FINAL

CORRECTIVE ACTION PLAN—PART B

IMA

3d Inf Div (Mech)

Underground Storage Tank 100A
Facility ID #9-089080
Building 1349
Fort Stewart, Georgia

Prepared for

U.S. ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT

Contract No. DACA21-02-D-0004
Delivery Order No. 64

November 2009

SAIC
From Science to Solutions

09-086(E)/111109

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UNDERGROUND STORAGE TANK 100A
FACILITY ID # 9-089080
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FORT STEWART, GEORGIA

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Prepared by
Science Applications International Corporation
P.O. Box 2501
Oak Ridge, TN 37831

November 2009

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List of Abbreviations and Acronyms

ACL	alternate concentration limit
AMSL	above mean sea level
AT123D	Analytical Transient 1-, 2-, 3-Dimensional
ATL	alternate threshold level
BGS	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
CAP	Corrective Action Plan
CY	calendar year
DAF	dilution attenuation factor
DPT	direct-push technology
DPW	Directorate of Public Works
F&T	fate and transport
FSMR	Fort Stewart Military Reservation
GA EPD	Georgia Environmental Protection Division
GUST	Georgia Underground Storage Tank
IWQS	In-Stream Water Quality Standard
MNA	monitored natural attenuation
NFA	no further action
OWS	oil/water separator
PAH	polycyclic aromatic hydrocarbon
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
SAIC	Science Applications International Corporation
SESOIL	Seasonal Soil Compartment (model)
STL	soil threshold level
SVOC	semivolatile organic compound
SWMU	solid waste management unit
USACE	U. S. Army Corps of Engineers
UST	underground storage tank
USTMP	Underground Storage Tank Management Program
VOC	volatile organic compound

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Underground Storage Tank Management Program
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CORRECTIVE ACTION PLAN
PART B

Facility Name:	UST 100A (formerly SWMU 27F)		
Street Address:	Building 1349		
City:	Fort Stewart	**County:**	Liberty
Facility ID #:	9-089080		
Latitude:	31° 52' 46"	**Longitude:**	-81° 37' 50"

Submitted by UST Owner/Operator:		**Prepared by:**	
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1.0 PLAN CERTIFICATION

A. UST Owner/Operator

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

Name: Tressa Rutland

Signature: _____ Date: _____

B. Professional Engineer or Professional Geologist

Name: Patricia Stoll

Signature: Patricia A Stoll

Date: 11/12/09

Georgia Stamp or Seal

Check all boxes below that apply. Attach supporting documentation, i.e., narrative, figures, tables, maps, boring/well logs, etc., for all items checked. Supporting documentation should be three-hole punched and prepared in conformity with the guidance document "Underground Storage Tank (UST) Release: Corrective Action Plan – Part B (CAP-B) Content", GUST-7B.

II. SITE INVESTIGATION REPORT

A. Local and Site Hydrogeology:

- ☒ Documentation of Local Groundwater Conditions
- ☒ Stratigraphic Boring Logs
- ☒ Stratigraphic Cross Sections
- ☒ Referenced or Documented Calculations of Relevant Aquifer Parameters
- ☒ Direction of Groundwater Flow
  - ☒ Table of Monitoring Well Data
  - ☒ Potentiometric Map
  - ☒ Flow Net Superimposed on a Base Map

B. Horizontal and Vertical Extent of Contamination:

☒ Soil ☒ Groundwater

☒ Free Product ☐ Surface Water

III. REMEDIAL ACTION PLAN

A. Corrective Action Completed or In-Progress:

- ☒ Recovery/Removal of Free-Product (Non-aqueous Phase Hydrocarbons)
  Adsorbent socks have been utilized at MW4 and MW12 to address intermittent product.
- ☐ Remediation/Treatment of Contaminated Backfill Material & Native Soils
- ☒ Other (specify) An investigation determined that the piping to the former waste oil tank UST-100A was not properly abandoned at the time of tank removal in 1996; these lines were properly grouted and abandoned in 2007 to eliminate this potential ongoing source to subsurface contamination.

B. Objective of Corrective Action:

☐ Remove Free Product That Exceeds One-Eighth Inch

☐ Remediate Groundwater Contamination That Exceeds:

☐ Maximum Contaminant Levels (MCLs)

OR

☐ In-stream Water Quality Standards

☐ Remediate Soil Contamination That Exceeds:

☐ Threshold Values Listed in Table A

OR

☐ Threshold Values Listed in Table B

OR

☐ Alternate Threshold Levels (ATLs)

☐ Provide Risk Based Corrective Action

☐ Remediate Soil and/or Groundwater Contamination That Exceeds Alternate Concentration Limits (ACLs) and Monitor Residual Contaminants

OR

☐ Monitor Soil and/or Groundwater Contamination That Exceeds Levels in Rule -.09 (3) But Is Less Than ACLs

C. Design Operation of Corrective Action Systems:

☐ Soil ☐ Groundwater ☐ Free Product ☐ Surface Water

D. Implementation (Section III.D):

Includes, as a minimum, the following:

- Plan to decommission equipment/wells and close site.

IV. PUBLIC NOTICE

☐ Certified Letters to Adjacent, and Potentially Affected Property Owners and Local Officials

☐ Legal Notice in Newspaper, as approved by EPD

☒ Other EPD-approved Method (specify): Site is located within the confines of Fort Stewart, a federal facility. Public notice was conducted under the RCRA program.

V. CLAIM FOR REIMBURSEMENT: (For GUST Trust Fund sites only)

☐ GUST Trust Fund Application (GUST-36), must be attached if applicable

☐ Cost Proposal

- ☐ Non-Reimbursable Costs

  OR

- ☐ Reimbursable Costs
  - ☐ Total Project Costs
    - ☐ Costs incurred to date, per GUST-92
    - ☐ Estimated costs to complete corrective action, per GUST-92
  - ☐ Invoices and Proofs-of-Payment for Costs Incurred to Date

☐ Proposed Schedule For Reimbursement

- ☐ Lump Sum Payment Upon Completion Of Corrective Action

  OR

- ☐ Interim Payments With Final Payment Upon Completion

☒ Not Applicable

2.0 SITE INVESTIGATION REPORT

This section represents the Site Investigation Report for Underground Storage Tank (UST) 100A, Building 1349, Facility ID# 9-089080, located at Fort Stewart, Georgia. This Corrective Action Plan (CAP)–Part B Report follows the guidance published by the Georgia Environmental Protection Division (GA EPD) in February 1995; however, the organization of the appendices for this report mirrors that of the appendices listed in the CAP–Part A template issued by GA EPD in May 1998 (GA EPD 1995). Report figures and tables are located in Appendices I and II, respectively.

The location of UST 100A at Fort Stewart is illustrated in Figure 1. The UST 100A site is located within an average of higher groundwater pollution susceptibility area, is greater than 500 ft from a withdrawal point, and is more than 500 ft from a surface water body. Because public water supply wells exist within 2 miles of the site, as defined in Georgia Underground Storage Tank (GUST) Management Rule 391-5-15-.09, the appropriate soil threshold levels (STLs) are those presented in Table A, Column 2 of GUST Rules 391-5-15. The site was formerly regulated under the Resource Conservation and Recovery Act (RCRA) and identified as Solid Waste Management Unit (SWMU) 27F, northwest of Building 1340, but has been regulated under the GA EPD UST Management Program (USTMP) since its official transfer to the program as per the correspondence from the GA EPD Hazardous Waste Management Branch, dated September 23, 2008. Previous investigations and corrective actions at the site were originally conducted under RCRA. Throughout this document, the site will be referred to under its current designation (i.e., UST 100A) for consistency.

A site map of UST 100A and the vicinity is shown in Figure 2a. UST 100A was a 1,000-gal waste oil UST located south of the oil/water separator (OWS) northwest of Building 1340, one of two OWSs that support the vehicle maintenance activities of the 3d Engineer Brigade. The OWS is located along the northwestern boundary of the motor pool area, approximately 650 ft northwest of Building 1340 and adjacent to a covered maintenance area identified as Building 1390. The maintenance pad consisted of six bays, three of which have inspection pits that allow military personnel to access underneath the military vehicles. A floor drain is located in each of the inspection pits to collect any drainage (i.e., spills and water) that may collect in the inspection pit. The floor drains are piped to the OWS by way of a common 6-in.-polyvinyl chloride pipe. In addition, a drain in the sliding collection tray flows to a trough located on the east side of each inspection pit. Each trough transitions into a 3-in.-diameter steel pipe that flows below ground to a common 4-in.-diameter cast iron pipe that discharged to UST 100A, a 1,000-gal waste oil UST located south of the OWS. UST 100A was removed in 1996 and the pipes purportedly abandoned. Maintenance activities for military vehicles were performed at the maintenance pad up to 2001 when the facility was purportedly shut down. The closure consisted of placing plywood over the metal grates covering the OWS.

A site inspection of the facility in early calendar year (CY) 2007 indicated that the maintenance facility had been sporadically used since 2001. Vehicles have been observed at the facility and waste oil had accumulated in the OWS. In addition, the 3-in.-diameter pipe in the inspection pit closest to the OWS was found to be open. It is not known if the pipe was not plugged during the abandonment of the UST in 1996 or whether the plug had been removed. The 3-in.-diameter pipes in the other two inspection pits had grouted ends. Maintenance activities were identified as late as July 2007. It is believed that these operations may have been the source of further contamination if the integrity of the OWS and its piping had been compromised. An evaluation of the integrity of the OWS and piping was conducted in May of 2007; this evaluation consisted of cleaning out the liquid and solid material in the OWS; cleaning the interior of the OWS; visually inspecting the OWS and piping; evaluating the integrity of the piping using a combination of visual inspection, smoke testing, low-pressure air testing, and static water testing; properly abandoning the pipe to the removed waste oil UST; and installing an aluminum, locked cover on top of the OWS to prevent its future use. In addition,

the Fort Stewart Military Reservation (FSMR) Directorate of Public Works (DPW) has initiated engineering controls to prevent the use of the facility.

A CAP–Part A has not been developed for UST 100A. The site was officially transferred to the GA EPD USTMP on September 23, 2008, as per the correspondence from the GA EPD Hazardous Waste Management Branch. Science Applications International Corporation (SAIC) developed and submitted the Revised Final CAP for the 3d Engineering Brigade, Northwest of Building 1340 (SWMU 27F) dated July 2004 under the RCRA program (SAIC 2004). Based upon the recommendations of the Phase II RCRA Facility Investigation (RFI), monitored natural attenuation (MNA) was selected as the corrective action for groundwater and soil. The alternative also consisted of land use restrictions to prohibit disturbance of surface and subsurface soil and groundwater and biennial soil sampling and groundwater sampling through the MNA period. Based upon the results of the first two biennial sampling events (CY 2002 and CY 2004), additional sampling was conducted to evaluate and delineate the nature and extent of subsurface soil contamination. The nature and extent of contamination in other site media had been adequately delineated through previous investigations.

To provide sufficient contextual basis for the Remedial Action Plan developed in Section III of this CAP–Part B Report, a background summary of RCRA-related investigations is presented in Section II. This CAP–Part B Report for UST 100A was developed for the Fort Stewart DPW, Environmental Branch, through the U. S. Army Corps of Engineers (USACE), Savannah District, by SAIC under contract number DACA21-02-D-0004, Delivery Order number 64.

2.1 REGIONAL, LOCAL, AND SITE HYDROGEOLOGY

Discussion of the local and site hydrogeology is based on field observations and investigative activities performed during the previous investigations performed under RCRA and is summarized herein to provide context for the proposed remedial action.

2.1.1 Documentation of Local Groundwater Conditions

2.1.1.1 Groundwater usage

According to the *Groundwater Pollution Susceptibility Map of Georgia* (GA EPD 1992), UST 100A, Facility ID #9-089080 is located within an average groundwater pollution susceptibility area. A total of seven groundwater supply wells are located within a 2-mile radius of the Fort Stewart garrison area. Six of these wells are located within the confines of the garrison area. The other well is located at Wright Army Airfield, approximately 1.2 miles northeast of the garrison area. All of the groundwater supply wells are classified as public wells that supply water to Fort Stewart for drinking and non-drinking purposes. These wells are approximately 450 ft deep and draw groundwater from the Principal Artesian (also known as the Floridan) aquifer. According to Fort Stewart DPW personnel, chlorine and fluoride are added to the groundwater at the well heads prior to the water being pumped into storage tanks and/or water towers. The locations of the wells within the 2-mile radius, along with a 500-ft radius drawn around each well, are shown in Figure 3. Based on the location of UST 100A relative to the identified groundwater supply wells, it is located approximately 1,500 ft from Well #3 and is classified as being located greater than 500 ft from a withdrawal point.

2.1.1.2 Aquifer description

The hydrogeology in the vicinity of Fort Stewart is dominated by two aquifers referred to as the Principal Artesian and the surficial aquifers. The Principal Artesian aquifer is the lowermost hydrologic unit and is regionally extensive from South Carolina through Georgia, Alabama, and most of Florida. Known elsewhere as the Floridan, this aquifer is composed primarily of Tertiary-age limestone, including the Bug Island

Formation, the Ocala Group, and the Suwannee Limestone. These formations are approximately 800 ft thick, and groundwater from this aquifer is used primarily for drinking water (Arora 1984).

The confining layer for the Principal Artesian aquifer is the phosphatic clay of the Hawthorn Group and ranges in thickness from 15 to 90 ft. The vertical hydraulic conductivity of this confining unit is on the order of 10^{-8} cm/sec. There are minor occurrences of aquifer material within the Hawthorn Group; however, they have limited utilization (Miller 1990). The Hawthorn Group has been divided into three formations: Coosawhatchie Formation, Markshead Formation, and Parachula Formation, which are listed from youngest to oldest. The Coosawhatchie Formation is composed predominantly of clay, but also has sandy clay, argillaceous sand, and phosphorite units. The formation is approximately 170 ft thick in the Savannah, Georgia, area. This unit disconformably overlies the Markshead Formation and is distinguished from the underlying unit by dark phosphatic clays or phosphorite in the lower part and fine-grained sand in the upper part. The Markshead Formation is approximately 70 ft thick in the Savannah, Georgia, area and consists of light-colored phosphatic, slightly dolomitic, argillaceous sand to fine-grained sandy clay with scattered beds of dolostone and limestone. The Parachula Formation consists of sand, clay, limestone, and dolomite and is approximately 10 ft thick in the Savannah, Georgia, area. The Parachula Formation generally overlies the Suwannee Limestone in Georgia.

The uppermost hydrologic unit is the surficial aquifer, which consists of widely varying amounts of sand and clay ranging from 55 to 150 ft in thickness. This aquifer is primarily used for domestic lawn and agricultural irrigation. The top of the water table ranges from approximately 2 to 10 ft below ground surface (BGS). However, soil surveys for Liberty and Long counties also describe the occurrence of a perched water table within the Stilson loamy sands present within Fort Stewart (Looper 1980).

2.1.1.3 Site-specific hydrogeology

Based on site-specific lithology, groundwater of the surficial aquifer has been divided into a shallow and a deep surficial aquifer. A clay-confining layer approximately 2 to 3 ft in thickness is encountered at a depth of approximately 8 to 12 ft BGS across the site. The water table for the surficial aquifer occurs at an average depth of approximately 7 ft BGS. Perched groundwater may also be encountered above the clay layer. The surficial aquifer is separated from the Floridan aquifer by the greenish clay of the Hawthorn Formation. Based on the boring logs for the deep site wells, the Hawthorn Formation was encountered at depths of 40 ft BGS (MW2), 36 ft BGS (MW8), and 33 ft BGS (MW11).

2.1.1.4 Potential discharge to surface water

Several surface water bodies are located within a 1-mile radius of the Fort Stewart garrison area and are shown in Figure 3.

No permanent surface water bodies or conveyances are present at this site and no surface drainage features exist around the site that may directly receive potential surface water runoff. However, there is a man-made drainage ditch approximately 450 ft south (downgradient) from the site. The drainage ditch receives miscellaneous drainage and surface water runoff from the northwestern side of the garrison area and discharges into Mill Creek approximately 2,400 ft to the west.

Several buried utilities are present within proximity to UST 100A and may represent preferential pathways for migration (shown in Figure 2b). A wastewater line exits the adjacent OWS and forms a junction with sewer manhole #27, located approximately 35 ft to the southeast. However, the manhole invert is located at an elevation of approximately 65 ft above mean sea level (AMSL), which is approximately 3.5 ft above the average groundwater elevation of 61.5 ft AMSL. Additionally, a storm drain is also located approximately 120 ft

southeast of UST 100A. The invert elevation of the nearest catch basin on this storm line (i.e., CB242) is approximately 61.5 ft AMSL, which is at or near the water table elevation.

2.1.2 Stratigraphy

2.1.2.1 Regional stratigraphy

Fort Stewart is located within the coastal plain physiographic province. This province is typified by nine southeastward-dipping strata that increase in thickness from 0 ft at the fall line, located approximately 150 miles inland from the Atlantic coast, to approximately 4,200 ft at the coast. State geologic records describe a probable petroleum exploration well (the No. 1 Jelks-Rogers) located in the region as encountering crystalline basement rocks at a depth of 4,254 ft BGS. This well provides the most complete record for Cretaceous, Tertiary, and Quaternary sedimentary strata in the region.

The Cretaceous section was found to be approximately 1,970 ft thick and dominated by clastics. The Tertiary section was found to be approximately 2,170 ft thick and dominated by limestone, with a 175-ft-thick cap of dark green phosphatic clay. This clay is regionally extensive and is known as the Hawthorn Group. The interval from approximately 110 ft to the surface is Quaternary in age and composed primarily of sand with interbeds of clay or silt. This section is undifferentiated into separate formations (Herrick and Vochis 1963).

State geologic records contain information regarding a well drilled in October 1942, 1.8 miles north of Flemington at Liberty Field of Camp Stewart (now known as Fort Stewart). This well is believed to be an artesian well located approximately 1/4 mile north of the runway at Wright Army Airfield within FSMR. The log for this well describes a 410-ft section, the lowermost 110 ft of which consisted predominantly of limestone sediment, above which 245 ft of dark green phosphatic clay typical of the Hawthorn Group were encountered. The uppermost portion of the section was found to be Quaternary-age interbedded sands and clays. The top 15 ft of this sediment were described as sandy clay (Herrick and Vochis 1963).

The surface soil located throughout the Fort Stewart garrison area consists of Stilson loamy sand. The surface layer of this soil is typically dark grayish-brown loamy sand measuring approximately 6 in. in depth. The surface layer is underlain by material consisting of pale yellow loamy sand and extends to a depth of approximately 29 in. The subsoil is predominantly sandy clay loam and extends to a depth of 72 in. or more (Herrick and Vochis 1963).

2.1.2.2 Site-specific stratigraphy

Boring logs collected during investigations to date indicate that the unconsolidated soil deposits present across the UST 100A site consist of alternating layers of sand and silty to clayey sands. A clay-confining layer approximately 2 to 3 ft in thickness is encountered at a depth of approximately 8 to 12 ft BGS across the site. Based on the boring logs for the deep site wells, the greenish clay of the Hawthorn Formation was encountered at depths of 40 ft BGS (MW2), 36 ft BGS (MW8), and 33 ft BGS (MW11).

A full compilation of the boring logs for UST 100A is presented in Appendix VIII.

2.1.3 Stratigraphic Cross-Sections

Stratigraphic cross-sections have been developed based on the soil boring logs collected at UST 100A. The north to south, southwest to northeast, and northeast to southwest cross-sections are shown in Figures 4a, 4b, and 4c, respectively. These cross-sections illustrate the geology described in Section 2.1.2.1.

2.1.4 Referenced or Documented Calculations

As part of the Phase II RFI and Addendum, geotechnical samples were collected during installation of the 18 site monitoring wells (SAIC 2000 and 2001). These results are summarized in Table 3.

2.1.5 Direction of Groundwater Flow

The potentiometric surface and direction of groundwater flow in April 2008 are shown in Figures 5a and 5b for the shallow and deep groundwater zones, respectively. Figures 5c and 5d show the potentiometric surface and direction of groundwater flow for the shallow and deep groundwater zones in the surficial aquifer, respectively, in March 2009.

The hydraulic gradient of the shallow surficial groundwater in April 2008 was approximately 0.0017 ft/ft. The hydraulic gradient for the shallow groundwater in March 2009 ranged from 0.00087 ft/ft at the west side of the site to 0.0025 ft/ft at the east portion of the site. In April 2008 and March 2009, the hydraulic gradient of the deep surficial groundwater was approximately 0.0013 ft/ft. The deep and shallow surficial groundwater flow direction is generally to the south and southwest.

The well construction details are summarized in Table 1 for UST 100A. Water level measurements collected from existing monitoring wells during the various historical investigations are presented in Table 2.

2.2 EXTENT OF CONTAMINATION

The horizontal and vertical extents of petroleum contamination in soil and groundwater have been delineated by activities performed during the UST closure and various RCRA field investigations. A brief description of environmental investigation efforts completed at the UST 100A site is presented below. All sample locations and monitoring wells at UST 100A are shown in Figure 2b.

UST Removal (Anderson Columbia Environmental Inc., 1996)

- Removal of the 1,000-gal waste oil tank was documented in a November 1996 closure report.
- A soil sample was collected at a depth of approximately 7 ft BGS, below the UST but above the underlying slab material, and analyzed for semivolatile organic compounds (SVOCs). No SVOCs were observed above the method detection limits.

Phase I RFI (SAIC 2000)

- A Phase I RFI was conducted at SWMU 27F in January through May of 1998 as 1 of the 16 sites under the Phase II RFI for 16 SWMUs at Fort Stewart (SAIC 2000).
- Four subsurface soil and groundwater samples were collected from soil borings (GP-01 through GP-04) using direct-push technology (DPT). Soil sample collection was based upon field headspace screening for volatile organic compounds (VOCs). Soil and groundwater samples were submitted for laboratory analysis of VOCs, SVOCs, and lead. The results for petroleum-related constituents are presented in Tables 4a and 4b for soil and Tables 5a and 5b for groundwater.
- No surface soil samples were collected based on field headspace screening for VOCs (i.e., no photoionization detector detections were observed in the 0 to 2-ft interval).
- No surface water or sediment samples were collected because no pathway exists for these media.

- An additional investigation to evaluate the nature and extent of potential soil and groundwater contamination was recommended.

Phase II RFI and Supplemental Phase II RFI (SAIC 2001)

- A Phase II RFI was performed in October 1999 and a supplemental Phase II RFI was performed in November 2000 and January 2001, the results of which were presented in the *Addendum for SWMU 27F: 3D Engineering 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* (SAIC 2001).

- DPT techniques were used to collect 15 groundwater screening samples (from GP-05 through GP-19) for analysis of VOCs only. Two vertical-profile borings (VP-01 and VP-02) were installed at the groundwater screening locations with the highest levels of contamination to investigate vertical extent, and the vertical-profile samples analyzed for VOCs. The results of the screening were used to site 11 site monitoring wells (MW1 through MW11, comprised of 8 shallow and 3 deep wells), which were sampled for VOCs, SVOCs, and RCRA metals. The results for petroleum-related constituents in groundwater are presented in Tables 5a and 5b.

- Soil samples were collected at each monitoring well and analyzed for VOCs, SVOCs, and RCRA metals. Because MW10 was located in an area of significant contamination, all the subsurface soil intervals to the water table (five) were analyzed for VOCs. The results for petroleum-related constituents in soil are presented in Tables 4a and 4b.

- One recovery well (MW12) was installed to recover potential free product identified on a clay lens encountered at approximately 8 ft BGS during the Phase I RFI. No soil or groundwater samples were collected at this location.

- Based on the results and recommendations of the Phase II RFI, six shallow monitoring wells (MW13 through MW18) were installed and sampled in November 2000 to January 2001 along with sampling the existing site wells (MW1 through MW10). The results for petroleum-related constituents in groundwater are presented in Tables 5a and 5b.

- No surface water or sediment samples were collected during either the Phase II or supplemental evaluation because no pathway exists for these media.

- The development of a CAP was recommended to determine the appropriate corrective action(s) to address human health constituents of concern in groundwater (benzene) and soil [benzo(*a*)pyrene].

CY 2002 RCRA CAP Sampling (SAIC 2003)

- Activities conducted in 2002 are documented in the *Corrective Action Plan Progress Report for Calendar Year (CY) 2002, 3d Engineering Brigade, Northwest of Building 1340 at Fort Stewart, Georgia.*

- Two surface soil samples (0 to 1 ft BGS; SS-01 and SS-02) were collected in September 2002 adjacent to MW10 using a hand auger and analyzed for SVOCs. The results for petroleum-related constituents in soil are presented in Tables 4a and 4b.

- Groundwater samples were collected at thirteen shallow monitoring wells (MW1, MW3, MW4, MW5, MW6, MW7, MW9, MW10, MW14, MW15, MW16, MW17, and MW18) in September 2002 and

analyzed for VOCs, SVOCs and natural attenuation parameters. The results for petroleum related constituents in groundwater are presented in Tables 5a and 5b.

CY 2004 RCRA CAP Sampling (SAIC 2006a)

- Activities conducted in 2004 are documented in *the Corrective Action Plan (CAP) Progress Report for Calendar Year (CY) 2004, 3d Engineering Brigade, Northwest of Building 1340 (SWMU 27F) at Fort Stewart, Georgia.*

- Thirteen shallow monitoring wells (MW1, MW3, MW4, MW5, MW6, MW7, MW9, MW10, MW14, MW15, MW16, MW17, and MW18) were sampled in August 2004 and analyzed for VOCs, SVOCs, and natural attenuation parameters. The results for petroleum-related constituents in groundwater are presented in Tables 5a and 5b.

