10.4	1
	2,4-Dinitrophenol	20.8 UG/L	U	U		20.8	1
	2,4-Dinitrotoluene	10.4 UG/L	U	U		10.4	1
	2,6-Dinitrotoluene	10.4 UG/L	U	U		10.4	1
	2-Chloronaphthalene	1 UG/L	U	U		1	1
	2-Chlorophenol	10.4 UG/L	U	U		10.4	1
	2-Methyl-4,6-dinitrophenol	10.4 UG/L	U	U		10.4	1
	2-Methylnaphthalene	10.6 UG/L		=		1	1
	2-Methylphenol	10.4 UG/L	U	U		10.4	1
	2-Nitroaniline	10.4 UG/L	U	U		10.4	1
	2-Nitrophenol	10.4 UG/L	U	U		10.4	1
	3,3'-Dichlorobenzidine	10.4 UG/L	U	U		10.4	1
	3-Nitroaniline	10.4 UG/L	U	U		10.4	1
	4-Bromophenyl phenyl ether	10.4 UG/L	U	U		10.4	1
	4-Chloro-3-methylphenol	10.4 UG/L	U	U		10.4	1
	4-Chloroaniline	10.4 UG/L	U	U		10.4	1
	4-Chlorophenyl phenyl ether	10.4 UG/L	U	U		10.4	1
	4-Methylphenol	10.4 UG/L	U	U		10.4	1
	4-Nitroaniline	10.4 UG/L	U	U		10.4	1
	4-Nitrophenol	10.4 UG/L	U	U		10.4	1
	Acenaphthene	1 UG/L	U	U		1	1
	Acenaphthylene	1 UG/L	U	U		1	1
	Anthracene	1 UG/L	U	U		1	1
	Benz(a)anthracene	1 UG/L	U	U		1	1
	Benzenemethanol	10.4 UG/L	U	U		10.4	1
	Benzo(a)pyrene	1 UG/L	U	U		1	1
	Benzo(b)fluoranthene	1 UG/L	U	U		1	1
	Benzo(ghi)perylene	1 UG/L	U	U		1	1
	Benzo(k)fluoranthene	1 UG/L	U	R	C04,C05	1	1
	Benzoic acid	20.8 UG/L	U	U		20.8	1
	Bis(2-chloroethoxy)methane	10.4 UG/L	U	U		10.4	1
	Bis(2-chloroethyl) ether	10.4 UG/L	U	U		10.4	1
	Bis(2-Chloroisopropyl)Ether	10.4 UG/L	U	U		10.4	1
	Bis(2-ethylhexyl)phthalate	10.4 UG/L	U	U		10.4	1
	Butyl benzyl phthalate	10.4 UG/L	U	U		10.4	1
	Carbazole	10.4 UG/L	U	U		10.4	1
	Chrysene	1 UG/L	U	U		1	1
	Di-n-butyl phthalate	10.4 UG/L	U	U		10.4	1
	Di-n-octylphthalate	10.4 UG/L	U	U		10.4	1
	Dibenz(a,h)anthracene	1 UG/L	U	U		1	1
	Dibenzofuran	0.46 UG/L	J	J		10.4	1
	Diethyl phthalate	10.4 UG/L	U	U		10.4	1
	Dimethyl phthalate	10.4 UG/L	U	U		10.4	1
	Diphenylamine	10.4 UG/L	U	U		10.4	1
	Fluoranthene	1 UG/L	U	U		1	1
	Fluorene	0.93 UG/L	J	J		1	1
	Hexachlorobenzene	10.4 UG/L	U	U		10.4	1
	Hexachlorobutadiene	10.4 UG/L	U	U		10.4	1
	Hexachlorocyclopentadiene	10.4 UG/L	U	U		10.4	1
	Hexachloroethane	10.4 UG/L	U	U		10.4	1
	Indeno(1,2,3-cd)pyrene	1 UG/L	U	U		1	1
	Isophorone	10.4 UG/L	U	U		10.4	1
	N-Nitroso-di-n-propylamine	10.4 UG/L	U	U		10.4	1
	Naphthalene	9.7 UG/L		=		1	1