- Free product was measured at 0.14 in. in MW4 and at 0.05 in. in MW12. Absorbent socks were emplaced in both MW12 and MW4.

2.2.1 Subsurface Soil Investigation (SAIC 2006b)

- Based on the results of the first two biennial sampling events, additional subsurface soil sampling was conducted in September 2005 to refine the nature and extent of subsurface soil contamination, as documented in the *Letter Report for the Subsurface Soil Investigation for the SWMU 27, 3d Engineer Brigade, Northwest of Building 1340 at Fort Stewart, Georgia.*

- A total of 14 subsurface borings (SB-01 through SB-14) were installed at the site using a Geoprobe rig and Encore® sampling. Eight of the borings were installed around the south and east sides of the maintenance pad, two were installed on the north side of the pad, and four were installed downgradient of the soil borings indicating visible contamination (SB-11 through SB-14). Soil boring samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) and SVOCs. The results for petroleum-related constituents in soil are presented in Tables 4a and 4b.

- Based on the sampling results, one additional soil boring was recommended to fully delineate the extent of contamination, and an investigation of the underground piping from the maintenance facility and OWS was recommended to determine if these lines had leaks that contributed to subsurface contamination.

CY 2007 RCRA CAP Sampling (SAIC 2007b)

- Activities conducted in 2007 are documented in the *Corrective Action Plan (CAP) Progress Report for Calendar Year (CY) 2007, 3d Engineering Brigade, Northwest of Building 1340 (SWMU 27F) at Fort Stewart, Georgia.*

- In May 2007, the inspection, cleaning, and integrity testing of the OWS and piping associated with the maintenance pad were conducted as recommended in the CY 2004 CAP Progress Report. This work was detailed in the *Completion Report for the Oil/Water Separator and Piping Evaluation for the SWMU 27, 3d Engineer Brigade, Northwest of Building 1340 at Fort Stewart, Georgia* (SAIC 2007a).

- Fourteen shallow monitoring wells (MW1, MW3, MW4, MW5, MW6, MW7, MW9, MW10, MW13, MW14, MW15, MW16, MW17, and MW18) were sampled in April 2007. MW13 was inadvertently not sampled in April and was subsequently sampled in July 2007. All groundwater samples were analyzed for VOCs, SVOCs, and natural attenuation parameters. The results for petroleum-related constituents in groundwater are presented in Tables 5a and 5b.

- Free product was not observed in MW4 and MW12 during the April 2007 groundwater sampling event.

- An additional subsurface soil investigation was recommended to fully delineate the extent of contamination, with the results of the OWS investigation utilized in selecting the subsequent boring locations.

CAP Progress Report for CY 2008 (SAIC 2008)

- Activities conducted in 2008 are documented in the *Corrective Action Plan (CAP) Progress Report for Calendar Year (CY) 2008, 3d Engineering Brigade, Northwest of Building 1340 (SWMU 27F) at Fort Stewart, Georgia.*

- A total of nine DPT soil borings (SB15 through SB23) and ten borings (SB26 through SB35) were installed in July 2007 and January 2008, respectively, at locations downgradient (i.e., south and southeast) of previous soil borings to refine the extent of subsurface soil contamination. Two soil samples were collected from each boring and analyzed for BTEX and SVOCs. The results for petroleum-related constituents in soil are presented in Tables 4a and 4b.

- One groundwater sample was collected from each of the 19 borings after the completion of the top of the clay-confining layer at approximately 10 to 12 ft BGS. The results for petroleum-related constituents in groundwater are presented in Tables 5a and 5b.

- In April 2008, two confirmatory surface soil samples (SS-03 and SS-04) were collected around MW10 to confirm that concentrations of SVOCs had remained below their respective remedial levels. The results for petroleum-related constituents in soil are presented in Tables 4a and 4b.

The laboratory analytical data for samples collected at UST 100A are provided in Appendix IV.

2.2.2 Delineation of Soil Contamination

During the various investigations described above, soil samples were collected from the following borings or monitoring wells:

- 1998 – Four soil samples were collected from DPT soil borings (GP-01 through GP-04). One sample was collected from each location from the interval displaying the highest headspace screening reading.

- 1999 – Twenty-six soil samples were collected from 11 monitoring well locations (MW1 through MW11) during installation. One surface and one subsurface sample were collected at each, with the exception of MW10, which was located in an area of significant contamination, and all the subsurface soil intervals to the water table (five) were collected for analysis.

- 2002 – Two surface soil samples (SS-01 and SS-02) were collected in the vicinity of MW10.

- 2005 – Fourteen soil samples were collected from DPT soil borings (SB-01 through SB-14) to refine the nature and extent of subsurface soil contamination at the maintenance pad.

- 2007 – Eighteen soil samples were collected from DPT soil borings (SB-15 through SB-23) to refine the extent of subsurface soil contamination downgradient of the previous soil borings.

- 2008 – Twenty soil samples were collected from DPT soil borings (SB-26 through SB-35) to refine the extent of subsurface soil contamination downgradient of the previous soil borings. Two confirmatory surface samples were collected at MW10 (SS-03 and SS-04).

These soil samples were analyzed for various analytes during the various investigations. The BTEX and polycyclic aromatic hydrocarbon (PAH) results are presented in Tables 4a and 4b, respectively, and summarized below:

- Benzene was detected in 33 of 82 soil samples at concentrations ranging from 0.00035J mg/kg to 0.864 mg/kg. Eighteen of the concentrations exceeded the STL of 0.008 mg/kg.
- Toluene was detected in 15 of 82 soil samples at concentrations ranging from 0.00029J mg/kg to 4.22 mg/kg. None of the concentrations exceeded the STL of 10 mg/kg.
- Ethylbenzene was detected in 46 of 82 soil samples at concentrations ranging from 0.00019J mg/kg to 3.3J mg/kg. None of the concentrations exceeded the STL of 6 mg/kg.
- Xylenes were detected in 50 of 82 soil samples at concentrations ranging from 0.00029J mg/kg to 17.8J mg/kg. None of the concentrations exceeded the STL of 700 mg/kg.
- Acenaphthene was detected in 11 of 82 soil samples at concentrations ranging from 0.0189J mg/kg to 1.12J mg/kg. No STL is established for this constituent.
- Anthracene was detected in 10 of 82 soil samples at concentrations ranging from 0.0349J mg/kg to 0.493 mg/kg. No STL is established for this constituent.
- Benz(*a*)anthracene was detected in 5 of 82 soil samples at concentrations ranging from 0.0236J mg/kg to 3.94J mg/kg. No STL is established for this constituent.
- Benzo(*a*)pyrene was detected in 5 of 82 soil samples at concentrations ranging from 0.0173J mg/kg to 2.43J mg/kg. No STL is established for this constituent.
- Benzo(*b*)fluoranthene was detected in 6 of 82 soil samples at concentrations ranging from 0.0131J mg/kg to 2.88J mg/kg. No STL is established for this constituent.
- Benzo(*ghi*)perylene was detected in 4 of 82 soil samples at concentrations ranging from 0.0182J mg/kg to 0.885J mg/kg. No STL is established for this constituent.
- Benzo(*k*)fluoranthene was detected in 3 of 82 soil samples at concentrations ranging from 0.0203J mg/kg to 2.1J mg/kg. No STL is established for this constituent.
- Chrysene was detected in 6 of 82 soil samples at concentrations ranging from 0.0182J mg/kg to 3.6J mg/kg. No STL is established for this constituent.
- Fluoranthene was detected in 12 of 82 soil samples at concentrations ranging from 0.0268J mg/kg to 0.543J mg/kg. No STL is established for this constituent.
- Fluorene was detected in 24 of 82 soil samples at concentrations ranging from 0.0364J mg/kg to 10.5J mg/kg. No STL is established for this constituent.

- Indeno(1,2,3-cd)pyrene was detected in 3 of 82 soil samples at concentrations ranging from 0.0146J mg/kg to 0.0375J mg/kg. No STL is established for this constituent.

- Naphthalene was detected in 29 of 82 soil samples at concentrations ranging from 0.0152J mg/kg to 4.49J mg/kg. No STL is established for this constituent.

- Phenanthrene was detected in 35 of 82 soil samples at concentrations ranging from 0.011J mg/kg to 5.23J mg/kg. No STL is established for this constituent.

- Pyrene was detected in 33 of 82 soil samples at concentrations ranging from 0.0232J mg/kg to 8.22J mg/kg. No STL is established for this constituent.

The subsurface soil quality maps for UST 100A are shown in Figures 6 and 7 for BTEX compounds and PAHs, respectively. Benzene is the only constituent that exceeds its STL of 0.008 mg/kg (Table A, Column 2). The horizontal extent of soil contamination exceeding STLs is shown in Figure 6.

The vertical distribution of the contaminants in the soil column was determined through borings located in and around the immediate vicinity of former UST 100A and the adjacent maintenance pad. The results indicated that benzene exceeds its STL in borings collected in the interval immediately above the 2- to 3- ft-thick clay layer, which is encountered across the site at depths of approximately 8 to 12 ft BGS.

2.2.3 Delineation of Groundwater Contamination

During the various investigations described above, groundwater samples were collected from the following borings or monitoring wells:

- 1999 – Fifteen DPT groundwater samples (GP-05 through GP-19) and two vertical-profile locations (VP-01 and VP-02).

- 2007 – Nine DPT groundwater samples (SB-15 through SB-23) collected at the 12- to 16-ft BGS interval.

- 2008 – Ten DPT groundwater samples (SB-26 through SB-35) collected at the 9- to 15-ft BGS interval.

- 2001 through 2009 – A total of seven annual or biennial groundwater sampling events have been conducted in conjunction with investigations or performance monitoring (MW1 through MW18).

The groundwater samples were analyzed for various analytes during the various investigations. The BTEX and PAH results are presented in Tables 5a and 5b, respectively.

The results for the DPT sampling conducted in 1999, 2007, and 2008 are summarized below:

- Benzene was detected in 18 of 40 groundwater samples at concentrations ranging from 0.465J µg/L to 441 µg/L. Five of the concentrations exceeded the In-Stream Water Quality Standard (IWQS) of 51 µg/L.

- Toluene was detected in 5 of 40 groundwater samples at concentrations ranging from 0.267J µg/L to 98.1 µg/L. None of the concentrations exceeded the IWQS of 5,980 µg/L.

- Ethylbenzene was detected in 21 of 40 groundwater samples at concentrations ranging from 0.515J µg/L to 54.3 µg/L. None of the concentrations exceeded the IWQS of 2,100 µg/L.

- Xylenes were detected in 22 of 40 groundwater samples at concentrations ranging from 0.253J µg/L to 166 µg/L. No IWQS is established for this constituent.

- 2-Methylnaphthalene was detected in 17 of 19 groundwater samples at concentrations ranging from 0.461J µg/L to 60.9 µg/L. No IWQS is established for this constituent.

- Acenaphthene was detected in 8 of 19 groundwater samples at concentrations ranging from 0.881J µg/L to 5.55 µg/L. None of the concentrations exceeded the IWQS of 990 µg/L.

- Anthracene was detected in 3 of 19 groundwater samples at concentrations ranging from 0.212J µg/L to 0.413J µg/L. None of the concentrations exceeded the IWQS of 40,000 µg/L.

- Fluorene was detected in 14 of 19 groundwater samples at concentrations ranging from 0.284J µg/L to 3.61 µg/L. None of the concentrations exceeded the IWQS of 5,300 µg/L.

- Naphthalene was detected in 15 of 19 groundwater samples at concentrations ranging from 0.782J µg/L to 86.2 µg/L. No IWQS is established for this constituent.

- Phenanthrene was detected in 13 of 19 groundwater samples at concentrations ranging from 0.492J µg/L to 3.89 µg/L. No IWQS is established for this constituent.

The groundwater quality maps for BTEX and PAH in DPT groundwater samples are presented in Figures 8 and 9, respectively. Benzene is the only constituent that exceeds its IWQS in DPT groundwater. Benzene exceeded its IWQS of 51 µg/L in the following five groundwater samples collected from DPT samples: GP-09 (141 µg/L) at the 0- to 15-ft BGS interval, SB-19 (151 µg/L) at the 12- to 16-ft BGS interval, SB-28 (347 µg/L) at the 10- to 14-ft BGS interval, SB-29 (83.2 µg/L) at the 9- to 13-ft BGS interval, and SB-31 (441 µg/L) at the 9- to 13-ft BGS interval. The January 2008 detection at SB-31 represents the maximum benzene concentration in groundwater observed at the site. The lateral extent of the benzene contamination in groundwater from DPT samples is shown in Figure 8.

All shallow and deep site monitoring wells were sampled contemporaneously in January 2001. The results for this groundwater sampling event are summarized as follows:

- Benzene was detected in 7 of 17 groundwater samples at concentrations ranging from 0.17J µg/L to 61 µg/L. One of the concentrations exceeded the IWQS of 51 µg/L.

- Toluene was detected in 5 of 17 groundwater samples at concentrations ranging from 0.33J µg/L to 10 µg/L. None of the concentrations exceeded the IWQS of 5,980 µg/L.

- Ethylbenzene was detected in 7 of 17 groundwater samples at concentrations ranging from 0.1J µg/L to 7 µg/L. None of the concentrations exceeded the IWQS of 2,100 µg/L.

- Xylenes were detected in 6 of 17 groundwater samples at concentrations ranging from 1.6J µg/L to 38.5 µg/L. No IWQS is established for this constituent.

- 2-Methylnaphthalene was detected in 6 of 17 groundwater samples at concentrations ranging from 1.7 µg/L to 31.9 µg/L. No IWQS is established for this constituent.

- Acenaphthene was detected in 2 of 17 groundwater samples at concentrations of 0.68J µg/L and 1.2 µg/L. Neither of these concentrations exceeded the IWQS of 990 µg/L.

- Fluorene was detected in 2 of 17 groundwater samples at concentrations of 0.98J µg/L and 2.1 µg/L. Neither of these concentrations exceeded the IWQS of 5,300 µg/L.

- Naphthalene was detected in 6 of 17 groundwater samples at concentrations ranging from 1 µg/L to 37.2 µg/L. No IWQS is established for this constituent.

- Phenanthrene was detected in 3 of 17 groundwater samples at concentrations ranging from 1.2 µg/L to 1.9 µg/L. No IWQS is established for this constituent.

The area of highest contamination is concentrated in the vicinity of MW14, which had benzene concentrations above the IWQS of 51 µg/L during the January 2001 sampling event at 61 µg/L, as well as the subsequent September 2002 sampling events at a concentration of 57.3 µg/L. MW14 is screened at the 2.9- to 12.9-ft BGS interval. No BTEX compounds or PAHs were detected in deep monitoring wells MW2 (28.8 to 38.8 ft BGS screened interval) or MW8 (30.9 to 40.9 ft BGS screened interval); at MW11 (29.4- to 39.4-ft BGS screened interval), only toluene was detected at a low estimated concentration. Groundwater contamination is confined to the shallow surficial or perched groundwater and has not migrated to the deep surficial groundwater. Contamination is prevented from migrating to surficial groundwater by the presence of the 2- to 3-ft-thick clay layer encountered at approximately 10 to 12 ft BGS across the site.

No groundwater samples from site monitoring wells have exhibited IWQS exceedances of any constituents during the August 2004, April 2007, April 2008, or March 2009 sampling events. The groundwater quality maps for BTEX and PAH from the last two annual sampling events at UST 100A, April 2008 and March 2009, are shown in Figures 10 through 13. Isoconcentration contour maps for BTEX constituents during the April 2008 sampling event are presented in Figures 14 through 17 and for the March 2009 sampling event are presented in Figures 18 through 21. Trending plots of benzene concentrations in groundwater versus time are presented in Appendix III for monitoring wells MW1 through MW18.

2.2.4 Delineation of Free Product Plume

In May 2001, 0.05 ft of thick, oily, black and viscous product was observed in MW12 during water level measurements (Table 2). This well was installed as a recovery well to recover potential free product identified on a clay lens encountered at approximately 8 ft BGS. The product was believed to be either residual soil contamination from either overflows from the adjacent OWS and/or the removed waste oil UST 100A. Small quantities of heavy petroleum products are trapped within the soil matrix and are slowly migrating to the perched groundwater located above the 2- to 3-ft-thick clay-confining layer encountered at approximately 8 to 12 ft BGS across the site. Subsequent to the observation of free product in May 2001, absorbent socks were emplaced in, and have been utilized at, both MW4 and MW12 through the present. During the sampling event in August 2004, free product was observed at both MW4 and MW12 at thicknesses of 0.14 and 0.05 ft, respectively. No free product was observed at either MW4 or MW12 during the April 2007, April 2008, or March 2009 groundwater sampling events.

2.2.5 Delineation of Surface Water Contamination

No surface water samples have been collected because there is no surface water body that intersects the dissolved contaminant plume. The closest surface water body is Mill Creek approximately 2,400 ft to the west. A man-made drainage ditch exists approximately 450 ft south of the site.

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3.0 REMEDIAL ACTION PLAN

3.1 CORRECTIVE ACTION COMPLETED OR IN PROGRESS

This section presents the actions completed to date in an effort to remove the source of contamination at the UST 100A site.

Removal of the 1,000-gal UST was completed in 1996 (Anderson Columbia Environmental Inc., 1996).

The selected corrective action in the RCRA CAP for UST 100A for treatment of soil and groundwater was MNA until site remedial levels have been achieved. This alternative was selected for remediation because it would effectively achieve the remedial levels in a reasonable period of time and would do so cost-effectively. CY 2002 and CY 2004 performance monitoring results indicated that contaminant concentrations in groundwater were not declining as predicted by modeling. Consequently, an additional subsurface investigation was performed, including an assessment of the OWS and associated piping, to determine if these structures posed an ongoing subsurface source.

The OWS and piping evaluation was performed in May 2007 and consisted of: (1) OWS cleanout, (2) OWS and pipe integrity testing, (3) pipeline abandonment, and (4) cover installation. The OWS and piping testing procedures and results were detailed in the *Completion Report for the Oil/Water Separator and Piping Evaluation for the SWMU 27, 3d Engineer Brigade, Northwest of Building 1340 at Fort Stewart, Georgia* (SAIC 2007a). During the evaluation, it was determined that the 3- and 4-in.-diameter steel piping that connected the three maintenance pads to the removed waste oil UST 100A had not been properly abandoned during the UST closure activities in 1996, and one opening remained available for potential dumping from the inspection pit located closest to the OWS and former UST 100A (Figure 2a). A small backhoe and hand tools were used to excavate to a depth of 4 ft to expose the end of the 4-in. waste oil pipeline, which would have entered UST 100A on its east side. The portion of the 4-in. waste oil line that was excavated was observed to be plugged and in good shape, and no soil staining from petroleum products was evident in the excavation. However, when the pipe was cut 18 in. from the terminal grouted end, it was determined that the 4-in. waste oil line was not fully grouted during UST closure, as well as 3-in. pipelines connecting to the waste oil line to the inspection pits. The pipes are now properly abandoned with grout and can no longer be used. Additionally, the trench drain was grouted flush to the surface down its full length to the OWS to prevent any potential use of the trench drain, and a metal cover was installed over the inspection pits to prevent easy access to the inspection pits and eliminate any potential discharge into the floor drains. The waste oil line connecting the inspection pits to the removed UST 100A was properly abandoned with grout and can no longer be used.

3.1.1 Recovery/Removal of Free Product

Removal of free product was conducted at MW4 and MW12 through the use of absorbent socks emplaced in both of these wells. The absorbent socks were replaced on a quarterly basis from 2001 through 2007. The purpose of MW12 was to function as a recovery well to recover potential free product identified on a clay lens encountered at approximately 8 ft BGS. During the sampling event in August 2004, free product was observed at both MW4 and MW12 at thicknesses of 0.14 and 0.05 ft, respectively. No free product was observed at either MW4 or MW12 during the April 2007, April 2008, or March 2009 groundwater sampling events.

3.1.2 Remediation/Treatment of Contaminated Backfill Material and Native Soil

The UST Closure Report did not indicate any soil contamination during the tank removal in 1996 (Anderson Columbia Environmental Inc., 1996). One confirmatory soil sample was collected at a depth of 7 ft BGS at a

point below the former UST but above the underlying slab. No contaminants were detected in the confirmatory sample, and no bulk soil was removed for remediation or treatment during or subsequent to the UST removal action.

3.2 OBJECTIVES OF CORRECTIVE ACTION

3.2.1 Removal of Free Product that Exceeds One-Eighth Inch

The information reported in historical documents has not indicated the presence of free product exceeding 1/8 in. at the UST 100A site since 2004. Sporadic free product on the order of 0.05 ft has been observed at MW4 (August 2004 only) and MW12 (May 2001 and August 2004), and an absorbent sock was utilized as a removal action. Free product has not been observed since 2004, and no additional recovery/removal of free product is required based on known site conditions.

3.2.2 Remediate Groundwater Contamination

The historical groundwater results indicate that the area of highest contamination is concentrated between MW7 and MW14. The benzene concentrations in MW14 exceeded the IWQS of 51 µg/L during the January 2001 and September 2002 sampling events at 61 and 57.3 µg/L, respectively. No groundwater samples from site monitoring wells have exhibited IWQS exceedances in the subsequent August 2004, April 2007, April 2008, and March 2009 sampling events.

No remedial objective with respect to groundwater is proposed because current concentrations of petroleum contaminants do not exceed the IWQS.

3.2.3 Remediate Soil Contamination

The historical soil sampling results from 1998 through 2008 for the UST 100A site indicate that benzene exceeds its STL in borings collected in the interval immediately above the 2- to 3-ft-thick clay layer that occurs at approximately 8 to 12 ft BGS and in the vicinity of the former UST and associated piping. This contaminated soil does not represent a significant continuing source of contaminants to groundwater because contamination is confined to the interval between 6 to 12 ft BGS and is prevented from migrating vertically due to the underlying confining clay layer.

3.2.4 Provide Risk-Based Corrective Action

A risk-based approach was utilized to determine the path for achieving site closure at the UST 100A site. Due to the nature of the contamination (petroleum hydrocarbon contamination of groundwater and subsurface soil), the risk-based approach was limited to human health concerns. Ecological risk concerns are minimal because of the land use (i.e., military industrial) surrounding the UST 100A site.

The following sections present the conceptual model of the exposure setting and potential receptors, as well as the general methodology employed to perform leaching with fate and transport (F&T) modeling, and the development of ATLs for soil and alternate concentration limits (ACLs) for groundwater.

3.2.4.1 Potential receptor survey

The exposure assessment identifies any potentially complete pathways between the contaminant source and potential receptors. This involves identifying potential current and future receptors, release mechanisms through which contamination might come into contact with the receptors, and the routes of exposure through which the receptors might be exposed.

The UST 100A site is located within Fort Stewart, an active military Installation. The land use at the site is currently military industrial. In the direction of groundwater flow, there is a man-made drainage ditch approximately 450 ft south (downgradient) from the site. This drainage ditch is approximately 6 to 8 ft deep and 20 ft wide and is heavily vegetated with grass. The drainage ditch receives miscellaneous drainage and surface water runoff from the northwestern side of the garrison area and discharges into Mill Creek approximately 2,400 ft to the west. Both the shallow and the deep surficial aquifer may intercept the man-made drainage ditch located approximately 450 ft to the southwest of the site. Several buried utilities are present within proximity to UST 100A, which may represent preferential pathways for migration (shown in Figure 2b). A wastewater line exits the adjacent OWS and forms a junction with sewer manhole #27, located approximately 35 ft to the southeast. However, the manhole invert is located at an elevation of approximately 65 ft AMSL, which is approximately 3.5 ft above the average groundwater elevation of 61.5 ft AMSL. Additionally, a storm drain is also located approximately 120 ft southeast of UST 100A. The invert elevation of the nearest catch basin on this storm line (i.e., CB242) is approximately 61.5 ft AMSL, which is at or near the water table elevation.

No connection between site contamination and the current off-site receptors has been identified. Site contamination may migrate within the surficial aquifer. The Hawthorn Group, which is approximately 90 ft of clay, separates the surficial aquifer from the deep drinking water aquifer (i.e., the Floridan aquifer). There appears to be no vertical migration from the surficial aquifer to the Floridan aquifer. A water supply well (Well #3) is located approximately 1,600 ft side- and downgradient of the UST 100A site; however, the Hawthorn Group, a thick and highly effective confining unit, separates the water supply well from the surficial aquifer.

No current on-site receptors have been identified for the site. Potential future on-site receptors might include industrial workers and military residents. Potential future on-site industrial receptors may come in direct contact with site soil contamination during construction or excavation activities. No near-term on-site receptors are likely to come into contact with groundwater.

3.2.4.2. Fate and transport model

F&T modeling using well-known and commonly used groundwater pollutant F&T models was utilized to support the development of ACLs and ATLs for benzene in groundwater and soil, respectively, for the UST 100A site.

Site-specific dilution attenuation factors (DAFs) between the source and the potential receptor locations were developed. The DAF is a numerical value that represents the attempt to mathematically quantify the natural physical, chemical, and biological processes (e.g., advection-dispersion, sorption-retardation, biodegradation, and volatilization) that result in the decrease of a chemical concentration in an environmental medium. In simple terms, the DAF is the ratio of chemical concentration at the source (or the point of origin) to the concentration at the potential exposure point. DAFs reflect the natural attenuation concepts outlined in the American Society of Testing and Material's Risk-Based Corrective Action protocol (ASTM 1995).

Leaching with F&T models is used as a tool for developing DAFs. The application of leaching with F&T models at any release site must ensure that the modeling results are protective of human health and the

environment. Therefore, the selection process of a predictive model at a release site must consider its performance, characteristics, and applicability to the site being considered. The following characteristics were considered before selecting an appropriate model for the site:

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

The Analytical Transient 1-, 2-, 3-Dimensional (AT123D) model meets all of the above criteria and was selected for performing F&T analysis for this site. AT123D is a well-known and commonly used analytical groundwater pollutant F&T model. This model computes the spatial-temporal concentration distribution of chemicals in the aquifer system and predicts the transient spread of a chemical plume through a groundwater aquifer. The F&T processes accounted for in AT123D are advection, dispersion, adsorption/retardation, and decay. This model can be used as a tool for estimating the dissolved concentration of a chemical in one, two, or three dimensions in the groundwater resulting from a mass release (either continuous or instant or depleting source) over a source area (i.e., point, line, area, or volume source).

The Seasonal Soil compartment (SESOIL) model is a semi-analytical computer code used to simulate the leaching and vertical transport of contaminants from the source areas down through the vadose zone to the shallow groundwater (water table). SESOIL is a one-dimensional, vertical transport code for the unsaturated soil zone and is designed to simultaneously model water transport and pollutant fate. The program was originally developed by the U. S. Environmental Protection Agency and has been extensively modified to enhance its capabilities.

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

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

- SESOIL has been extensively validated and shown to work under a number of scenarios. It has also been used for similar applications in other parts of the country and is capable of providing the information required for this study.

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

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

Modeling of leaching to groundwater by percolating rain water was performed with SESOIL. The results from SESOIL were combined with the existing groundwater plume to develop the source term for the saturated zone AT123D model. Thus, a steady-state model was developed by calibrating the model against the maximum concentration in groundwater beneath the site in March 2009. Potential receptors are a man-made drainage ditch, approximately 450 ft southwest of the site. A buried storm drain is also located approximately 120 ft southeast of the site, and based on the invert elevation of catch basin CB242, this utility line occurs at the water table. Therefore, the storm drain is considered a potential receptor.

The updated F&T modeling results are provided in Appendix V. The man-made storm drain approximately 180 ft southeast of the site was modeled as the nearest potential downgradient receptor that might encounter migrating groundwater contamination. Contaminant F&T simulations were performed to predict the maximum concentrations at these receptor locations over a simulation period of 100 years, assuming a continuous source (decaying) based on the maximum predicted benzene concentration in groundwater. The modeling indicated that the benzene concentration is not expected to ever exceed the IWQS of 51 µg/L beyond 50 ft downgradient from MW14. Based on modeling results, a groundwater DAF for benzene at 50 ft downgradient of the source was 121.

3.2.4.3. Site-specific levels

ATLs for soil and ACLs for groundwater were developed for contaminants exceeding STLs or IWQSs using site-specific information from the leaching with F&T models and applicable regulatory levels.

ACLs. Benzene is the only constituent in groundwater to exceed the IWQS (51 µg/L) based on data collected between 1999 and 2009. The storm drain utility line approximately 120 ft southeast of the site is the closest potential receptor for groundwater; however, groundwater modeling indicated that the benzene concentration is not expected to ever exceed its remedial level (IWQS of 51 µg/L) beyond 50 ft downgradient from the source area at MW14. Modeling estimated a groundwater DAF of 121 for benzene at 50 ft downgradient of the source. The approach for calculating the ACL would be to utilize the DAF to the receptor in conjunction with the IWQS. However, this would produce an unrealistically high benzene ACL. As a result, a more conservative DAF of 10 was selected to calculate ACLs for VOCs. The compound-specific regulatory levels were used in conjunction with the DAF to develop constituent-specific ACLs (Appendix VI). An ACL of 510 µg/L is proposed for benzene in groundwater. Groundwater samples collected from the monitoring wells do not exceed the ACL proposed for benzene.

ATLs. Benzene is the only constituent in soil to exceed the STL (0.008 mg/kg) based on data collected between 1999 and 2008. ATL calculations for benzene are presented in Appendix VI and are based on the migration of leachate to the water table using the results of the SESOIL modeling. An ATL of 1.1 mg/kg is proposed for benzene in soil. None of the soil samples collected to date exceed the proposed ATL for benzene.

3.2.4.2 Conclusions and recommendations

Upon transfer of the UST 100A site from RCRA to USTMP, as approved in September 2008, the purpose of the development of this CAP–Part B Report was to document the previous investigations with respect to the USTMP guidance. A CAP–Part A Report has not been prepared for UST 100A.

Fort Stewart respectfully requests that GA EPD USTMP assign Facility ID #9-089080 a no-further-action (NFA)-required status for the following reasons:

- Free product has only been intermittently observed at the site and has not been observed since 2004.

- All former storage tanks, piping, and associated structures have been either removed or properly plugged and abandoned.

- The horizontal and vertical extents of soil and groundwater contamination have been thoroughly characterized and documented throughout multiple phases of investigation under the RCRA program and summarized in this report.

- The benzene concentrations in groundwater at all monitoring wells have been below the IWQS of 51 µ/L since September 2002.

- Benzene has never been detected above the proposed ACL of 510 µ/L in groundwater at UST 100A.

- Benzene is the only constituent in soil above the STL. No soil concentrations exceed the proposed ATL of 1.1 mg/kg for benzene.

- The closest preferential pathway (i.e., a storm drain) is located approximately 120 ft southeast of the site, while the closest potential surface water body (i.e., a drainage ditch) it located approximately 450 ft southwest of the site.

- Based on the historical soil data and most conservative sampling data (historical maxima), the site ranking score is 850 (Appendix VII).

No additional corrective action is recommended for soil and groundwater at the UST 100A site to achieve site closure.

3.3 DESIGN AND OPERATION OF CORRECTIVE ACTION SYSTEMS

No corrective action system is proposed for the site as the data indicate that the remediation objectives have been achieved. Risk-based screening results show that benzene is the only constituent in groundwater above its IWQS (51 µg/L) but has never been detected above its proposed ACL of 510 µg/L. Benzene is the only constituent in soil above its STL of 0.008 mg/kg, but has never been detected above its proposed ATL of 1.1 mg/kg. NFA is recommended for the UST 100A site.

3.4 IMPLEMENTATION

Approval of this CAP–Part B Report by GA EPD will constitute GA EPD's approval for decommissioning the monitoring wells. Abandonment of all site wells will be completed in accordance with the USACE Design Manual for monitoring wells. Decommissioning will comply with all applicable state and federal standards.

The following certification will be submitted to GA EPD within 30 days of submitting the final Completion Report:

I hereby certify that the Corrective Action Plan–Part B, dated_____, 20__, for Fort Stewart, UST 100A site, Facility ID #9-089080, including any and all certified amendments thereto, has been implemented in accordance with the schedules, specifications, sampling programs, and conditions contained therein, and that the plan's stated objectives have been met.

_____

Signature (Owner/Operator)

3.5 PUBLIC NOTIFICATION

The UST 100A site is located entirely within the confines of FSMR, a federal facility. The U. S. Government owns all of the property contiguous to the site. Specific public notifications in accordance with RCRA requirements were issued when the site was formerly identified as SWMU 27F under the RCRA program. No public notices have been issued for UST 100A under the GA EPD USTMP.

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4.0 CLAIM FOR REIMBURSEMENT

Fort Stewart is a federally owned facility and has funded the investigation for the UST 100A site (Facility ID# 9-089080) using U. S. Department of Defense Environmental Restoration Account Funds. Application for GUST Trust Fund reimbursement is not being pursued at this time.

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5.0 REFERENCES

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APPENDIX I:

FIGURES

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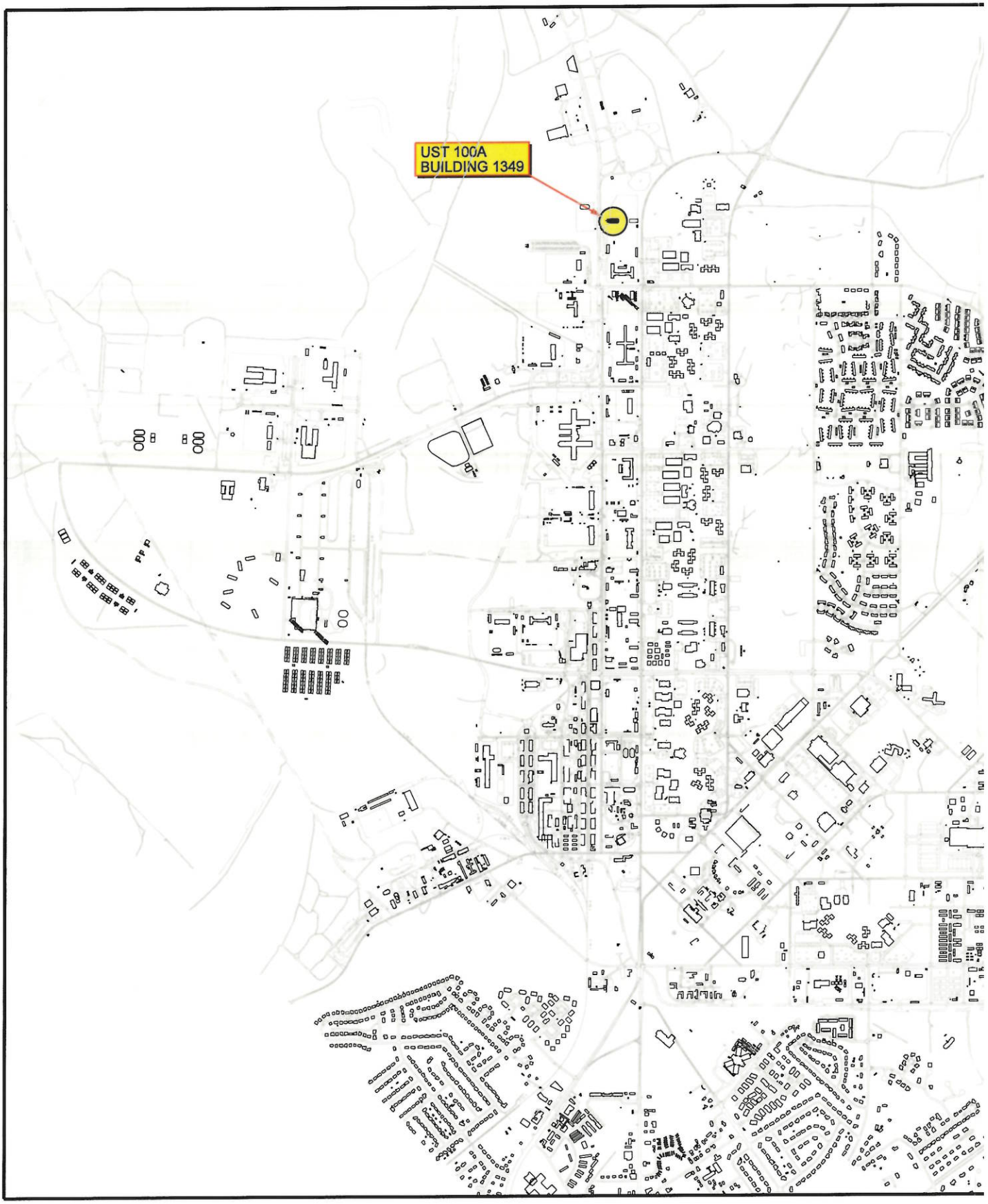


Figure 1. Location Map for UST 100A Bu

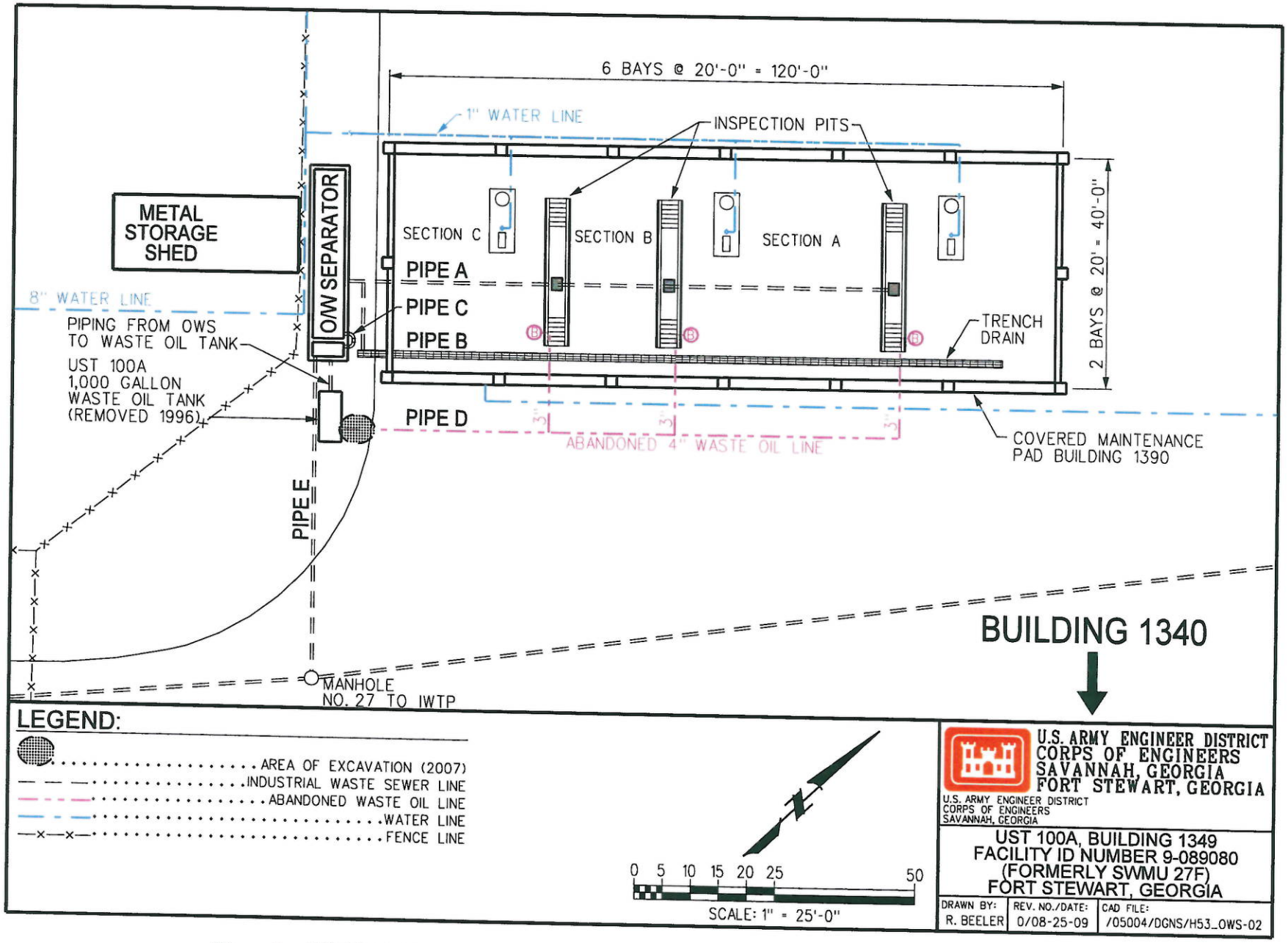


Figure 2a. UST 100A Site Map, Including OWS and Piping Layout of Maintenance Pad, Building 1349

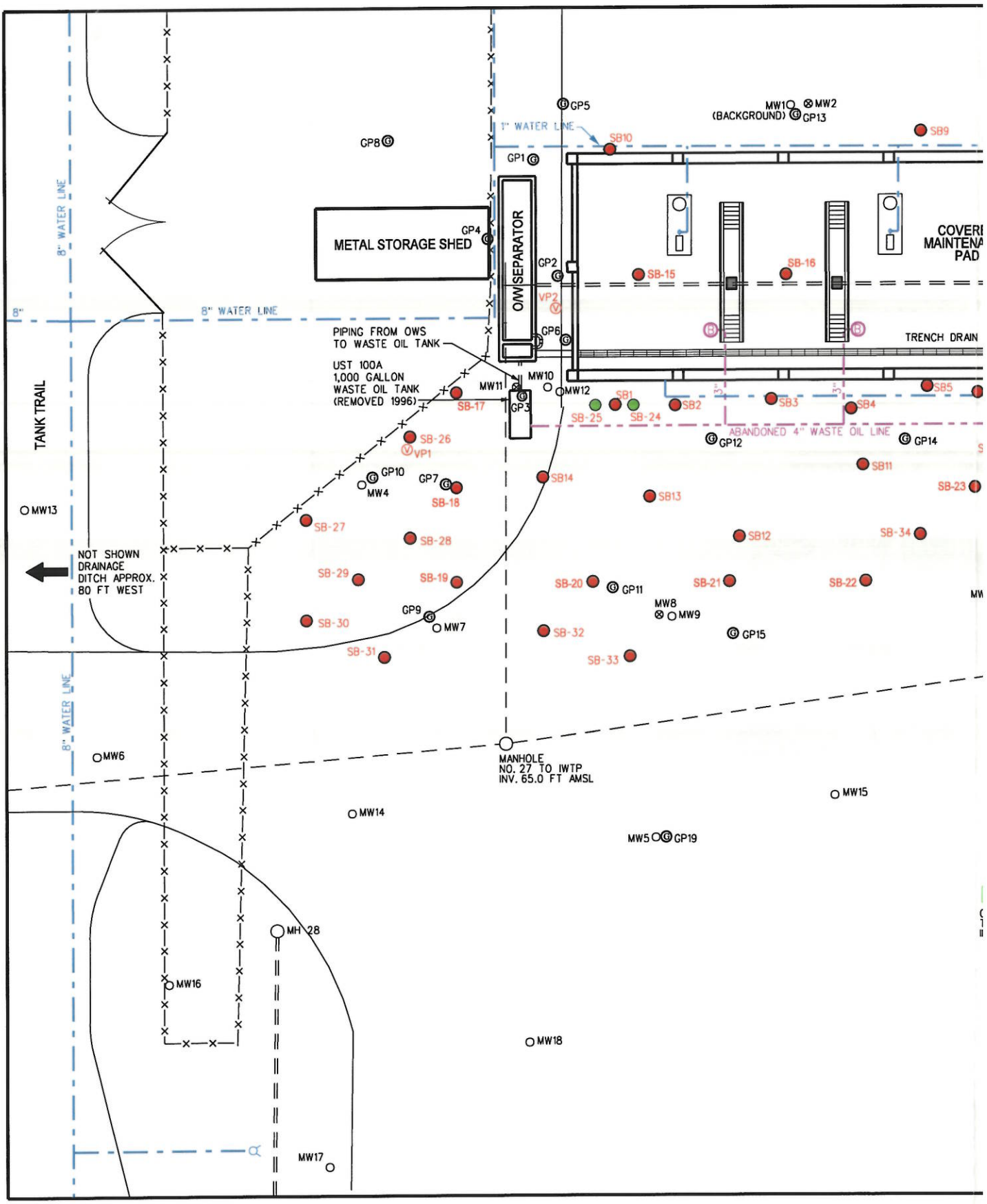
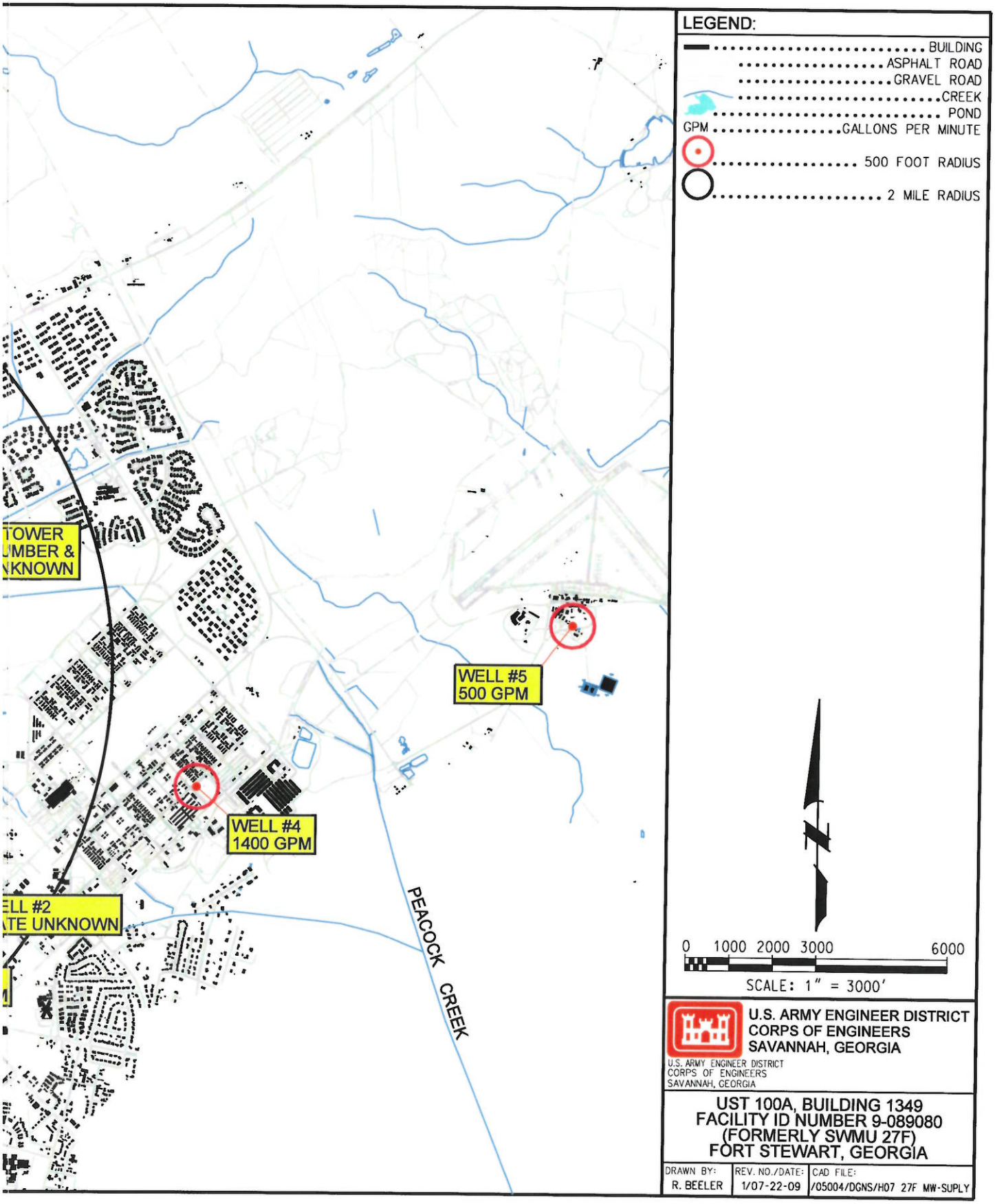