Station: 7J-MW-18
Sample ID: 7J4J74 **Media:** Groundwater
Date Collected: 08/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**General Engineering Laboratory**							
SW846 8270C	Nitrobenzene	10.4	UG/L	U	U		10.4	1
	Pentachlorophenol	10.4	UG/L	U	U		10.4	1
	Phenanthrene	1.3	UG/L		=		1	1
	Phenol	10.4	UG/L	U	U		10.4	1
	Pyrene	1	UG/L	U	U		1	1
Volatile Organic Gases	**General Engineering Laboratory**							
SW846 3810	Methane	293	UG/L		=		20	1
Volatile Organics	**General Engineering Laboratory**							
SW846 8260B	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1
	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1
	1,2-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloropropane	1	UG/L	U	U		1	1
	2-Butanone	5	UG/L	U	U		5	1
	2-Hexanone	5	UG/L	U	U		5	1
	4-Methyl-2-pentanone	5	UG/L	U	U		5	1
	Acetone	5	UG/L	J	U	F04,F06	5	1
	Benzene	1	UG/L	U	U		1	1
	Bromodichloromethane	1	UG/L	U	U		1	1
	Bromoform	1	UG/L	U	U		1	1
	Bromomethane	1	UG/L	U	U		1	1
	Carbon disulfide	5	UG/L	U	U		5	1
	Carbon tetrachloride	1	UG/L	U	U		1	1
	Chlorobenzene	1	UG/L	U	U		1	1
	Chloroethane	1	UG/L	U	U		1	1
	Chloroform	1	UG/L	U	U		1	1
	Chloromethane	1	UG/L	U	U		1	1
	cis-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Dibromochloromethane	1	UG/L	U	U		1	1
	Ethylbenzene	0.66	UG/L	J	J		1	1
	Methylene chloride	5	UG/L	U	U		5	1
	Styrene	1	UG/L	U	U		1	1
	Tetrachloroethene	1	UG/L	U	U		1	1
	Toluene	1	UG/L	U	U		1	1
	trans-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Trichloroethene	1	UG/L	U	U		1	1
	Vinyl chloride	1	UG/L	U	U		1	1
	Xylenes, Total	1	UG/L		=		1	1

Station: QC **Northing:** NA **Easting:** NA
Coord System: NA **Method:**

Station: QC
Sample ID: TB3551 **Media:** Quality Control
Date Collected: 08/19/2004 **Field Sample Type:** Trip Blank

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Volatile Organics	**General Engineering Laboratory**							
	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
SW846 8260B	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1

Station: QC
Sample ID: TB3551 **Media:** Quality Control
Date Collected: 08/19/2004 **Field Sample Type:** Trip Blank

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Volatile Organics	**General Engineering Laboratory**							
SW846 8260B	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1
	1,2-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloropropane	1	UG/L	U	U		1	1
	2-Butanone	5	UG/L	U	U		5	1
	2-Hexanone	5	UG/L	U	U		5	1
	4-Methyl-2-pentanone	5	UG/L	U	U		5	1
	Acetone	2.6	UG/L	J	J		5	1
	Benzene	1	UG/L	U	U		1	1
	Bromodichloromethane	1	UG/L	U	U		1	1
	Bromoform	1	UG/L	U	U		1	1
	Bromomethane	1	UG/L	U	U		1	1
	Carbon disulfide	5	UG/L	U	U		5	1
	Carbon tetrachloride	1	UG/L	U	U		1	1
	Chlorobenzene	1	UG/L	U	U		1	1
	Chloroethane	1	UG/L	U	U		1	1
	Chloroform	1	UG/L	U	U		1	1
	Chloromethane	1	UG/L	U	U		1	1
	cis-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Dibromochloromethane	1	UG/L	U	U		1	1
	Ethylbenzene	1	UG/L	U	U		1	1
	Methylene chloride	5	UG/L	U	U		5	1
	Styrene	1	UG/L	U	U		1	1
	Tetrachloroethene	1	UG/L	U	U		1	1
	Toluene	1	UG/L	U	U		1	1
	trans-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Trichloroethene	1	UG/L	U	U		1	1
	Vinyl chloride	1	UG/L	U	U		1	1
	Xylenes, Total	1	UG/L	U	U		1	1

Station: QC
Sample ID: TB3552 **Media:** Quality Control
Date Collected: 08/20/2004 **Field Sample Type:** Trip Blank

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Volatile Organics	**General Engineering Laboratory**							
	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
SW846 8260B	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1
	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1
	1,2-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloropropane	1	UG/L	U	U		1	1
	2-Butanone	5	UG/L	U	U		5	1
	2-Hexanone	5	UG/L	U	U		5	1
	4-Methyl-2-pentanone	5	UG/L	U	U		5	1
	Acetone	6.8	UG/L	B	U	F01,F07	5	1
	Benzene	1	UG/L	U	U		1	1
	Bromodichloromethane	1	UG/L	U	U		1	1
	Bromoform	1	UG/L	U	U		1	1
	Bromomethane	1	UG/L	U	U		1	1
	Carbon disulfide	5	UG/L	U	U		5	1
	Carbon tetrachloride	1	UG/L	U	U		1	1