Figure 2b. UST 100A Site Map



ıce Water Bodies Within the Fort Stewart Garrison Area

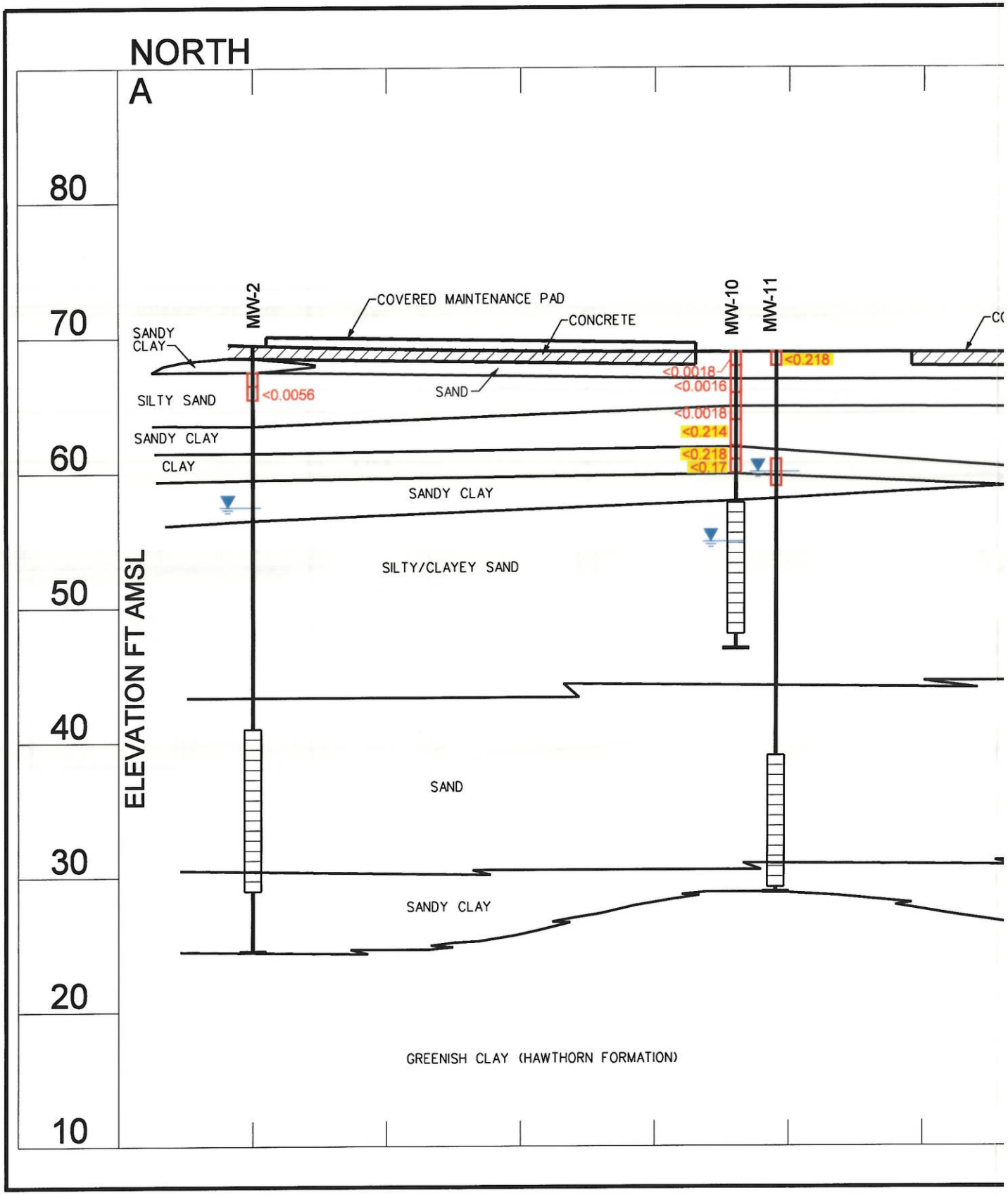
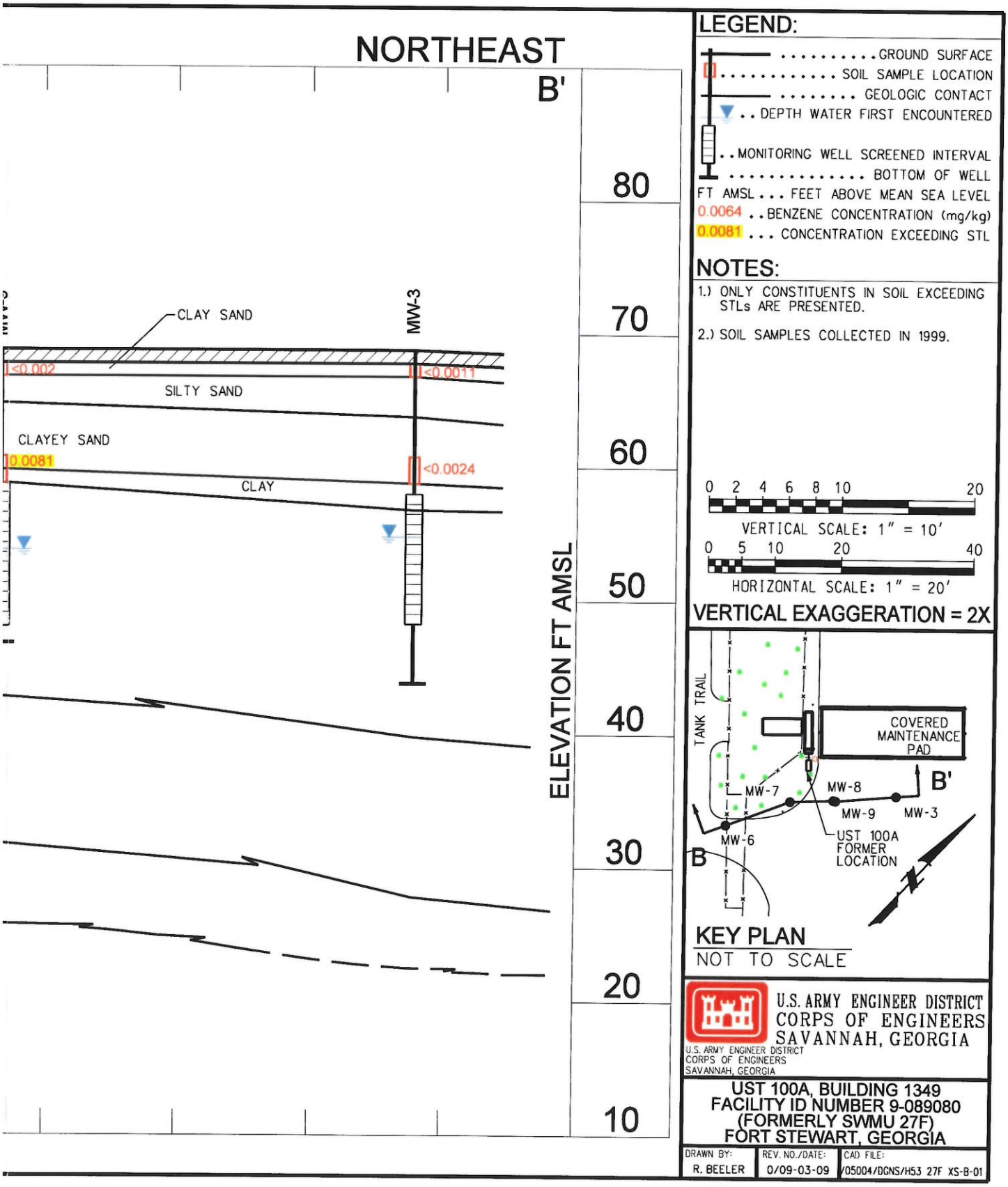


Figure 4a. North to South Cross S



s Section of UST 100A, Building 1349

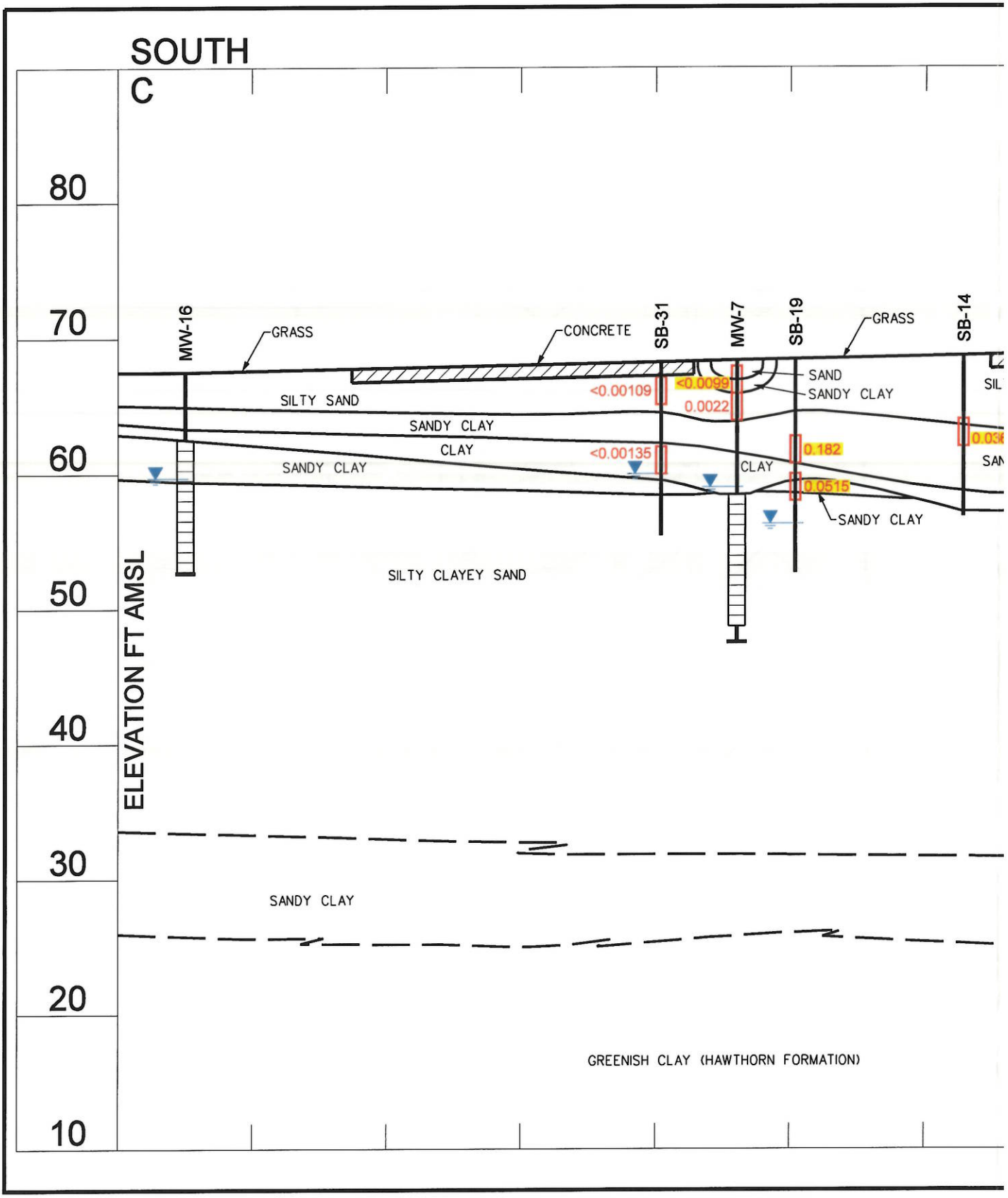


Figure 4c. Northeast to Southwest Cr

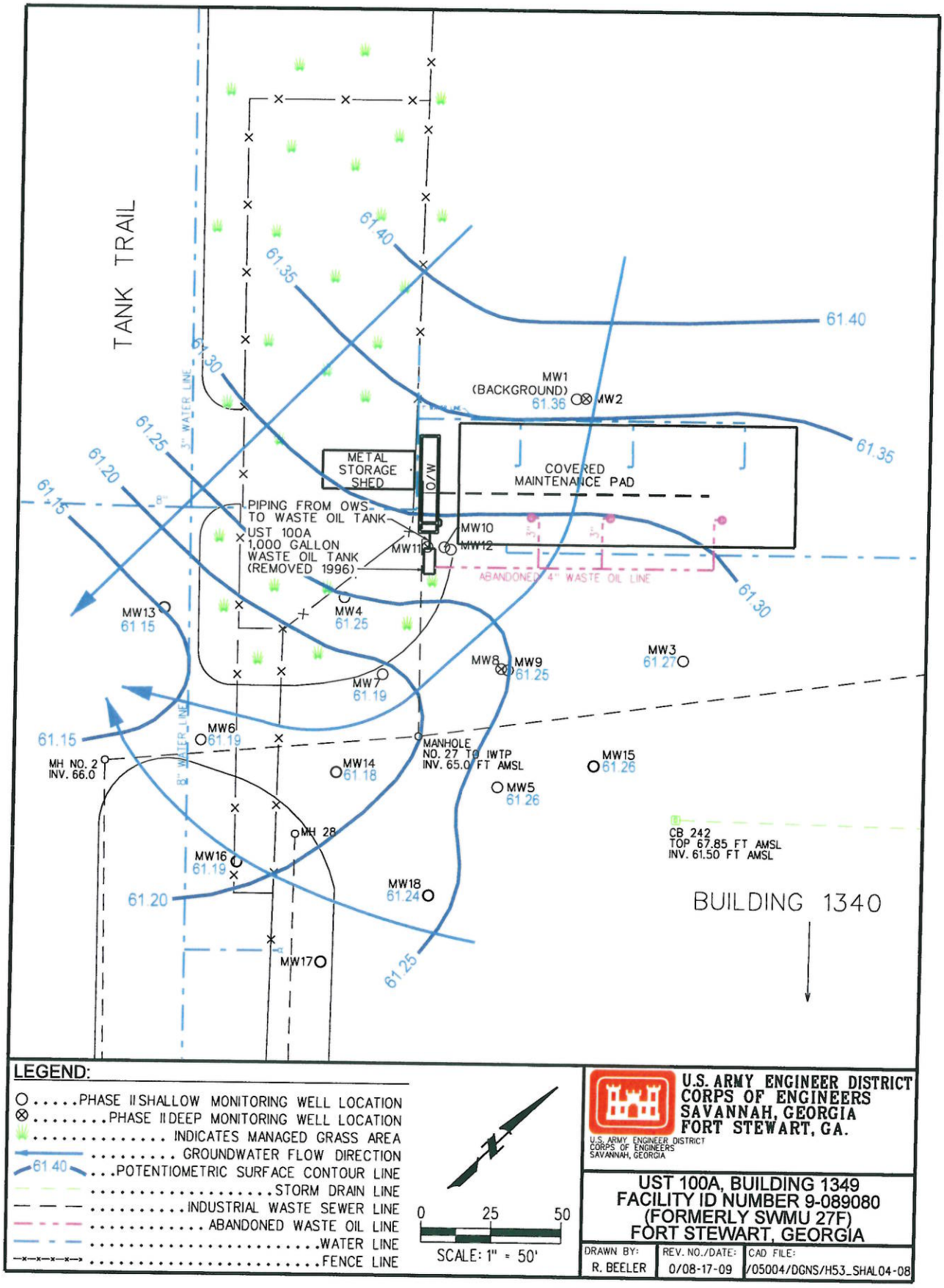


Figure 5a. Groundwater Potentiometric Surface Map (Shallow Zone) at UST 100A (April 2008)

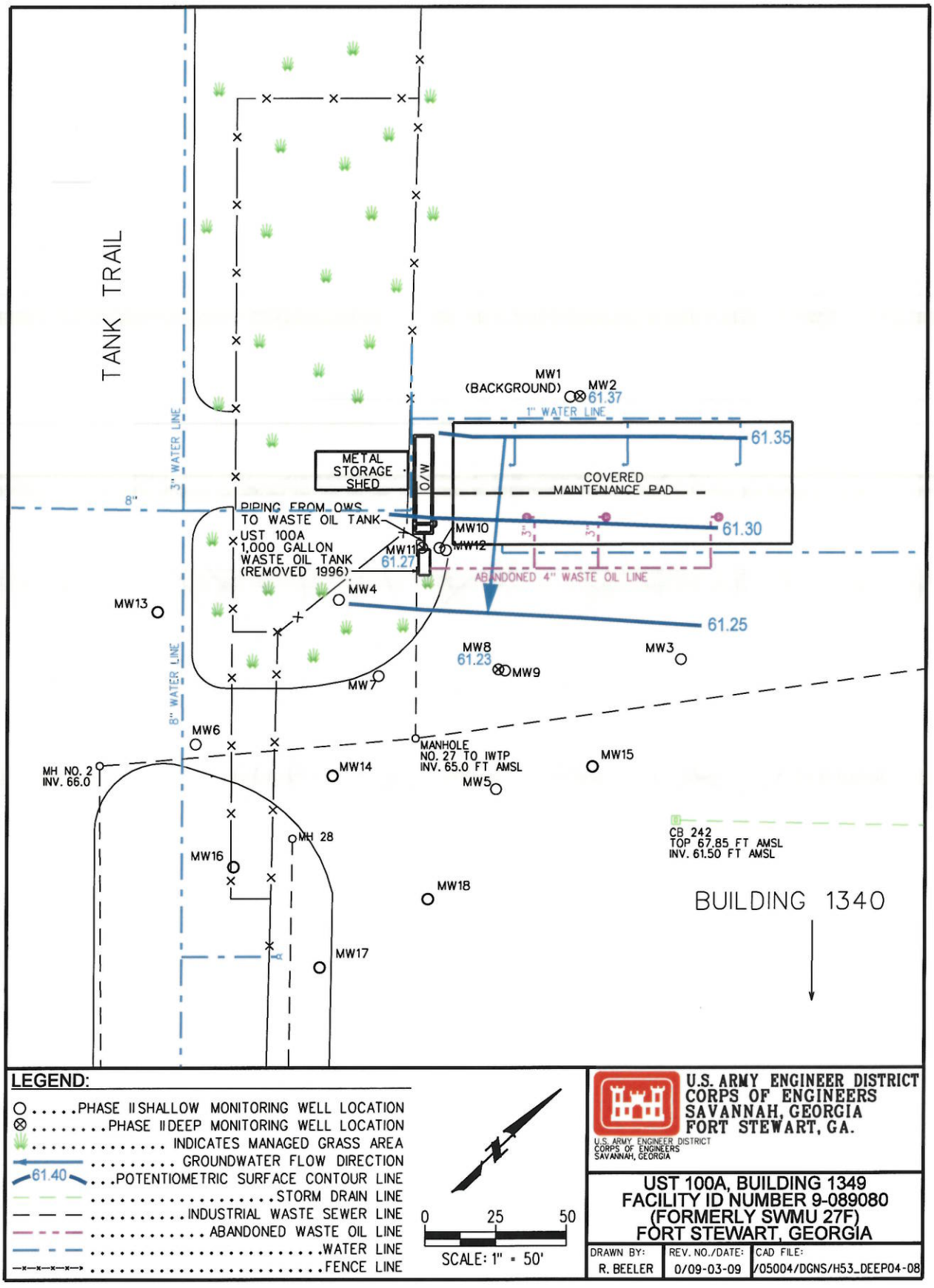


Figure 5b. Groundwater Potentiometric Surface Map (Deep Zone) at UST 100A (April 2008)

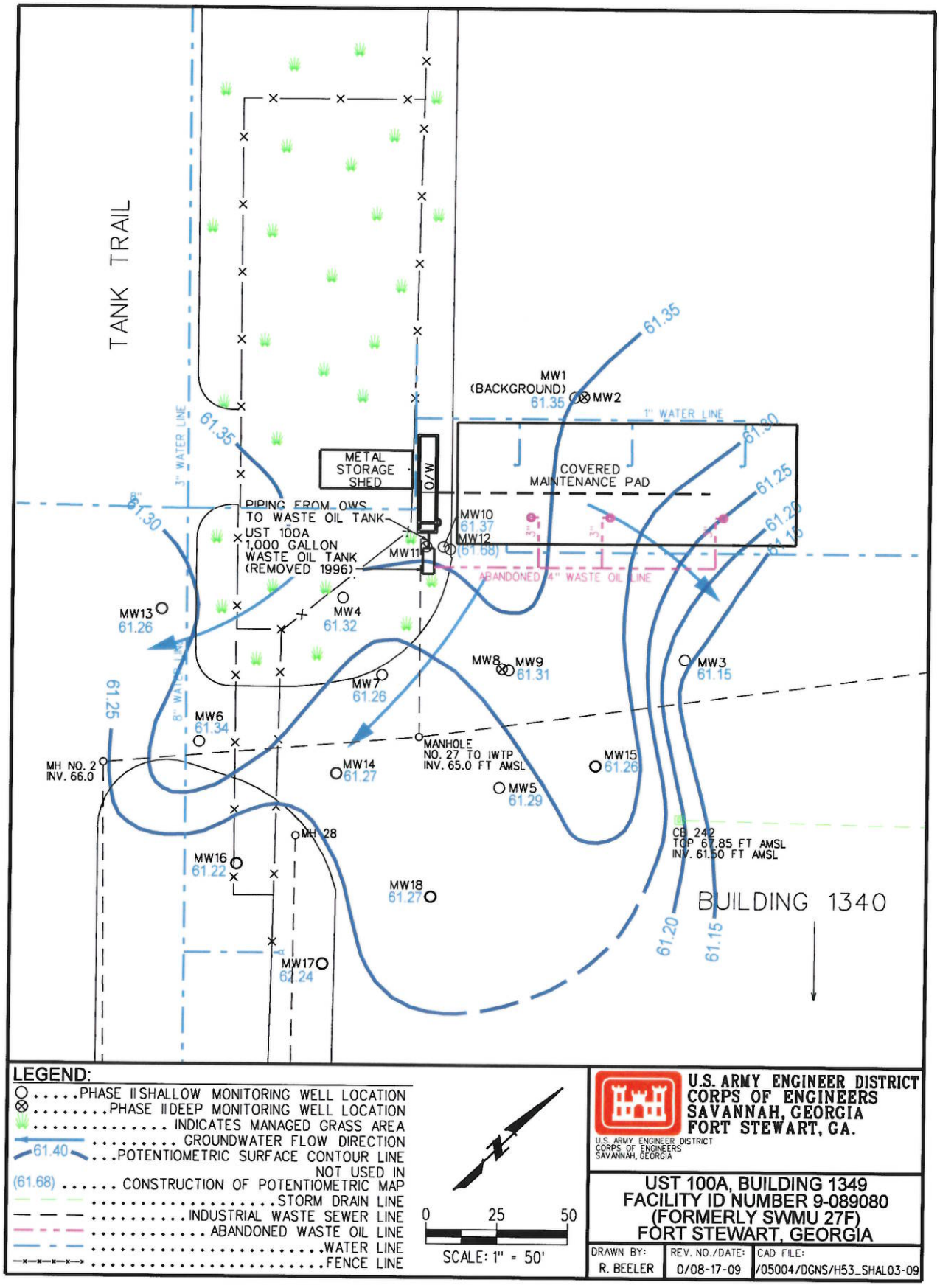


Figure 5c. Groundwater Potentiometric Surface Map (Shallow Zone) at UST 100A (March 2009)

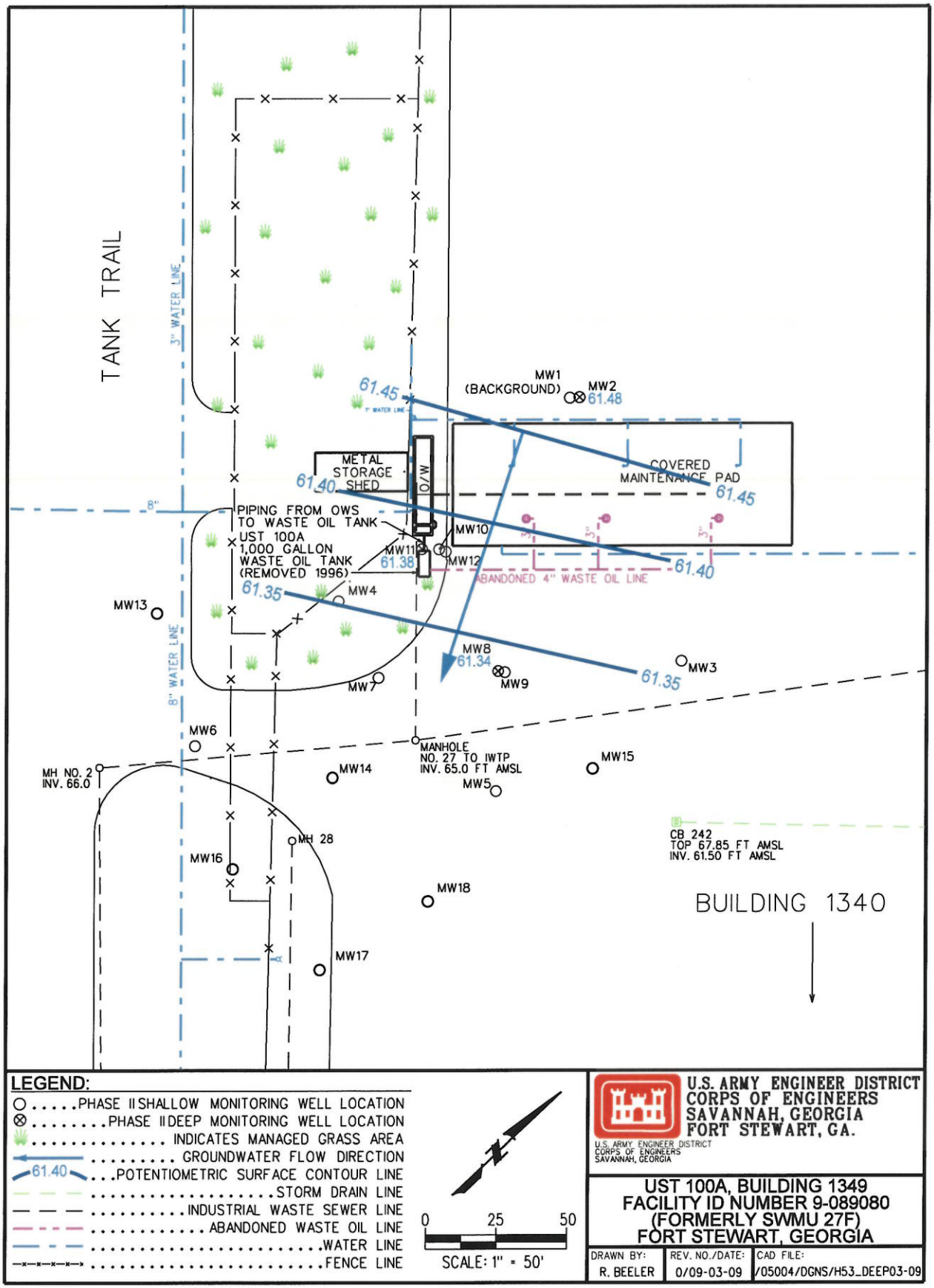


Figure 5d. Groundwater Potentiometric Surface Map (Deep Zone) at UST 100A (March 2009)

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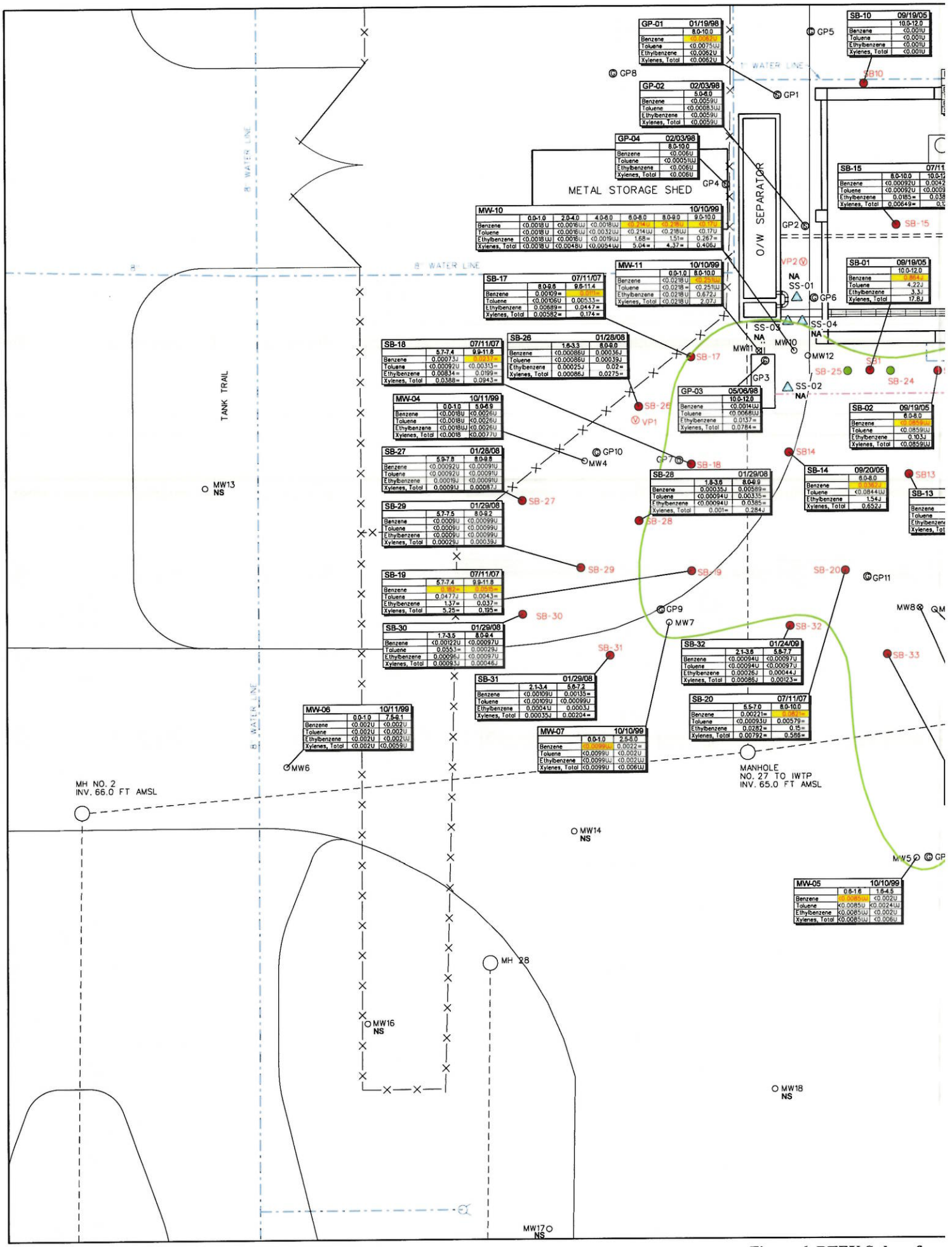
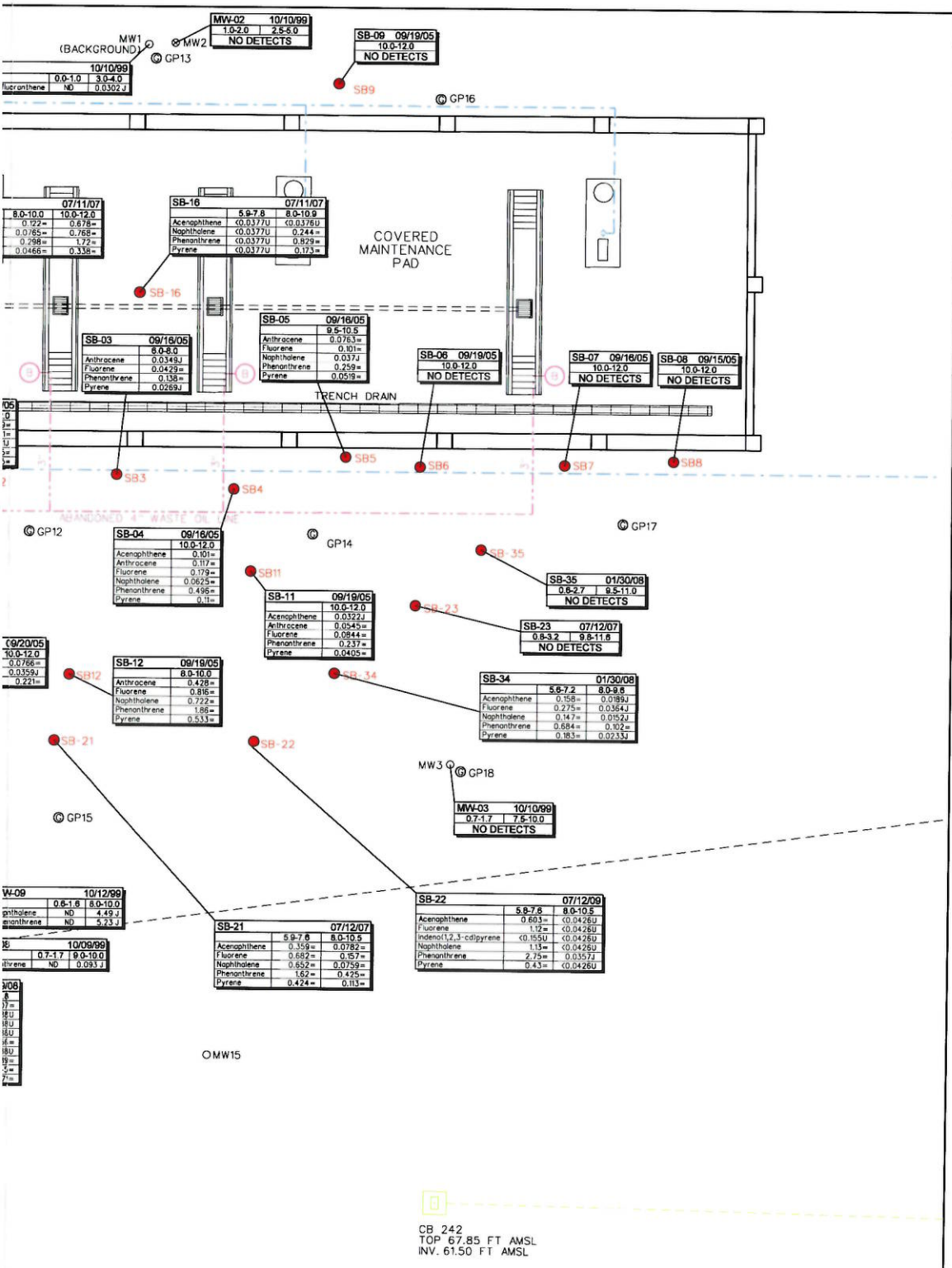


Figure 6. BTEX Subsurface



LEGEND:

- ○ . . . . . SHALLOW MONITORING WELL
- ⊗ . . . . . DEEP MONITORING WELL
- ● . . . . . SOIL BORING SEPTEMBER 200
- ● . . . . . SOIL BORIN
- Ⓖ . . . . GEOPROBE GROUNDWATER SAMPLE
- Ⓥ . . . . . VERTICAL PROFILE
- . . . . . STORM DRAIN LINE
- _ _ _ _ _ INDUSTRIAL WASTE SEWER LINE
- . . . ABANDONED WASTE OIL LINE
- . . . . . WATER LINE
- —x—x—x— . . . . . FENCE LINE
- U . . . . . UNDETECTED
- J . . . . . ESTIMATED VALUE
- RED . . . . . CONCENTRATION ABOVE STL

NOTES:

1.) ALL CONCENTRATIONS IN mg/kg.

2.) PAH CONCENTRATIONS WERE SCREENED AGAINST THEIR APPLICABLE SOIL THRESHOLD LEVELS (TABLE A, COLUMN B). NO EXCEEDANCES WERE OBSERVED ABOVE REGULATORY CRITERIA.

0 2 4 6 8 10 20
SCALE: 1" = 10'

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Figure 7.
PAH Subsurface Soil Quality Map at UST 100A

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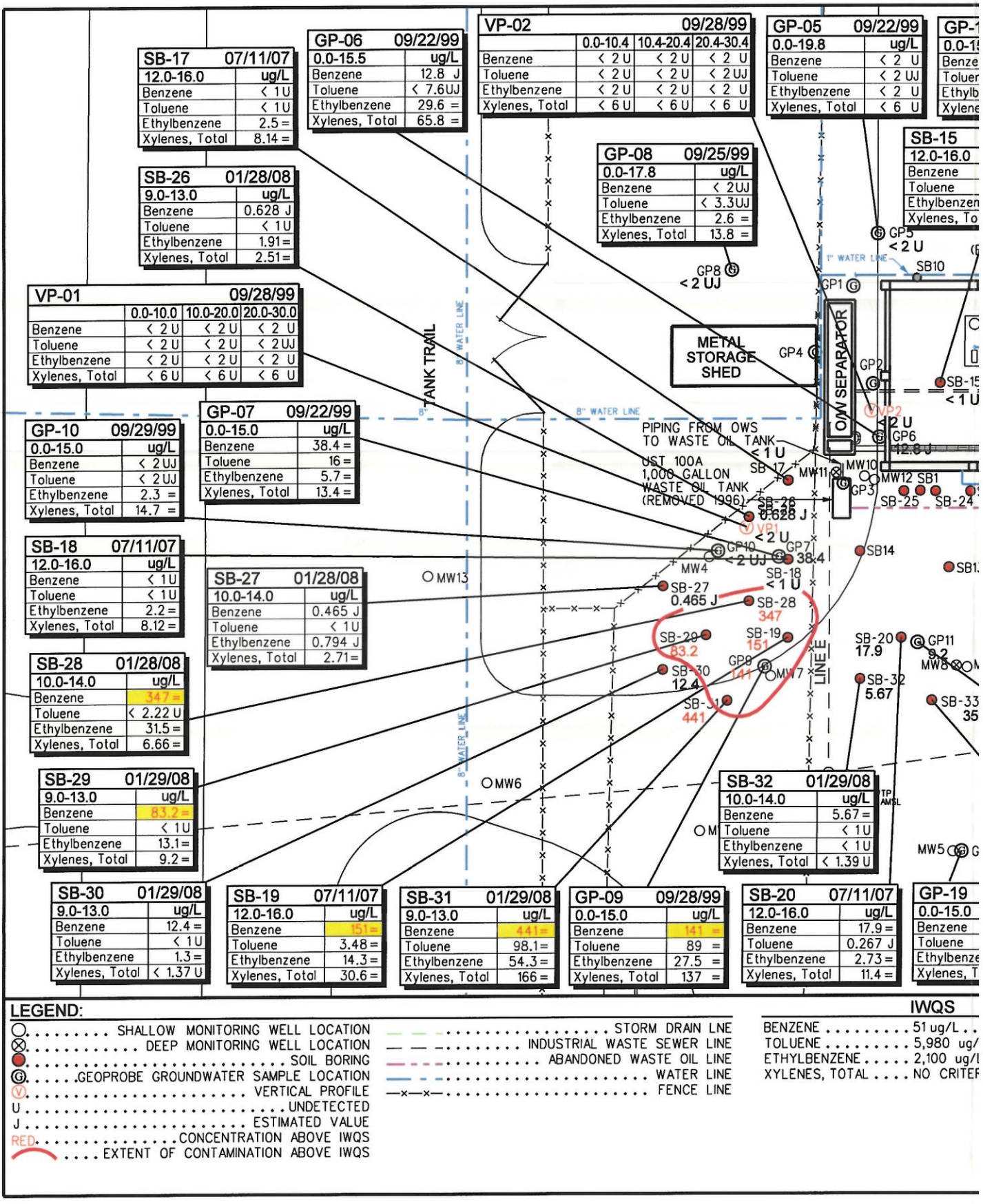
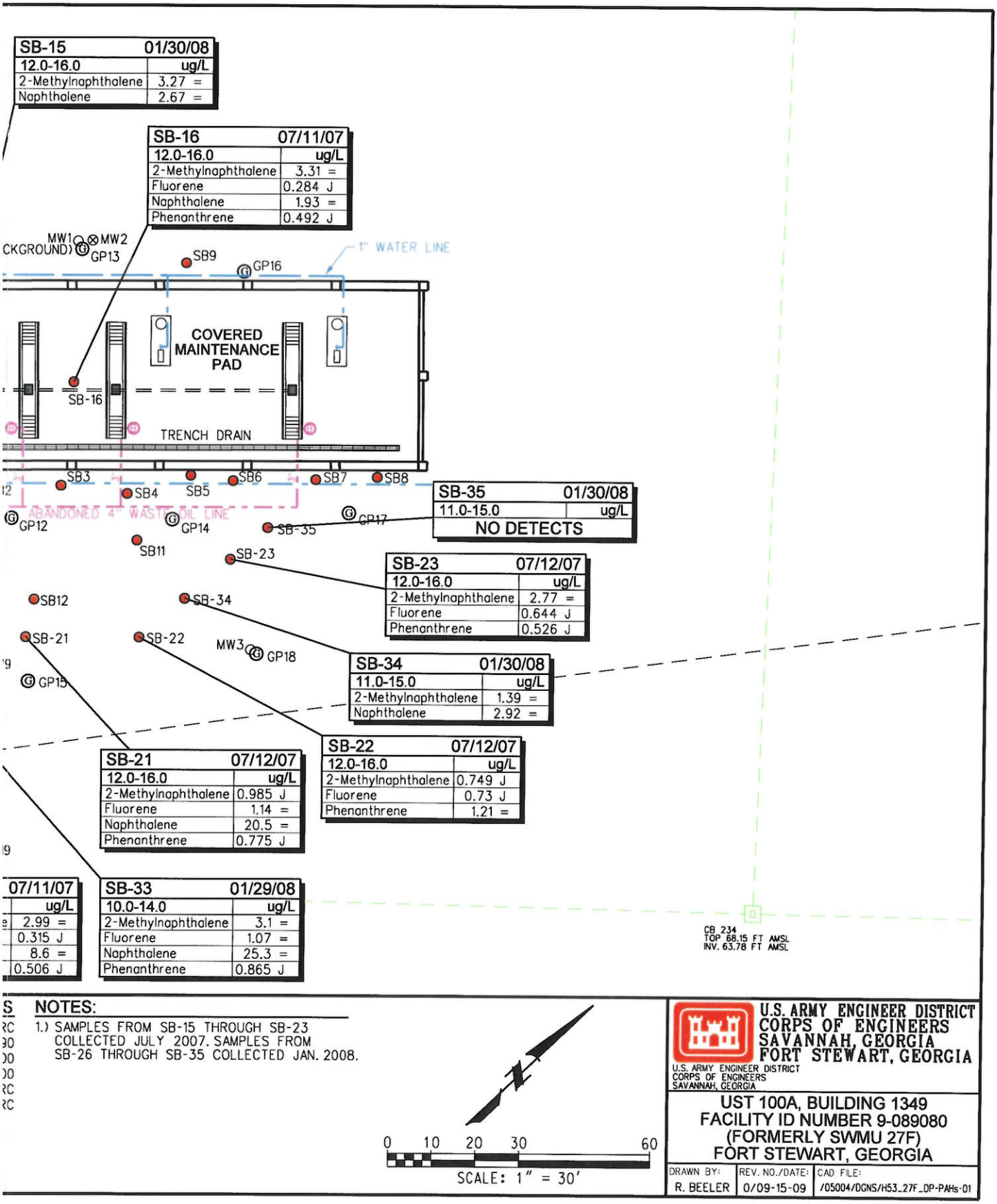


Figure 8. BTEX Groundwater Quality Ma



for Samples from DPT Points at UST 100A

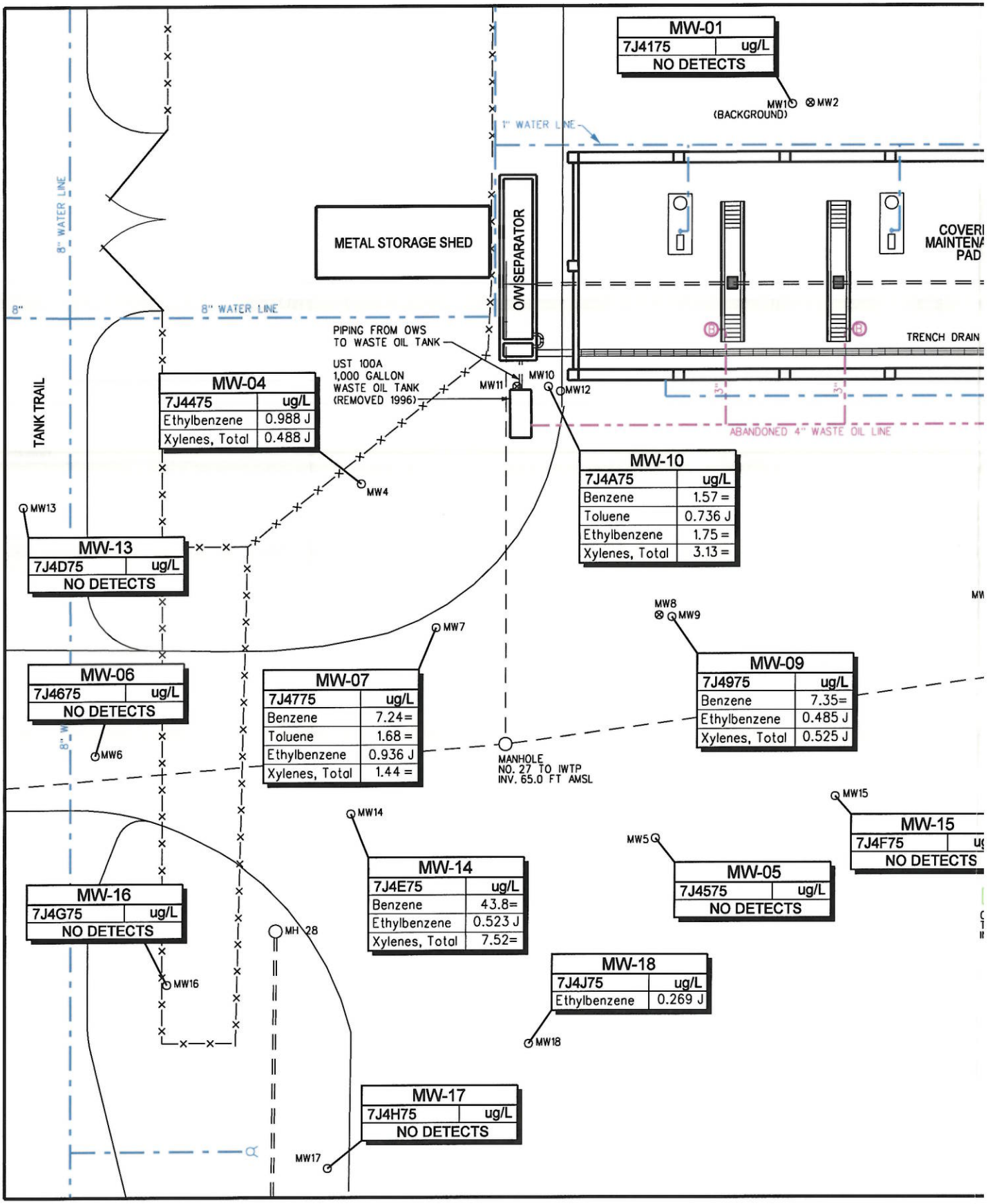
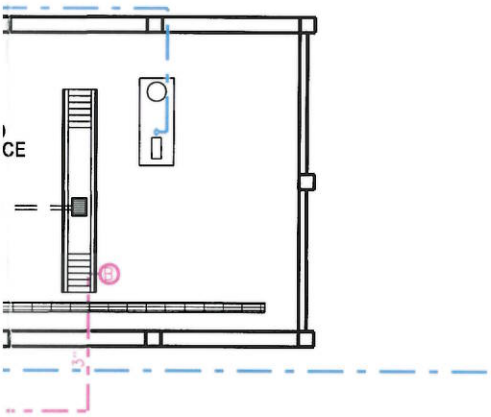


Figure 10. BTEX Groundwater Qu



MW-03

7J4375	ug/L
Naphthalene	0.987=

242
67.85 FT AMSL
61.50 FT AMSL

CB 234
TOP 68.15 FT AMSL
INV. 63.78 FT AMSL

LEGEND:

- ○ . . . . . SHALLOW MONITORING WELL
- ⊗ . . . . . DEEP MONITORING WELL
- . . . . . STORM DRAIN LINE
- — — — . . . INDUSTRIAL WASTE SEWER LINE
- — — — . . . . . ABANDONED WASTE OIL LINE
- — — — . . . . . WATER LINE
- —x—x— . . . . . FENCE LINE
- = ... DETECTED CONCENTRATION
- J . . . . . ESTIMATED CONCENTRATION
- INDICATES CONCENTRATION
- RED . . . . . ABOVE SCREENING CRITERIA
- NRC . . . . . NO REGULATORY CRITERIA

NOTES:

1.) GROUNDWATER SAMPLES COLLECTED IN APRIL 2008.

2.) DATA SCREENED AGAINST THE IN-STREAM WATER QUALITY STANDARDS. NO EXCEEDANCES OBSERVED.

	IWQS
2-METHYLNAPHTHALENE	NRC
ACENAPHTHENE	990
ANTHRACENE	40,000
FLUORENE	5,300
NAPHTHALENE	NRC
PHENANTHRENE	NRC

0 5 10 15 20 25 50

SCALE: 1" = 25'-0"

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ity Map for UST 100A (April 2008)

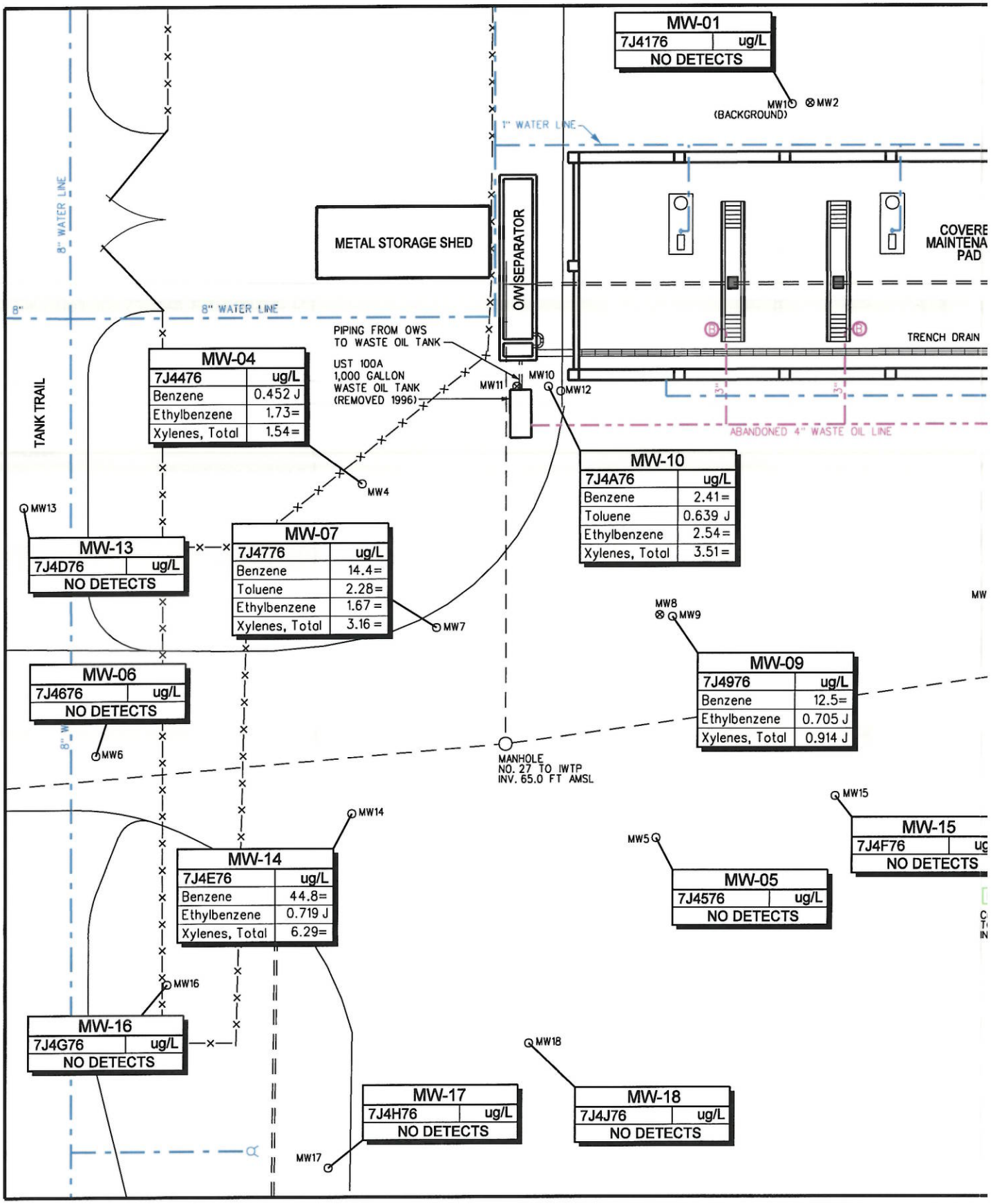
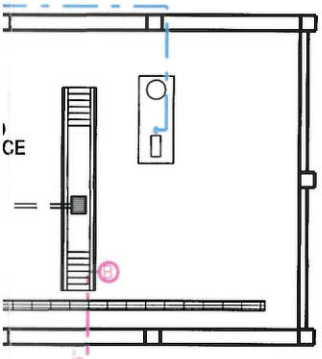


Figure 12. BTEX Groundwater Qua



MW-03	
7J4376	ug/L
Naphthalene	0.987=

242
67.85 FT AMSL
61.50 FT AMSL

CB 234
TOP 68.15 FT AMSL
INV. 63.78 FT AMSL

LEGEND:

- ○ . . . . . SHALLOW MONITORING WELL
- ⊗ . . . . . DEEP MONITORING WELL
- . . . . . STORM DRAIN LINE
- — — — . . . INDUSTRIAL WASTE SEWER LINE
- — · — · — . . . . . ABANDONED WASTE OIL LINE
- — · — . . . . . WATER LINE
- —x—x— . . . . . FENCE LINE
- = ... DETECTED CONCENTRATION
- J . . . . . ESTIMATED CONCENTRATION
- INDICATES CONCENTRATION
- RED . . . . . ABOVE SCREENING CRITERIA
- NRC . . . . . NO REGULATORY CRITERIA

NOTES:

1.) GROUNDWATER SAMPLES COLLECTED IN MARCH 2009.