Fort Stewart - SWMU 27F

Station: QC
Sample ID: TB3552 **Media:** Quality Control
Date Collected: 08/20/2004 **Field Sample Type:** Trip Blank

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Volatile Organics	**General Engineering Laboratory**							
SW846 8260B	Chlorobenzene	1	UG/L	U	U		1	1
	Chloroethane	1	UG/L	U	U		1	1
	Chloroform	1	UG/L	U	U		1	1
	Chloromethane	1	UG/L	U	U		1	1
	cis-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Dibromochloromethane	1	UG/L	U	U		1	1
	Ethylbenzene	1	UG/L	U	U		1	1
	Methylene chloride	5	UG/L	U	U		5	1
	Styrene	1	UG/L	U	U		1	1
	Tetrachloroethene	1	UG/L	U	U		1	1
	Toluene	0.44	UG/L	J	J		1	1
	trans-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Trichloroethene	1	UG/L	U	U		1	1
	Vinyl chloride	1	UG/L	U	U		1	1
	Xylenes, Total	1	UG/L	U	U		1	1

CHAIN-OF-CUSTODY FORMS

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CHAIN OF CUSTODY RECORD

COC NO.: 27FØ10

PROJECT NAME: SWMU-27F

PROJECT NUMBER: 01-1055-04-5788-100

PROJECT MANAGER: Jeff Longaker

Sampler (Signature): Patricia A Stoll (Printed Name): PATRICIA A. STOLL

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Raod, Charleston, SC 29407

PHONE NO: (843) 556-8171

	Sample ID	Date Collected	Time Collected	Matrix	VOC	SVOC	Methane	Carbon Dioxide	Nitrate, Nitrite, Sulfate	Sulfide	Total Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
004	7J4574	8/19/04	1320	Water		2						2		
005	7J4974		1245			2						2		
003	7J4J74		1450			2					1	3		
002	7J4G74		1140			2					1	3		
001	7J4674		1030			2						2		

B-39 of 311

8/20/04

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Patricia A Stoll	8/20/04	Ben Worthington	8/20/04 1250
COMPANY NAME: SAIC		COMPANY NAME: CEL	
RECEIVED BY:	Date/Time	RELINQUISHED BY: Ben Worthington	Date/Time 8/20/04 15:15
COMPANY NAME:		COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME:		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 12

Cooler ID: Ø72

Cooler Temperature: 4 °C

FEDEX NUMBER: N/A

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CHAIN OF CUSTODY RECORD

COC NO.: 27F011

PROJECT NAME: SWMU-27F

PROJECT NUMBER: 01-1055-04-5788-100

PROJECT MANAGER: Jeff Longaker

Sampler (Signature): P A Stoll (Printed Name): PATRICIA A. STOLL

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Raod, Charleston, SC 29407

PHONE NO: (843) 556-8171

Sample ID	Date Collected	Time Collected	Matrix	VOC	SVOC	Methane	Carbon Dioxide	Nitrate, Nitrite, Sulfate	Sulfide	Total Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
005 7J4374	8/19/04	1140	Water		2				1	1	4		
007 7J4174		1545			2				1	1	4		
004 7J4574		1320							1	1	2		
003 7J4J74		1450							1		1		
002 7J4G74		1140							1		1		
001 7J4674		1030							1	1	2		
006 7J4974		1245							1	1	2		

B-40/10 E311

P A Stoll 8/20/04

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
P A Stoll	8/20/04	Ben Walton	8/20/04 12:00
COMPANY NAME: SAIC		COMPANY NAME: GEL	
RECEIVED BY:	Date/Time	RELINQUISHED BY: Ben Walton	Date/Time 8/20/04 15:15
COMPANY NAME:		COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME:		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 16