2.) DATA SCREENED AGAINST THE IN-STREAM WATER QUALITY STANDARDS. NO EXCEEDANCES OBSERVED.

	IWQS
2-METHYLNAPHTHALENE	NRC
ACENAPHTHENE	990
ANTHRACENE	40,000
FLUORENE	5,300
NAPHTHALENE	NRC
PHENANTHRENE	NRC

0 5 10 15 20 25 50

SCALE: 1" = 25'-0"

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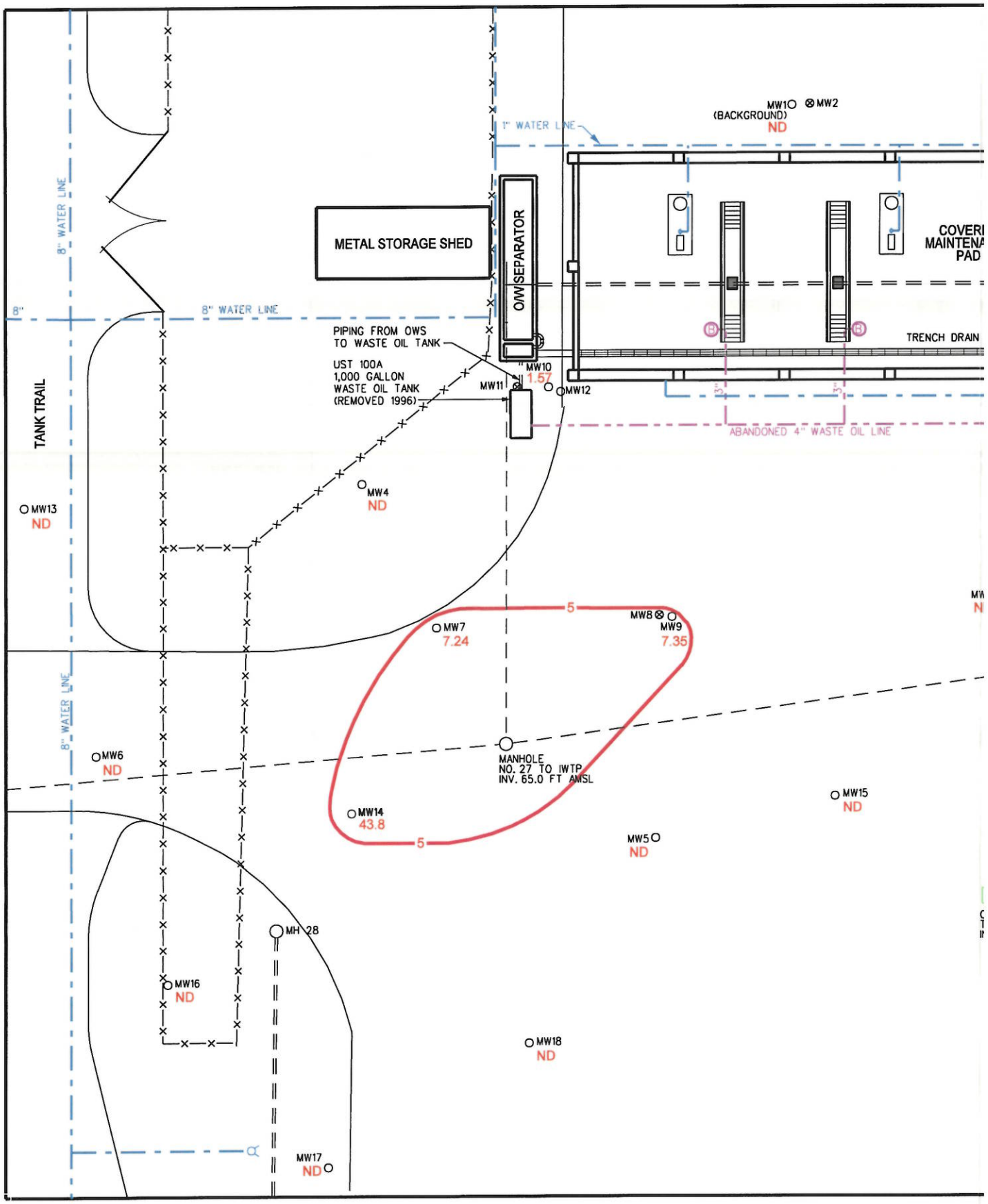
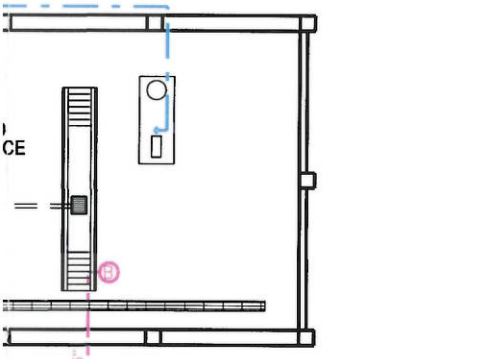


Figure 13. Benzene Isoconcentration C



MW3
ND

242
67.85 FT AMSL
61.50 FT AMSL

CB 234
TOP 68.15 FT AMSL
INV. 63.78 FT AMSL

LEGEND:

- ○ . . . . . SHALLOW MONITORING WELL
- ⊗ . . . . . DEEP MONITORING WELL
- . . . . . STORM DRAIN LINE
- — — — . . . INDUSTRIAL WASTE SEWER LINE
- — - — - — . . . . . ABANDONED WASTE OIL LINE
- — — — . . . . . WATER LINE
- —x—x— . . . . . FENCE LINE
- 1.68 . . . . . TOLUENE CONCENTRATION (ug/L)
- J . . . . . ESTIMATED CONCENTRATION
- ND . . . . . NON DETECT
- ⌒ . . . . . 5 ug/L CONTOUR

NOTES:

1.) GROUNDWATER SAMPLES COLLECTED IN APRIL 2008.

2.) IN-STREAM WATER QUALITY STANDARDS USED AS SCREENING CRITERIA. NO EXCEEDANCES OBSERVED.

0 5 10 15 20 25 50

SCALE: 1" = 25'-0"

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ntour Map for UST 100A (April 2008)

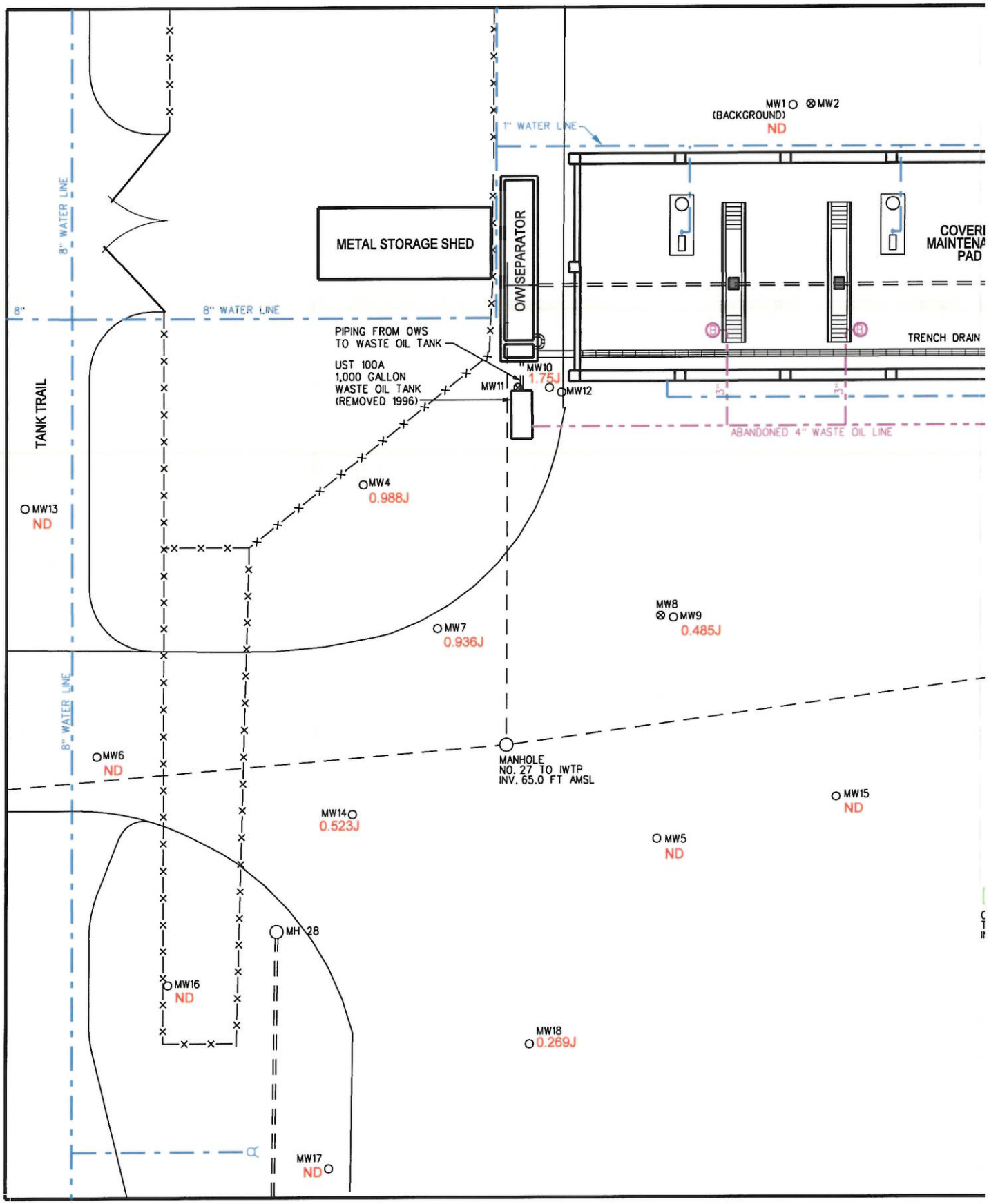
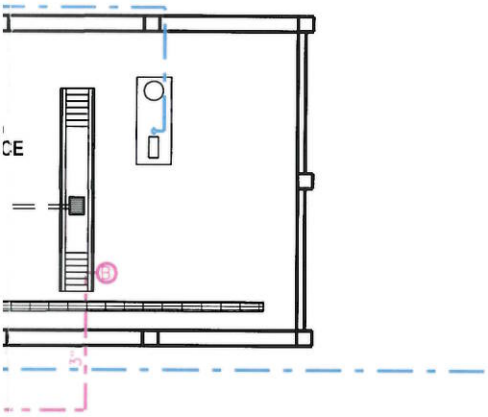


Figure 15. Ethylbenzene Isoconcentratio



MW3
ND

242
67.85 FT AMSL
61.50 FT AMSL

CB 234
TOP 68.15 FT AMSL
INV. 63.78 FT AMSL

LEGEND:

- ○ . . . . . SHALLOW MONITORING WELL
- ⊗ . . . . . DEEP MONITORING WELL
- . . . . . STORM DRAIN LINE
- — — — . . . INDUSTRIAL WASTE SEWER LINE
- — · — · — . . . . . ABANDONED WASTE OIL LINE
- — · — · — . . . . . WATER LINE
- —x—x— . . . . . FENCE LINE
- 7.52 . . . . . XYLENE CONCENTRATION (ug/L)
- J . . . . . ESTIMATED CONCENTRATION
- ND . . . . . NON DETECT
- ⌒ . . . . . 5 ug/L CONTOUR

NOTES:

1.) GROUNDWATER SAMPLES COLLECTED IN APRIL 2008.

2.) IN-STREAM WATER QUALITY STANDARDS USED AS SCREENING CRITERIA. NO EXCEEDANCES OBSERVED.

0 5 10 15 20 25 50

SCALE: 1" = 25'-0"

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itour Map for UST 100A (April 2008)

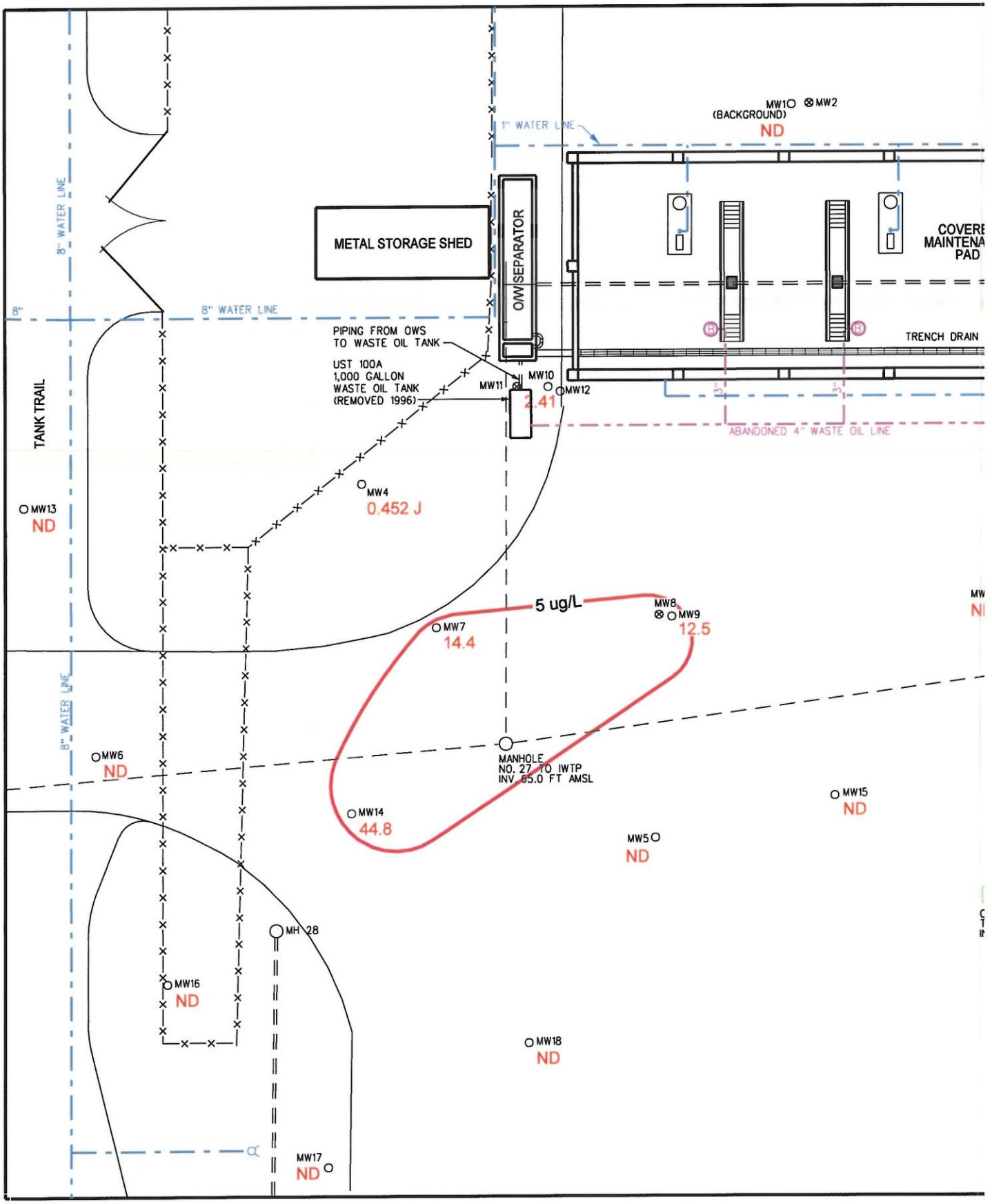
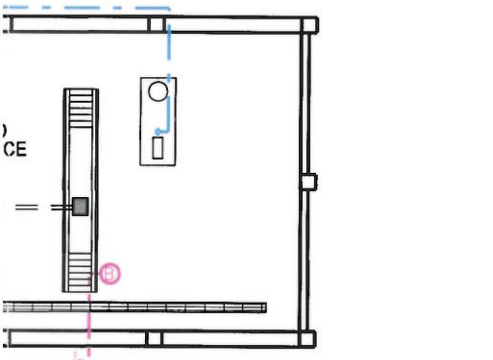


Figure 17. Benzene Isoconcentrati



MW3
ND

242
67.85 FT AMSL
61.50 FT AMSL

CB 234
TOP 68.15 FT AMSL
INV. 63.78 FT AMSL

LEGEND:

- ○ . . . . . SHALLOW MONITORING WELL
- ⊗ . . . . . DEEP MONITORING WELL
- . . . . . STORM DRAIN LINE
- — — — . . . INDUSTRIAL WASTE SEWER LINE
- — — — . . . . . ABANDONED WASTE OIL LINE
- — - — . . . . . WATER LINE
- —x—x— . . . . . FENCE LINE
- 1.68 . . . . . TOLUENE CONCENTRATION (ug/L)
- J . . . . . ESTIMATED CONCENTRATION
- ND . . . . . NON DETECT
- ⌒ . . . . . 5 ug/L CONTOUR

NOTES:

1.) GROUNDWATER SAMPLES COLLECTED IN MARCH 2009.

2.) IN-STREAM WATER QUALITY STANDARDS USED AS SCREENING CRITERIA. NO EXCEEDANCES OBSERVED.

0 5 10 15 20 25 50

SCALE: 1" = 25'-0"

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R. BEELER	0/09-09-09	/05004/DGNS/H53_TOLUENE03-09

tour Map for UST 100A (March 2009)

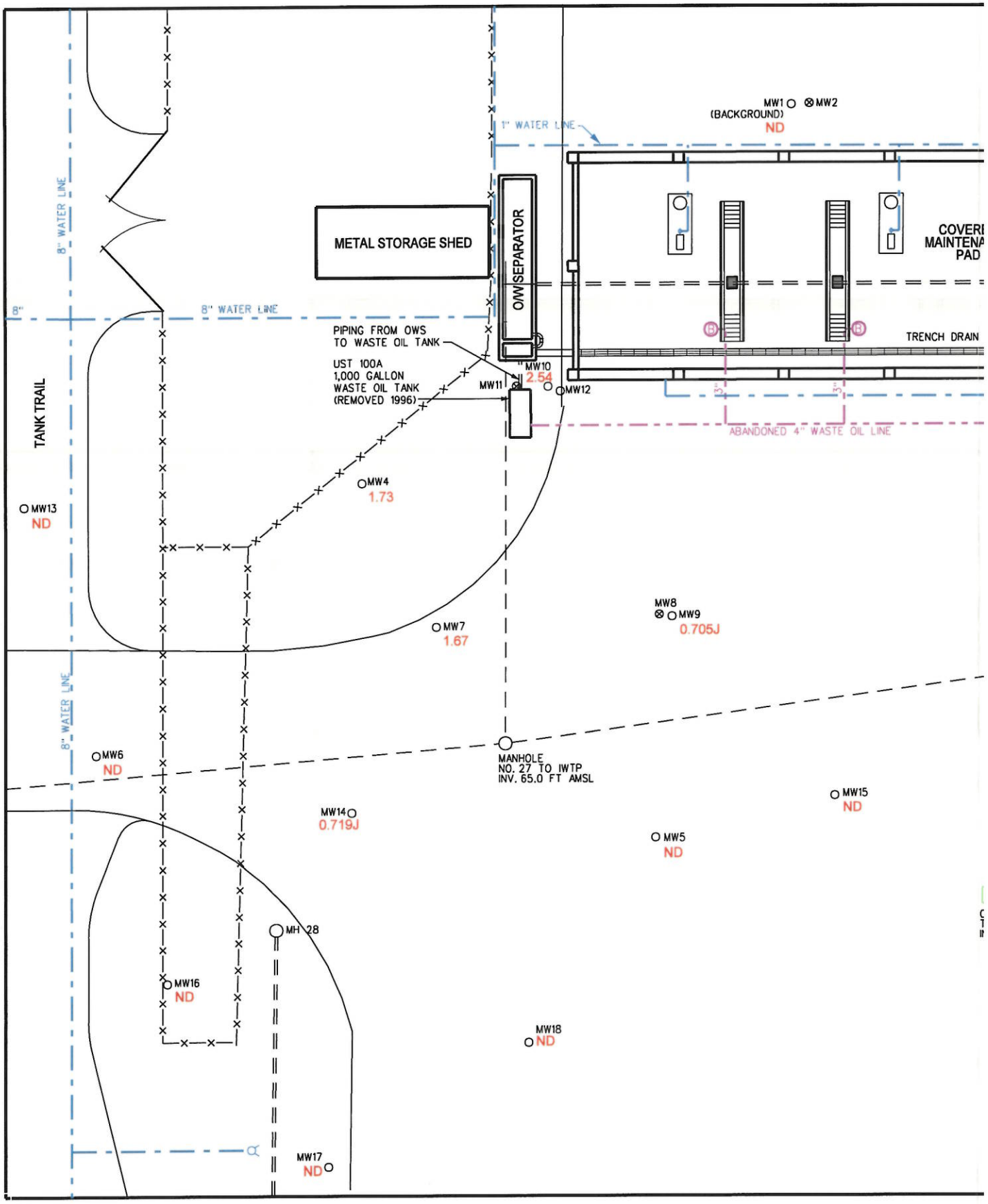
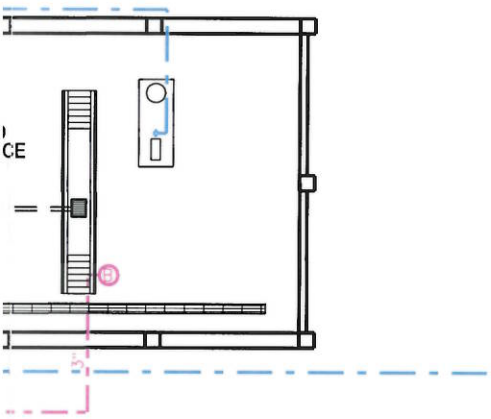


Figure 20. Ethylbenzene Isoconcentration



MW3
ND

242
67.85 FT AMSL
61.50 FT AMSL

CB 234
TOP 68.15 FT AMSL
INV. 63.78 FT AMSL

LEGEND:

- ○ . . . . . SHALLOW MONITORING WELL
- ⊗ . . . . . DEEP MONITORING WELL
- . . . . . STORM DRAIN LINE
- — — — . . . INDUSTRIAL WASTE SEWER LINE
- — · — · — . . . . . ABANDONED WASTE OIL LINE
- — — — . . . . . WATER LINE
- —x—x— . . . . . FENCE LINE
- 7.52 . . . . . XYLENE CONCENTRATION (ug/L)
- J . . . . . ESTIMATED CONCENTRATION
- ND . . . . . NON DETECT
- ⌒ . . . . . 5 ug/L CONTOUR

NOTES:

1.) GROUNDWATER SAMPLES COLLECTED IN MARCH 2009.

2.) IN-STREAM WATER QUALITY STANDARDS USED AS SCREENING CRITERIA. NO EXCEEDANCES OBSERVED.

0 5 10 15 20 25 50

SCALE: 1" = 25'-0"

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

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

UST 100A, BUILDING 1349
FACILITY ID NUMBER 9-089080
(FORMERLY SWMU 27F)
FORT STEWART, GEORGIA

DRAWN BY:	REV. NO./DATE:	CAD FILE:
R. BEELER	0/09-09-09	/05004/DGNS/H53_XYLENE03-09

tour Map for UST 100A (March 2009)

APPENDIX II:

TABLES

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Table 1. Monitoring Well Construction and Soil Borings Summary, UST 100A

Well/Boring No.	Date Installed	Well or Boring Type	Coordinates		Total Depth (ft)	Screen Interval (ft BGS)	Top of Casing Elevation (ft AMSL)
			Northing	Easting			
GP-01	01/18/98	Soil Boring	684392.37	821509.30	16.0	N/A	68.71
GP-02	02/03/98	Soil Boring	684379.47	821527.80	14.75	N/A	68.50
GP-03	01/17/98	Soil Boring	684358.35	821538.38	14.1	N/A	67.97
GP-04	02/03/98	Soil Boring	684315.51	821513.22	14.5	N/A	67.86
MW1	10/11/99	2-in. PVC	684433.25	821537.79	21.0	9.3 to 19.3	69.16
MW2	10/10/99	2-in. PVC	684435.72	821540.10	45.0	28.8 to 38.8	69.27
MW3	10/10/99	2-in. PVC	684392.99	821630.44	25.0	10.4 to 20.4	68.45
MW4	10/11/99	2-in. PVC	684325.34	821527.60	18.0	5.9 to 15.9	68.02
MW5	10/10/99	2-in. PVC	684314.94	821614.36	20.0	8.8 to 18.8	67.99
MW6	10/11/99	2-in. PVC	684253.33	821526.08	20.0	8.7 to 18.7	67.88
MW7	10/10/99	2-in. PVC	684315.20	821556.65	21.0	10.0 to 20.0	68.14
MW8	10/11/99	2-in. PVC	684345.97	821585.83	43.0	30.9 to 40.9	68.34
MW9	10/12/99	2-in. PVC	684347.37	821587.85	22.0	10.3 to 20.3	68.46
MW10	10/10/99	2-in. PVC	684362.91	821540.80	22.0	11.0 to 21.0	68.70
MW11	10/11/99	2-in. PVC	684358.83	821536.44	40.0	29.4 to 39.4	68.66
MW12	10/12/99	2-in. PVC	684363.88	821543.07	10.0	5.0 to 9.7	68.74
MW13	11/29/00	2-in. PVC	684278.17	821483.84	15.0	4.1 to 14.1	67.26
MW14	11/31/00	2-in. PVC	684278.63	821569.04	15.0	2.9 to 12.9	67.76
MW15	11/29/00	2-in. PVC	684344.10	821633.70	15.0	3.8 to 13.8	68.03
MW16	12/05/00	2-in. PVC	684231.17	821565.74	15.5	5.0 to 15.0	67.64
MW17	12/05/00	2-in. PVC	684226.55	821612.29	15.5	4.9 to 14.9	69.08
MW18	12/05/00	2-in. PVC	684270.23	821623.61	15.5	4.9 to 14.9	67.49
SB-01	09/19/05	Soil Boring	684369.27	821552.37	12.0	N/A	N/A
SB-02	09/19/05	Soil Boring	684377.00	821560.74	12.0	N/A	N/A
SB-03	09/16/05	Soil Boring	684390.28	821573.28	12.0	N/A	N/A
SB-04	09/16/05	Soil Boring	684399.38	821585.55	12.0	N/A	N/A
SB-05	09/16/05	Soil Boring	684412.37	821593.17	12.0	N/A	N/A
SB-06	09/19/05	Soil Boring	684418.08	821600.95	12.0	N/A	N/A
SB-07	09/16/05	Soil Boring	684431.13	821614.34	16.0	N/A	N/A
SB-08	09/15/05	Soil Boring	684441.27	821624.20	18.0	N/A	N/A
SB-09	09/19/05	Soil Boring	684446.61	821559.10	12.0	N/A	N/A
SB-10	09/19/05	Soil Boring	684403.70	821518.57	12.0	N/A	N/A
SB-11	09/19/05	Soil Boring	684393.22	821594.47	12.0	N/A	N/A
SB-12	09/19/05	Soil Boring	684367.31	821586.69	12.0	N/A	N/A
SB-13	09/20/05	Soil Boring	684361.10	821569.06	12.0	N/A	N/A
SB-14	09/20/05	Soil Boring	684349.89	821551.75	12.0	N/A	N/A
SB-15	07/11/07	Soil Boring	684390.12	821538.81	16.0	N/A	N/A
SB-16	07/11/07	Soil Boring	684409.33	821559.16	16.0	N/A	N/A
SB-17	07/11/07	Soil Boring	684350.27	821528.78	16.0	N/A	N/A
SB-18	07/11/07	Soil Boring	684337.21	821541.10	16.0	N/A	N/A
SB-19	07/11/07	Soil Boring	684324.15	821553.43	16.0	N/A	N/A
SB-20	07/11/07	Soil Boring	684341.97	821572.30	16.0	N/A	N/A
SB-21	07/12/07	Soil Boring	684359.78	821591.17	16.0	N/A	N/A
SB-22	07/12/07	Soil Boring	684377.59	821610.04	16.0	N/A	N/A
SB-23	07/12/07	Soil Boring	684404.70	821612.90	16.0	N/A	N/A
SB-24	07/12/07	Soil Boring	684371.58	821554.96	16.0	N/A	N/A

Table 1. Monitoring Well Construction and Soil Borings Summary, UST 100A (continued)

Well/Boring No.	Date Installed	Well or Boring Type	Coordinates		Total Depth (ft)	Screen Interval (ft BGS)	Top of Casing Elevation (ft AMSL)
			Northing	Easting			
SB-25	07/12/07	Soil Boring	684366.61	821549.71	16.0	N/A	N/A
SB-26	01/28/08	Soil Boring	684338.18	821528.03	13.0	N/A	N/A
SB-27	01/28/08	Soil Boring	684313.26	821524.46	14.0	N/A	N/A
SB-28	01/29/08	Soil Boring	684324.25	821541.18	14.0	N/A	N/A
SB-29	01/29/08	Soil Boring	684311.79	821539.40	13.0	N/A	N/A
SB-30	01/29/08	Soil Boring	684299.33	821537.61	13.0	N/A	N/A
SB-31	01/29/08	Soil Boring	684304.32	821553.22	13.0	N/A	N/A
SB-32	01/29/08	Soil Boring	684328.71	821571.92	14.0	N/A	N/A
SB-33	01/29/08	Soil Boring	684336.44	821587.24	14.0	N/A	N/A
SB-34	01/30/08	Soil Boring	684391.15	821611.47	15.0	N/A	N/A
SB-35	01/30/08	Soil Boring	684415.77	821614.07	15.0	N/A	N/A

Note: All elevations are National Geodetic Vertical Datum 1988. Horizontal coordinates are North American Datum 1983.
AMSL = Above mean sea level.
BGS = Below ground surface.
N/A = Not applicable.
PVC = Polyvinyl chloride.
UST = Underground storage tank.

Table 2. Water Levels

Well Number	Date Measured	Top of Casing Elevation (ft AMSL)	Screened Interval (ft BGS)	Depth to Product (ft BTOC)	Depth to Water (ft BTOC)	Product Thickness (ft)	Corrected Groundwater Elevation [a] (ft AMSL)
Water Level Measurements – May 2001							
MW1	05/04/01	69.16	9.3 to 19.3	---	8.41	0	60.75
MW2	05/04/01	69.27	28.8 to 38.8	---	8.61	0	60.66
MW3	05/04/01	68.45	10.4 to 20.4	---	7.8	0	60.65
MW4	05/04/01	68.02	5.9 to 15.9	---	7.37	0	60.65
MW5	05/04/01	67.99	8.8 to 18.8	---	7.34	0	60.65
MW6	05/04/01	67.88	8.7 to 18.7	---	7.28	0	60.6
MW7	05/04/01	68.14	10.0 to 20.0	---	7.52	0	60.62
MW8	05/04/01	68.34	30.9 to 40.9	---	7.82	0	60.52
MW9	05/04/01	68.46	10.3 to 20.3	---	7.8	0	60.66
MW10	05/04/01	68.70	11.0 to 21.0	---	8.01	0	60.69
MW11	05/04/01	68.66	29.4 to 39.4	---	8.06	0	60.6
MW12	05/04/01	68.74	5.0 to 9.7	7.89	7.94	0.05	60.85
MW13	05/04/01	67.26	4.1 to 14.1	---	6.62	0	60.64
MW14	05/04/01	67.76	2.9 to 12.9	---	7.15	0	60.61
MW15	05/04/01	68.03	3.8 to 13.8	---	7.37	0	60.66
MW16	05/04/01	67.64	5.0 to 15.0	---	7.07	0	60.57
MW17	05/04/01	69.08	4.9 to 14.9	---	7.46	0	61.62
MW18	05/04/01	67.49	4.9 to 14.9	---	6.86	0	60.63
Water Level Measurements – September 2002							
MW1	09/19/02	69.16	9.3 to 19.3	---	8.36	0	60.8
MW2	09/19/02	69.27	28.8 to 38.8	---	8.54	0	60.73
MW3	09/19/02	68.45	10.4 to 20.4	---	7.7	0	60.75
MW4	09/19/02	68.02	5.9 to 15.9	---	7.48	0	60.54
MW5	09/19/02	67.99	8.8 to 18.8	---	7.27	0	60.72
MW6	NM	67.88	8.7 to 18.7	---	NM	0	NM
MW7	09/19/02	68.14	10.0 to 20.0	---	7.46	0	60.68
MW8	09/19/02	68.34	30.9 to 40.9	---	7.72	0	60.62
MW9	09/19/02	68.46	10.3 to 20.3	---	7.75	0	60.71
MW10	09/19/02	68.70	11.0 to 21.0	---	7.97	0	60.73
MW11	09/19/02	68.66	29.4 to 39.4	---	7.98	0	60.68
MW12	09/19/02	68.74	5.0 to 9.7	---	7.67	0	61.07
MW13	NM	67.26	4.1 to 14.1	---	NM	0	NM
MW14	09/19/02	67.76	2.9 to 12.9	---	7.08	0	60.68
MW15	09/19/02	68.03	3.8 to 13.8	---	7.31	0	60.72
MW16	09/19/02	67.64	5.0 to 15.0	---	6.34	0	61.3
MW17	09/19/02	69.08	4.9 to 14.9	---	7.4	0	61.68
MW18	09/19/02	67.49	4.9 to 14.9	---	6.8	0	60.69
Water Level Measurements – August 2004							
MW1	08/19/04	69.16	9.3 to 19.3	---	7.56	0	61.6
MW2	08/19/04	69.27	28.8 to 38.8	---	7.65	0	61.62
MW3	08/19/04	68.45	10.4 to 20.4	---	6.95	0	61.5
MW4	08/19/04	68.02	5.9 to 15.9	6.38	6.52	0.14	61.65
MW5	08/19/04	67.99	8.8 to 18.8	---	6.55	0	61.44
MW6	8/19/2004	67.88	8.7 to 18.7	---	6.5	0	61.38

Table 2. Water Levels (continued)

Well Number	Date Measured	Top of Casing Elevation (ft AMSL)	Screened Interval (ft BGS)	Depth to Product (ft BTOC)	Depth to Water (ft BTOC)	Product Thickness (ft)	Corrected Groundwater Elevation [a] (ft AMSL)
MW7	08/19/04	68.14	10.0 to 20.0	---	6.7	0	61.44
MW8	08/19/04	68.34	30.9 to 40.9	---	6.87	0	61.47
MW9	08/19/04	68.46	10.3 to 20.3	---	7.01	0	61.45
MW10	08/19/04	68.70	11.0 to 21.0	---	7.17	0	61.53
MW11	08/19/04	68.66	29.4 to 39.4	---	7.13	0	61.53
MW12	08/19/04	68.74	5.0 to 9.7	6.61	6.66	0.05	62.13
MW13	NM	67.26	4.1 to 14.1	---	NM	0	NM
MW14	08/19/04	67.76	2.9 to 12.9	---	6.35	0	61.41
MW15	08/19/04	68.03	3.8 to 13.8	---	6.58	0	61.45
MW16	08/19/04	67.64	5.0 to 15.0	---	4.98	0	62.66
MW17	08/19/04	69.08	4.9 to 14.9	---	6.7	0	62.38
MW18	08/19/04	67.49	4.9 to 14.9	---	6.07	0	61.42
Water Level Measurements – April 2007							
MW1	04/18/07	69.16	9.3 to 19.3	---	8.67	0	60.49
MW2	04/18/07	69.27	28.8 to 38.8	---	8.79	0	60.48
MW3	04/18/07	68.45	10.4 to 20.4	---	8.02	0	60.43
MW4	04/18/07	68.02	5.9 to 15.9	---	7.65	0	60.37
MW5	04/18/07	67.99	8.8 to 18.8	---	7.06	0	60.93
MW6	04/18/07	67.88	8.7 to 18.7	---	7.53	0	60.35
MW7	04/18/07	68.14	10.0 to 20.0	---	7.76	0	60.38
MW8	04/18/07	68.34	30.9 to 40.9	---	7.99	0	60.35
MW9	04/18/07	68.46	10.3 to 20.3	---	8.06	0	60.4
MW10	04/18/07	68.70	11.0 to 21.0	---	8.25	0	60.45
MW11	04/18/07	68.66	29.4 to 39.4	---	8.24	0	60.42
MW12	04/18/07	68.74	5.0 to 9.7	---	7.97	0	60.77
MW13	04/18/07	67.26	4.1 to 14.1	---	6.92	0	60.34
MW14	04/18/07	67.76	2.9 to 12.9	---	7.4	0	60.36
MW15	04/18/07	68.03	3.8 to 13.8	---	7.6	0	60.43
MW16	04/22/07	67.64	5.0 to 15.0	---	7.51	0	60.13
MW17	04/18/07	69.08	4.9 to 14.9	---	7.71	0	61.37
MW18	04/18/07	67.49	4.9 to 14.9	---	7.12	0	60.37
Water Level Measurements – April 2008							
MW1	04/29/08	69.16	9.3 to 19.3	---	7.8	0	61.36
MW2	04/29/08	69.27	28.8 to 38.8	---	7.9	0	61.37
MW3	04/29/08	68.45	10.4 to 20.4	---	7.18	0	61.27
MW4	04/29/08	68.02	5.9 to 15.9	---	6.77	0	61.25
MW5	04/29/08	67.99	8.8 to 18.8	---	6.73	0	61.26
MW6	04/29/08	67.88	8.7 to 18.7	---	6.69	0	61.19
MW7	04/29/08	68.14	10.0 to 20.0	---	6.95	0	61.19
MW8	04/29/08	68.34	30.9 to 40.9	---	7.11	0	61.23
MW9	04/29/08	68.46	10.3 to 20.3	---	7.21	0	61.25
MW10	04/29/08	68.70	11.0 to 21.0	---	7.25	0	61.45
MW11	04/29/08	68.66	29.4 to 39.4	---	7.39	0	61.27
MW12	04/29/08	68.74	5.0 to 9.7	---	7.05	0	61.69
MW13	04/29/08	67.26	4.1 to 14.1	---	6.11	0	61.15
MW14	04/29/08	67.76	2.9 to 12.9	---	6.58	0	61.18

Table 2. Water Levels (continued)

Well Number	Date Measured	Top of Casing Elevation (ft AMSL)	Screened Interval (ft BGS)	Depth to Product (ft BTOC)	Depth to Water (ft BTOC)	Product Thickness (ft)	Corrected Groundwater Elevation [a] (ft AMSL)
MW15	04/29/08	68.03	3.8 to 13.8	---	6.77	0	61.26
MW16	04/29/08	67.64	5.0 to 15.0	---	6.45	0	61.19
MW17	04/29/08	69.08	4.9 to 14.9	---	6.85	0	62.23
MW18	04/29/08	67.49	4.9 to 14.9	---	6.25	0	61.24
Water Level Measurements – March 2009							
MW1	03/10/09	69.16	9.3 to 19.3	---	7.81	0	61.35
MW2	03/10/09	69.27	28.8 to 38.8	---	7.79	0	61.48
MW3	03/10/09	68.45	10.4 to 20.4	---	7.3	0	61.15
MW4	03/10/09	68.02	5.9 to 15.9	---	6.7	0	61.32
MW5	03/10/09	67.99	8.8 to 18.8	---	6.7	0	61.29
MW6	03/10/09	67.88	8.7 to 18.7	---	6.54	0	61.34
MW7	03/10/09	68.14	10.0 to 20.0	---	6.88	0	61.26
MW8	03/10/09	68.34	30.9 to 40.9	---	7	0	61.34
MW9	03/10/09	68.46	10.3 to 20.3	---	7.15	0	61.31
MW10	03/10/09	68.70	11.0 to 21.0	---	7.33	0	61.37
MW11	03/10/09	68.66	29.4 to 39.4	---	7.28	0	61.38
MW12	03/10/09	68.74	5.0 to 9.7	---	7.06	0	61.68
MW13	03/10/09	67.26	4.1 to 14.1	---	6	0	61.26
MW14	03/10/09	67.76	2.9 to 12.9	---	6.49	0	61.27
MW15	03/10/09	68.03	3.8 to 13.8	---	6.71	0	61.32
MW16	03/10/09	67.64	5.0 to 15.0	---	6.42	0	61.22
MW17	03/10/09	69.08	4.9 to 14.9	---	6.84	0	62.24
MW18	03/10/09	67.49	4.9 to 14.9	---	6.22	0	61.27

[a] Groundwater elevations in wells with product were corrected using the specific gravity of 912 kg/m^3 for motor oil.
AMSL = Above mean sea level.
BGS = Below ground surface.
BTOC = Below top of casing.
NM = Not measured.

Table 3. Summary of Geotechnical Analyses Performed at UST 100A

Station	27F-MW1	27F-MW2	27F-MW3	27F-MW4	27F-MW5	27F-MW6	27F-MW7	27F-MW8	27F-MW9
Sample ID	**7J1173**	**7J1273**	**7J1373**	**7J1473**	**7J1573**	**7J1673**	**7J1773**	**7J1873**	**7J1973**
Depth (ft)	**15 to 17**	**37 to 40**	**10.6 to 20.6**	**15 to 16**	**9 to 10**	**16 to 17**	**35 to 45**	**7.7 to 9.0**	**14 to 15**
Moisture Content (%)	20.09	26.18	17.73	30.74	18.83	19.13	35.03	16.7	23.32
Liquid Limit (%)	NP	NP	18	NP	NP	NP	21.5	35	32.7
Plastic Limit (%)	NP	NP	17.7	NP	NP	NP	18.4	25.1	23.8
Plasticity Index (%)	NP	NP	0.3	NP	NP	NP	3.1	9.9	8.9
Soil Classification	SW	SW	ML	SM	SM	SM	ML	ML	ML
Gravel (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Sand (%)	92.39	88.87	84.4	85.01	90.1	89.66	81.63	67.25	75.24
Fines (%)	7.61	11.13	15.6	14.99	9.9	10.34	18.17	32.75	24.76
Specific Gravity	NA	NA	NA	NA	NA	NA	NA	NA	NA
Soil Porosity	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bulk Density (pcf)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Permeability (cm/sec)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (mg/kg)	6,900	NA	NA	NA	NA	NA	NA	NA	NA

Station	27F-MW10	27F-MW11	27F-MW13	27F-MW14	27F-MW15	27F-MW16	27F-MW17	27F-MW18
Sample ID	**7J1A73**	**7J1B73**	**7J1D82**	**7J1E82**	**7J1F82**	**7J1G82**	**7J1H82**	**7J1I82**
Depth (ft)	**11 to 12**	**30 to 40**	**8.2 to 10.0**	**8.0 to 10.0**	**8.7 to 11.0**	**10.0 to 12.0**	**8.0 to 15.0**	**7.0 to 15.0**
Moisture Content (%)	23.9	22.92	17.0	16.0	18.0	20.0	20.0	21.0
Liquid Limit (%)	NP	NP	NP	NP	NP	NP	NP	NP
Plastic Limit (%)	NP	NP	NP	NP	NP	NP	NP	NP
Plasticity Index (%)	NP	NP	NP	NP	NP	NP	NP	NP
Soil Classification	SW	SW	SM	SM	SM	SW	SM	SM
Gravel (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sand (%)	92.8	94.82	84.1	86.2	86.2	88.9	85.4	84.6
Fines (%)	7.2	5.18	15.9	13.8	13.8	11.1	14.6	15.4
Specific Gravity	2.65	NA	NA	NA	NA	NA	NA	NA
Soil Porosity	0.45	NA	NA	NA	NA	NA	NA	NA
Bulk Density (pcf)	105.91	NA	NA	NA	NA	NA	NA	NA
Permeability (cm/sec)	7.60E-04	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (mg/kg)			NA	NA	NA	NA	NA	NA

NA = Not analyzed.
NP = Non-plastic.
pcf = Pounds per cubic foot.
UST = Underground storage tank.

Soil Classifications
ML = Silts and fine sands, clayey fine sands, or clayey silts.
SM = Silty sands, sand silt mixtures.
SW = Well-graded sands or gravelly sands.

Table 4a. Soil Analytical Results (BTEX Compounds)

Sample Station	Sample ID	Depth (ft BGS)	Date	Sample Type	Benzene (mg/kg)		Toluene (mg/kg)		Ethylbenzene (mg/kg)		Xylenes, Total (mg/kg)		Total BTEX (mg/kg)
Phase I RCRA Facility Investigation (1998)													
GP-01	7J1111	8.0 to 10.0	01/19/98	Grab	0.0062	U	0.0075	UJ	0.0062	U	0.0062	U	ND
GP-02	7J1211	5.0 to 6.0	02/03/98	Grab	0.0059	U	0.00083	UJ	0.0059	U	0.0059	U	ND
GP-03	7J1312	10.0 to 12.0	05/06/98	Grab	0.0014	UJ	0.0068	UJ	0.0137	=	0.0784	=	0.0921
GP-04	7J1411	8.0 to 10.0	02/03/98	Grab	0.006	U	0.00051	UJ	0.006	U	0.006	U	ND
Phase II RCRA Facility Investigation (1999-2000)													
MW1	7J1171	0.0 to 1.0	10/09/99	Grab	0.0054	U	0.0054	U	0.0054	UJ	0.0054	U	ND
MW1	7J1172	3.0 to 4.0	10/09/99	Grab	0.0018	U	0.0035	UJ	0.002	U	0.0056	U	ND
MW2	7J1271	1.0 to 2.0	10/10/99	Grab	0.0056	UJ	0.0056	U	0.0056	UJ	0.0056	U	ND
MW2	7J1272	2.5 to 5.0	10/10/99	Grab	0.002	U	0.0055	UJ	0.002	U	0.0059	U	ND
MW3	7J1371	0.7 to 1.7	10/10/99	Grab	0.0011	UJ	0.0011	U	0.0011	UJ	0.0011	UJ	ND
MW3	7J1372	7.5 to 10.0	10/10/99	Grab	0.0024	UJ	0.0024	UJ	0.0024	UJ	0.0072	U	ND
MW4	7J1471	0.0 to 1.0	10/11/99	Grab	0.0018	U	0.0018	U	0.0018	UJ	0.0018	U	ND
MW4	7J1472	5.0 to 6.9	10/11/99	Grab	0.0026	U	0.0026	U	0.0026	U	0.0077	U	ND
MW5	7J1571	0.6 to 1.6	10/10/99	Grab	**0.0085**	**UJ**	0.0085	U	0.0085	UJ	0.0085	UJ	ND
MW5	7J1572	1.6 to 4.5	10/10/99	Grab	0.002	U	0.0024	UJ	0.002	U	0.006	U	ND
MW6	7J1671	0.6 to 1.0	10/11/99	Grab	0.002	U	0.002	U	0.002	U	0.002	U	ND
MW6	7J1672	7.5 to 9.1	10/11/99	Grab	0.002	U	0.002	UJ	0.002	U	0.0059	U	ND
MW7	7J1771	0.85 to 1.85	10/10/99	Grab	**0.0099**	**UJ**	0.0099	U	0.0099	UJ	0.0099	U	ND
MW7	7J1772	2.5 to 5.0	10/10/99	Grab	0.0022	=	0.002	U	0.002	UJ	0.006	UJ	0.0022
MW8	7J1871	0.7 to 1.7	10/09/99	Grab	0.0022	U	0.0022	U	0.0022	UJ	0.0022	U	ND
MW8	7J1872	9.0 to 10.0	10/09/99	Grab	0.0064	=	0.0019	UJ	0.0096	=	0.0121	=	0.0281
MW9	7J1971	0.6 to 1.6	10/12/99	Grab	0.002	U	0.002	U	0.002	UJ	0.002	U	ND
MW9	7J1972	8.0 to 10.0	10/12/99	Grab	**0.0081**	=	0.0022	U	0.0202	=	0.0449	=	0.0732
MW10	7J1A71	0.0 to 1.0	10/10/99	Grab	0.0018	U	0.0018	U	0.0018	UJ	0.0018	U	ND
MW10	7J1A74	2.0 to 4.0	10/10/99	Grab	0.0016	UJ	0.0016	UJ	0.0016	U	0.0048	U	ND
MW10	7J1A75	4.0 to 6.0	10/10/99	Grab	0.0018	UJ	0.0032	UJ	0.0019	UJ	0.0054	UJ	ND
MW10	7J1A76	6.0 to 8.0	10/10/99	Grab	**0.214**	**U**	0.214	UJ	1.68	=	5.04	=	6.72
MW10	7J1A72	8.0 to 9.0	10/10/99	Grab	**0.218**	**U**	0.218	UJ	1.51	=	4.37	=	5.88
MW10	7J1A77	9.0 to 10.0	10/10/99	Grab	**0.17**	**U**	0.17	U	0.267	=	0.406	J	0.673
MW11	7J1B71	0.0 to 1.0	10/10/99	Grab	**0.0218**	**U**	0.0218	=	0.0218	U	0.0218	U	0.0218
MW11	7J1B72	8.0 to 10.0	10/10/99	Grab	**0.251**	**UJ**	0.251	UJ	0.672	J	2.07	J	2.742

Table 4a. Soil Analytical Results (BTEX Compounds) (continued)