Cooler ID: 1692

Cooler Temperature: 4°C

FEDEX NUMBER: N/A

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1146407

CHAIN OF CUSTODY RECORD

COC NO.: 27F012

PROJECT NAME: SWMU-27F

PROJECT NUMBER: 01-1055-04-5788-100

PROJECT MANAGER: Jeff Longaker

Sampler (Signature): P A Shell (Printed Name): PATRICIA A. SHELL

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Raod, Charleston, SC 29407

PHONE NO: (843) 556-8171

	Sample ID	Date Collected	Time Collected	Matrix	VOC	SVOC	Methane	Carbon Dioxide	Nitrate, Nitrite, Sulfate	Sulfide	Total Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
001	7J4674	8/19/04	1030	water	2		2	1	1			4		
002	7J4G74		1140		2		2	1	1			4		
003	7J4J74		1450		2		2	1	1			4		
004	7J4574		1320		2		2	1	1			4		
005	7J4374		1140		2		2	1	1			4		
006	7J4974		1245		2		2	1	1			4		
007	7J4174		1545		2		2	1	1			4		
008	TB3551		0745		2							2		

P Shell 8/20/04

B41 8-0F-31

RELINQUISHED BY: P A Shell	Date/Time 8/20/04	RECEIVED BY: Ben Walters	Date/Time 8/24/04 12:20	TOTAL NUMBER OF CONTAINERS: 30	Cooler Temperature: 4 °C
COMPANY NAME: SAIC		COMPANY NAME: GEL		Cooler ID: 952	FEDEX NUMBER: N/A
RECEIVED BY:	Date/Time	RELINQUISHED BY: Ben Walters	Date/Time 8/24/04 15:15		
COMPANY NAME:		COMPANY NAME:			
RELINQUISHED BY:	Date/Time	RECEIVED BY: Thom Simms	Date/Time 8/20/04 10:00		
COMPANY NAME:		COMPANY NAME: GEL			

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CHAIN OF CUSTODY RECORD

COC NO.: 27F013

PROJECT NAME: SWMU-27F

PROJECT NUMBER: 01-1055-04-5788-100

PROJECT MANAGER: Jeff Longaker

Sampler (Signature): P Stoll (Printed Name): PATRICIA A. STOLL

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Raod, Charleston, SC 29407

PHONE NO: (843) 556-8171

Sample ID	Date Collected	Time Collected	Matrix	VOC	SVOC	Methane	Carbon Dioxide	Nitrate, Nitrite, Sulfate	Sulfide	Total Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
7J4H74	8/20/04	1040	water		2						2		
7J4E74		1200			2						2		
7J4F74		1440			2						2		
7J4A74		1125			2						2		
7J4474		1455			2				1	1	4		

P Stoll 8/23/04

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
P Stoll	8/23/04		
COMPANY NAME: SAIC		COMPANY NAME: GEL	8/23/04 1425
RECEIVED BY: Ben Watkins	Date/Time 8/23/04 11:35	RELINQUISHED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	
RELINQUISHED BY: Ben Watkins	Date/Time 8/23/04 14:25	RECEIVED BY:	Date/Time
COMPANY NAME: GEL		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 12

Cooler ID: 710

Cooler Temperature: 4°C

FEDEX NUMBER: N/A

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Science Applications International Corporation
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1197082

CHAIN OF CUSTODY RECORD

COC NO.: 27F014

PROJECT NAME: SWMU-27F

PROJECT NUMBER: 01-1055-04-5788-100

PROJECT MANAGER: Jeff Longaker

Sampler (Signature): Patricia A Stoll (Printed Name): PATRICIA A. STOLL

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Raod, Charleston, SC 29407

PHONE NO: (843) 556-8171

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOC	SVOC	Methane	Carbon Dioxide	Nitrate, Nitrite, Sulfate	Sulfide	Total Iron	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
7J4774	8/20/04	1725	Water	2	2	2	1	1	1	1	10		
7J4A74	↓	1125		2		2	1	1	1	1	8		
7J4F74		1440		2		2	1	1	1	1	8		
7J4H74		1040		2		2	1	1	1	1	8		
7J4G74		1230		2		2	1	1	1	1	8		
7J4474		1455		2		2	1	1			6		
TB3552	↓	0745	↓	2							2		

Patricia A Stoll 8/23/04

	Date/Time		Date/Time		
RELINQUISHED BY: Patricia A Stoll	8/23/04	RECEIVED BY:	8/23/04 1420	TOTAL NUMBER OF CONTAINERS: 50	Cooler Temperature: 4°C
COMPANY NAME: SAIC		COMPANY NAME: GEL		Cooler ID: 712	FEDEX NUMBER: N/A
RECEIVED BY: Ben Watkins	8/23/04 11:35	RELINQUISHED BY:			
COMPANY NAME: GEL		COMPANY NAME:			
RELINQUISHED BY: Ben Watkins	8/23/04 14:25	RECEIVED BY:			
COMPANY NAME: GEL		COMPANY NAME:			

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