Sample Station	Sample ID	Depth (ft BGS)	Date	Sample Type	Benzene (mg/kg)		Toluene (mg/kg)		Ethylbenzene (mg/kg)		Xylenes, Total (mg/kg)		Total BTEX (mg/kg)
September 2005 Direct-Push Soil Boring Sampling													
SB-01	7J1181	10.0 to 12.0	09/19/05	Grab	**0.864**	J	4.22	J	3.3	J	17.8	J	26.184
SB-02	7J1281	6.0 to 8.0	09/19/05	Grab	**0.0859**	UJ	0.0859	UJ	0.103	J	0.0859	UJ	0.103
SB-03	7J1381	6.0 to 8.0	09/16/05	Grab	**0.0899**	U	0.0899	U	0.0337	J	0.0898	J	0.1235
SB-04	7J1481	10.0 to 12.0	09/16/05	Grab	**0.0644**	J	0.0904	U	0.644	=	1.85	=	2.5584
SB-05	7J1581	9.5 to 10.5	09/16/05	Grab	0.00096	U	0.00096	U	0.0018	=	0.0004	J	0.0022
SB-06	7J1681	10.0 to 12.0	09/19/05	Grab	0.00086	U	0.00086	U	0.00086	U	0.00086	U	ND
SB-07	7J1781	10.0 to 12.0	09/16/05	Grab	0.00088	U	0.00088	U	0.00088	U	0.00088	U	ND
SB-08	7J1881	10.0 to 12.0	09/15/05	Grab	0.00091	U	0.00091	U	0.00091	U	0.00091	U	ND
SB-09	7J1981	10.0 to 12.0	09/19/05	Grab	0.001	U	0.001	U	0.001	U	0.001	U	ND
SB-10	7J1081	10.0 to 12.0	09/19/05	Grab	0.001	U	0.001	U	0.001	U	0.001	U	ND
SB-11	7J1A81	10.0 to 12.0	09/19/05	Grab	**0.0487**	J	0.0927	UJ	0.729	J	2.38	J	3.1577
SB-12	7J1B81	8.0 to 10.0	09/19/05	Grab	**0.0323**	=	0.00089	U	0.0891	=	0.132	=	0.2534
SB-13	7J1C81	10.0 to 12.0	09/20/05	Grab	**0.0907**	J	0.0346	J	0.112	J	0.5	J	0.7373
SB-14	7J1K81	6.0 to 8.0	09/20/05	Grab	**0.0362**	J	0.0844	UJ	1.54	J	0.652	J	2.2282
July 2007 Direct-Push Soil Boring Sampling													
SB-15	7J1M81	8.0 to 10.0	07/11/07	Grab	0.00092	U	0.00092	U	0.0185	=	0.00649	=	0.02499
SB-15	7J1M82	10.0 to 12.0	07/11/07	Grab	0.00427	=	0.00097	U	0.0383	=	0.121	=	0.16357
SB-16	7J1N81	5.9 to 7.8	07/11/07	Grab	0.00096	U	0.00096	U	0.00096	U	0.00096	U	ND
SB-16	7J1N82	8.0 to 10.9	07/11/07	Grab	0.00098	=	0.00088	U	0.021	=	0.00159	=	0.02357
SB-17	7J1P81	8.0 to 9.6	07/11/07	Grab	0.00109	=	0.00106	U	0.00689	=	0.00582	=	0.0138
SB-17	7J1P82	9.6 to 11.4	07/11/07	Grab	**0.0111**	=	0.00533	=	0.0447	=	0.174	=	0.23513
SB-18	7J1R81	5.7 to 7.4	07/11/07	Grab	0.00073	J	0.00092	U	0.00834	=	0.0388	=	0.04787
SB-18	7J1R82	9.9 to 11.8	07/11/07	Grab	**0.0237**	=	0.00313	=	0.0199	=	0.0943	=	0.14103
SB-19	7J1S81	5.7 to 7.4	07/11/07	Grab	**0.182**	=	0.0477	J	1.37	=	5.25	=	6.8497
SB-19	7J1S82	9.9 to 11.8	07/11/07	Grab	**0.0515**	=	0.0043	=	0.037	=	0.195	=	0.2878
SB-20	7J1T81	5.5 to 7.0	07/11/07	Grab	0.00221	=	0.00093	U	0.0282	=	0.00792	=	0.03833
SB-20	7J1T82	8.0 to 10.0	07/11/07	Grab	**0.0821**	=	0.00579	=	0.15	=	0.586	=	0.82389
SB-21	7J1U81	5.9 to 7.6	07/12/07	Grab	**0.00892**	J	0.00039	J	0.114	=	0.0782	J	0.20151
SB-21	7J1U82	8.0 to 10.5	07/12/07	Grab	**0.0285**	=	0.00116	U	0.0424	=	0.00433	=	0.07523
SB-22	7J1V81	5.8 to 7.6	07/12/07	Grab	**0.011**	J	0.00094	U	0.134	=	0.0314	J	0.1764
SB-22	7J1V82	8.0 to 10.5	07/12/07	Grab	0.00534	=	0.00121	U	0.00821	=	0.00128	=	0.01483
SB-23	7J1X81	0.8 to 3.2	07/12/07	Grab	0.0004	J	0.001	U	0.00136	=	0.0008	J	0.00256
SB-23	7J1X82	9.8 to 11.6	07/12/07	Grab	0.001	J	0.001	U	0.001	U	0.001	U	0.001

Table 4a. Soil Analytical Results (BTEX Compounds) (continued)

Sample Station	Sample ID	Depth (ft BGS)	Date	Sample Type	Benzene (mg/kg)		Toluene (mg/kg)		Ethylbenzene (mg/kg)		Xylenes, Total (mg/kg)		Total BTEX (mg/kg)
January 2008 Direct-Push Soil Boring Sampling													
SB-26	7J12681	1.6 to 3.3	01/28/08	Grab	0.00086	U	0.00086	U	0.00025	J	0.00086	J	0.00111
SB-26	7J12682	8.0 to 9.0	01/28/08	Grab	0.00036	J	0.00039	J	0.02	=	0.0275	=	0.04825
SB-27	7J12781	5.9 to 7.8	01/28/08	Grab	0.00092	U	0.00092	U	0.00019	J	0.00091	J	0.0011
SB-27	7J12782	8.0 to 9.8	01/28/08	Grab	0.00091	U	0.00091	U	0.00091	U	0.00087	J	0.00178
SB-28	7J12881	1.8 to 3.6	01/29/08	Grab	0.00035	J	0.00094	U	0.00094	U	0.001	=	0.00135
SB-28	7J12882	8.0 to 9.9	01/29/08	Grab	0.00589	=	0.00335	=	0.0385	=	0.284	J	0.33174
SB-29	7J12981	5.7 to 7.5	01/29/08	Grab	0.0009	U	0.0009	U	0.0009	U	0.00029	J	0.00029
SB-29	7J12982	8.0 to 9.2	01/29/08	Grab	0.00099	U	0.00099	U	0.00099	U	0.00039	J	0.00039
SB-30	7J13081	1.7 to 3.5	01/29/08	Grab	0.00122	U	0.0553	=	0.00096	J	0.00093	J	0.05719
SB-30	7J13082	8.0 to 9.4	01/29/08	Grab	0.00097	U	0.00029	J	0.00097	U	0.00046	J	0.00075
SB-31	7J13181	2.1 to 3.4	01/29/08	Grab	0.00109	U	0.00109	U	0.00041	J	0.00035	J	0.00076
SB-31	7J13182	5.6 to 7.2	01/29/08	Grab	0.00135	=	0.00099	U	0.0003	J	0.00204	=	0.00369
SB-32	7J13281	2.1 to 3.6	01/29/08	Grab	0.00094	U	0.00094	U	0.00026	J	0.00086	J	0.00112
SB-32	7J13282	5.8 to 7.7	01/29/08	Grab	0.00097	U	0.00097	U	0.00044	J	0.00123	=	0.00167
SB-33	7J13381	2.2 to 3.8	01/29/08	Grab	0.00102	=	0.00033	J	0.00149	=	0.00185	=	0.00469
SB-33	7J13382	8.0 to 9.8	01/29/08	Grab	**0.0282**	**J**	0.00097	U	0.141	J	0.162	J	0.3312
SB-34	7J13481	5.6 to 7.2	01/30/08	Grab	0.00115	=	0.00092	U	0.00911	=	0.00205	=	0.01231
SB-34	7J13482	8.0 to 9.6	01/30/08	Grab	0.00109	=	0.00104	U	0.00266	=	0.0008	J	0.00455
SB-35	7J13581	0.6 to 2.7	01/30/08	Grab	0.00094	U	0.00031	J	0.00041	J	0.00034	J	0.00106
SB-35	7J13582	9.5 to 11.0	01/30/08	Grab	0.00088	U	0.00088	U	0.00088	U	0.00088	U	ND
Soil Threshold Level (Table A, Column B)					0.008		10		6		700		NRC
Alternate Threshold Level					1.1		--		--		--		---

Bolded values exceed the soil threshold level.
BTEX = Benzene, toluene, ethylbenzene, and xylenes.
BGS = Below ground surface.
ND = Not detected.
NRC = No regulatory criteria.
RCRA = Resource Conservation and Recovery Act.
Laboratory Qualifiers
= Indicates that the compound was detected at the concentration reported.
U Indicates that the compound was not detected at the concentration reported.
J Indicates that the value of the compound is an estimated value.

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Table 4b. Soil Anal

Well	Sample ID	Depth (ft BGS)	Sample Date	Sample Type	Acenaphthene (mg/kg)		Anthracene (mg/kg)		Benz(*a*)anthracene (mg/kg)		Benzo(*a*)pyrene (mg/kg)		Benzo(*b*)fluoranthene (mg/kg)		
Phase I RCRA Facili															
GP-01	7J1111	8.0 to 10.0	01/19/98	Grab	0.397	U	0.397	U	0.397	U	0.397	U	0.397	U	0
GP-02	7J1211	5.0 to 6.0	02/03/98	Grab	0.392	U	0.392	U	0.392	U	0.392	U	0.392	U	0
GP-03	7J1312	10.0 to 12.0	05/06/98	Grab	15.5	U	15.5	U	15.5	U	15.5	U	15.5	U	
GP-04	7J1411	8.0 to 10.0	02/03/98	Grab	0.393	U	0.393	U	0.393	U	0.393	U	0.393	U	0
Phase II RCRA Facility															
MW1	7J1171	0.0 to 1.0	10/09/99	Grab	0.392	U	0.392	U	0.392	U	0.392	U	0.392	U	0
MW1	7J1172	3.0 to 4.0	10/09/99	Grab	0.366	U	0.366	U	0.366	U	0.366	U	0.0302	J	0
MW2	7J1271	1.0 to 2.0	10/10/99	Grab	0.388	U	0.388	U	0.388	U	0.388	U	0.388	U	0
MW2	7J1272	2.5 to 5.0	10/10/99	Grab	0.351	U	0.351	U	0.351	U	0.351	U	0.351	U	0
MW3	7J1371	0.7 to 1.7	10/10/99	Grab	0.379	U	0.379	U	0.379	U	0.379	U	0.379	U	0
MW3	7J1372	7.5 to 10.0	10/10/99	Grab	0.392	U	0.392	U	0.392	U	0.392	U	0.392	U	0
MW4	7J1471	0.0 to 1.0	10/11/99	Grab	0.37	U	0.37	U	0.37	U	0.37	U	0.37	U	
MW4	7J1472	5.0 to 6.9	10/11/99	Grab	0.388	U	0.388	U	0.388	U	0.388	U	0.388	U	0
MW5	7J1571	0.6 to 1.6	10/10/99	Grab	0.392	U	0.392	U	0.392	U	0.392	U	0.392	U	0
MW5	7J1572	1.6 to 4.5	10/10/99	Grab	0.366	U	0.366	U	0.366	U	0.366	U	0.366	U	0
MW6	7J1671	0.6 to 1.0	10/11/99	Grab	0.383	U	0.383	U	0.383	U	0.383	U	0.383	U	0
MW6	7J1672	7.5 to 9.1	10/11/99	Grab	0.402	U	0.402	U	0.402	U	0.402	U	0.402	U	0
MW7	7J1771	0.85 to 1.85	10/10/99	Grab	0.392	U	0.392	U	0.392	U	0.392	U	0.392	U	0
MW7	7J1772	2.5 to 5.0	10/10/99	Grab	0.379	U	0.379	U	0.379	U	0.379	U	0.379	U	0
MW8	7J1871	0.7 to 1.7	10/09/99	Grab	0.383	U	0.383	U	0.383	U	0.383	U	0.383	U	0
MW8	7J1872	9.0 to 10.0	10/09/99	Grab	0.422	U	0.422	U	0.422	U	0.422	U	0.422	U	0
MW9	7J1971	0.6 to 1.6	10/12/99	Grab	0.388	U	0.388	U	0.388	U	0.388	U	0.388	U	0
MW9	7J1972	8.0 to 10.0	10/12/99	Grab	42.2	U	42.2	U	42.2	U	42.2	U	42.2	U	
MW10	7J1A71	0.0 to 1.0	10/10/99	Grab	0.0425	J	0.492	J	3.94	J	2.43	J	2.88	J	0
MW10	7J1A72	8.0 to 9.0	10/10/99	Grab	1.12	J	0.393	J	3.92	U	3.92	U	3.92	U	
MW11	7J1B71	0.0 to 1.0	10/10/99	Grab	0.37	U	0.37	U	0.37	U	0.37	U	0.0345	J	0.0
MW11	7J1B72	8.0 to 10.0	10/10/99	Grab	4.02	U	4.02	U	4.02	U	4.02	U	4.02	U	
September 2002 Su															
SS-01	7J7111	0.0 to 1.0	09/23/02	Grab	0.0357	U	0.0357	U	0.0357	U	0.0357	U	0.0357	U	0.0
SS-02	7J7211	0.0 to 0.5	09/23/02	Grab	0.0367	U	0.0367	U	0.0367	U	0.0924	=	0.0367	U	0.0
September 2005 Direct-P															
SB-01	7J1181	10.0 to 12.0	09/19/05	Grab	0.0407	U	0.0669	=	0.0407	U	0.0407	U	0.0407	U	0.0
SB-02	7J1281	6.0 to 8.0	09/19/05	Grab	0.0378	U	0.493	=	0.0378	U	0.0378	U	0.0378	U	0.0
SB-03	7J1381	6.0 to 8.0	09/16/05	Grab	0.0378	U	0.0349	J	0.0378	U	0.0378	U	0.0378	U	0.0
SB-04	7J1481	10.0 to 12.0	09/16/05	Grab	0.101	=	0.117	=	0.0368	U	0.0368	U	0.0368	U	0.0
SB-05	7J1581	9.5 to 10.5	09/16/05	Grab	0.0396	U	0.0763	=	0.0396	U	0.0396	U	0.0396	U	0.0
SB-06	7J1681	10.0 to 12.0	09/19/05	Grab	0.0379	U	0.0379	U	0.0379	U	0.0379	U	0.0379	U	0.0
SB-07	7J1781	10.0 to 12.0	09/16/05	Grab	0.0377	U	0.0377	U	0.0377	U	0.0377	U	0.0377	U	0.0
SB-08	7J1881	10.0 to 12.0	09/15/05	Grab	0.0375	U	0.0375	U	0.0375	U	0.0375	U	0.0375	U	0.0

Results (PAHs) (continued)

Benzo(*ghi*)perylene (mg/kg)		Benzo(*k*)fluoranthene (mg/kg)		Chrysene (mg/kg)		Fluoranthene (mg/kg)		Fluorene (mg/kg)		Indeno(1,2,3-*cd*)pyrene (mg/kg)		Naphthalene (mg/kg)		Phenanthrene (mg/kg)		Pyrene (mg/kg)		Total PAHs (mg/kg)
395	U	0.0395	U	0.0395	U	0.0395	U	0.0395	U	0.0395	U	0.0395	U	0.0395	U	0.0395	U	ND
419	U	0.0419	U	0.0419	U	0.0419	U	0.0419	U	0.0419	U	0.0419	U	0.0419	U	0.0419	U	ND
377	U	0.0377	U	0.0377	U	0.0377	U	0.0844	=	0.0377	U	0.0377	U	0.237	=	0.0405	=	0.4486
038	U	0.038	U	0.038	U	0.038	U	0.816	=	0.038	U	0.722	=	1.86	=	0.533	=	4.359
382	U	0.0382	U	0.0382	U	0.0382	U	0.0766	=	0.0382	U	0.0359	J	0.221	=	0.0382	U	0.3335
377	U	0.0377	U	0.0377	U	0.384	=	0.592	=	0.0377	U	0.654	=	1.66	=	0.613	=	3.903
Soil Boring Sampling																		
038	U	0.038	U	0.038	U	0.038	U	0.122	=	0.038	U	0.0765	=	0.298	=	0.0466	=	0.5431
399	U	0.0399	U	0.0399	U	0.0399	U	0.678	=	0.0399	U	0.768	=	1.72	=	0.338	=	3.504
377	U	0.0377	U	0.0377	U	0.0377	U	0.0377	U	0.0377	U	0.0377	U	0.0377	U	0.0377	U	ND
376	U	0.0376	U	0.0376	U	0.0376	U	0.0376	U	0.0376	U	0.244	=	0.829	=	0.173	=	1.246
397	U	0.0397	U	0.0397	U	0.133	=	0.0397	U	0.0397	U	0.427	=	0.851	=	0.216	=	1.627
394	U	0.0394	U	0.0394	U	0.0394	U	0.0394	U	0.0394	U	0.0394	U	0.0394	U	0.0394	U	ND
392	U	0.0392	U	0.0392	U	0.086	=	0.0392	U	0.0392	U	0.154	=	0.538	=	0.163	=	0.941
385	U	0.0385	U	0.0385	U	0.113	=	0.0385	U	0.0385	U	0.343	=	0.737	=	0.214	=	1.407
353	U	0.0353	U	0.0353	U	0.0353	U	0.39	=	0.0353	U	0.215	=	0.871	=	0.187	=	1.663
398	U	0.0398	U	0.0398	U	0.0398	U	0.0398	U	0.0398	U	0.0398	U	0.0139	J	0.0398	U	0.0139
388	U	0.0388	U	0.0925	=	0.354	=	0.979	=	0.0388	U	1.2	=	2.6	=	0.656	=	5.9663
392	U	0.0392	U	0.0392	U	0.118	=	0.319	=	0.0392	U	0.281	=	0.839	=	0.219	=	1.776
768	U	0.0768	U	0.0768	U	0.0768	U	0.682	=	0.0768	U	0.652	=	1.62	=	0.424	=	3.737
442	U	0.0442	U	0.0442	U	0.0442	U	0.157	=	0.0442	U	0.0759	=	0.425	=	0.113	=	0.8491
155	U	0.155	U	0.155	U	0.155	U	1.12	=	0.155	U	1.13	=	2.75	=	0.43	=	6.033
426	U	0.0426	U	0.0426	U	0.0426	U	0.0426	U	0.0426	U	0.0426	U	0.0357	J	0.0426	U	0.0357
346	U	0.0346	U	0.0346	U	0.0346	U	0.0346	U	0.0346	U	0.0346	U	0.0346	U	0.0346	U	ND
365	U	0.0365	U	0.0365	U	0.0365	U	0.0365	U	0.0365	U	0.0365	U	0.0365	U	0.0365	U	ND
h Soil Boring Sampling																		
366	U	0.0366	U	0.0366	U	0.0366	UJ	0.0366	U	0.0366	U	0.0366	U	0.0366	UJ	0.0366	U	ND
394	U	0.0394	U	0.0403	=	0.173	=	0.357	=	0.0394	U	0.454	=	0.88	=	0.242	=	2.4372
385	U	0.0385	U	0.0385	U	0.0385	U	0.0385	U	0.0385	U	0.0385	U	0.0385	U	0.0385	U	ND
388	U	0.0388	U	0.0388	U	0.0388	U	0.0388	U	0.0388	U	0.0388	U	0.0388	U	0.0388	U	ND
384	U	0.0384	U	0.0384	U	0.0384	U	0.0384	U	0.0384	U	0.0384	U	0.0384	U	0.0384	U	ND
371	U	0.0371	U	0.0371	U	0.0371	U	0.987	=	0.0371	U	2.37	=	2.76	=	1.01	=	7.735
369	U	0.0369	U	0.0369	U	0.0369	U	0.0369	U	0.0369	U	0.0369	U	0.0369	U	0.0369	U	ND
387	U	0.0387	U	0.0387	U	0.0387	U	0.0387	U	0.0387	U	0.0387	U	0.0387	U	0.0387	U	ND
348	U	0.0348	U	0.0348	U	0.0348	U	0.0348	U	0.0348	U	0.0348	U	0.0348	U	0.0348	U	ND
386	U	0.0386	U	0.0386	U	0.0386	U	0.0386	U	0.0386	U	0.0386	U	0.0386	U	0.0386	U	ND
345	U	0.0345	U	0.0345	U	0.0345	U	0.0345	U	0.0345	U	0.0345	U	0.0345	U	0.0345	U	ND
403	U	0.0403	U	0.0403	U	0.0403	U	0.0403	U	0.0403	U	0.0403	U	0.0403	U	0.0403	U	ND
382	J	0.0354	U	0.0184	J	0.0354	U	0.0354	U	0.0166	J	0.0354	U	0.0354	U	0.0232	J	0.1524
382	U	0.0382	U	0.0382	U	0.0303	J	0.0382	U	0.0382	U	0.0382	U	0.216	=	0.0579	=	0.3042
389	J	0.0357	U	0.0182	J	0.0357	U	0.0357	U	0.0146	J	0.0357	U	0.011	J	0.0299	J	0.1673

Table 4b. Soil Analytical

Well	Sample ID	Depth (ft BGS)	Sample Date	Sample Type	Acenaphthene (mg/kg)		Anthracene (mg/kg)		Benz(*a*)anthracene (mg/kg)		Benzo(*a*)pyrene (mg/kg)		Benzo(*b*)fluoranthene (mg/kg)		
SB-33	7J13382	8.0 to 9.8	01/29/08	Grab	0.0388	U	0.0388	U	0.0607	=	0.0388	U	0.0388	U	0.
SB-34	7J13481	5.6 to 7.2	01/30/08	Grab	0.158	=	0.0387	U	0.0387	U	0.0387	U	0.0387	U	0.
SB-34	7J13482	8.0 to 9.6	01/30/08	Grab	0.0189	J	0.0424	U	0.0424	U	0.0424	U	0.0424	U	0.
SB-35	7J13581	0.6 to 2.7	01/30/08	Grab	0.0369	U	0.0369	U	0.0369	U	0.0369	U	0.0369	U	0.
SB-35	7J13582	9.5 to 11.0	01/30/08	Grab	0.0382	U	0.0382	U	0.0382	U	0.0382	U	0.0382	U	0.
															May 2008 Surf
SS-03	7J7311	0.0 to 1.0	05/01/08	Grab	0.0356	U	0.0356	U	0.0356	U	0.052	=	0.0131	J	0.
SS-04	7J7411	0.0 to 1.0	05/01/08	Grab	0.0348	U	0.0348	U	0.0348	U	0.0348	U	0.0348	U	0.
Soil Threshold Level (Table A, Column 2)					NRC		NRC		NRC		NRC		NRC		
Alternate Threshold Level					--		--		--		--		--		

ND = Not detected.
NRC = No regulatory criteria.
PAH = Polycyclic aromatic hydrocarbon.
RCRA = Resource Conservation and Recovery Act.
Laboratory Qualifiers
= Indicates that the compound was detected at the concentration reported.
U Indicates that the compound was not detected at the concentration reported.
J Indicates that the value of the compound is an estimated value.

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Table 5a. Groundwater Analytical Results (BTEX Compounds)

Well	Screened Interval (ft BGS)	Sample ID	Date	Sample Type	Benzene (µg/L)		Toluene (µg/L)		Ethylbenzene (µg/L)		Xylenes, Total (µg/L)		Total BTEX (µg/L)
Phase II RCRA Facility Investigation (1999-2000)													
GP-05	0.0 to 19.8	7J4551	09/22/99	Grab	2	U	2	U	2	U	6	U	ND
GP-06	0.0 to 15.5	7J4651	09/22/99	Grab	12.8	J	7.6	UJ	29.6	=	65.8	=	108.20
GP-07	0.0 to 15.0	7J4751	09/22/99	Grab	38.4	=	16	=	5.7	=	13.4	=	73.50
GP-08	0.0 to 17.8	7J4851	09/25/99	Grab	2	UJ	3.3	UJ	2.6	=	13.8	=	16.40
GP-09	0.0 to 15.0	7J4B51	09/28/99	Grab	141	=	89	=	27.5	=	137	=	394.50
GP-10	0.0 to 15.0	7J4C51	09/29/99	Grab	2	U	2	U	2.3	=	14.7	=	17.00
GP-11	0.0 to 15.0	7J4D51	09/29/99	Grab	9.2	=	2	U	2	UJ	7.1	=	16.30
GP-12	0.0 to 15.0	7J4E51	09/29/99	Grab	3.8	=	2	UJ	12	=	25.6	=	41.40
GP-13	0.0 to 15.0	7J4F51	09/29/99	Grab	2	U	2	U	2	U	6	U	ND
GP-14	0.0 to 15.0	7J4G51	09/29/99	Grab	2	UJ	2	U	4.5	=	11.5	=	16.00
GP-15	0.0 to 15.0	7J4H51	09/29/99	Grab	8.2	=	2	U	7	=	16.1	=	31.30
GP-16	0.0 to 15.0	7J4J51	09/29/99	Grab	2	U	2	U	2	U	6	U	ND
GP-17	0.0 to 14.0	7J4K51	09/29/99	Grab	2	U	2	UJ	2	U	6	UJ	ND
GP-18	0.0 to 15.0	7J4M51	09/29/99	Grab	2	U	2	U	2	U	6	U	ND
GP-19	0.0 to 15.0	7J4N51	09/29/99	Grab	2	U	2	U	2	U	6	U	ND
VP-01	0.0 to 10.0	7J4951	09/28/99	Grab	2	U	2	U	2	U	6	U	ND
VP-01	10.0 to 20.0	7J4952	09/28/99	Grab	2	U	2	U	2	U	6	U	ND
VP-01	20.0 to 30.0	7J4953	09/28/99	Grab	2	U	2	U	2	U	6	U	ND
VP-02	0.0 to 10.4	7J4A51	09/28/99	Grab	2	U	2	U	2	U	6	U	ND
VP-02	10.4 to 20.4	7J4A52	09/28/99	Grab	2	U	2	U	2	U	6	U	ND
VP-02	20.4 to 30.4	7J4A53	09/28/99	Grab	2	U	2	UJ	2	U	6	U	ND
MW1	9.3 to 19.3	7J4171	11/02/99	Grab	2	U	2	U	2	U	6	U	ND
MW2	28.8 to 38.8	7J4271	11/03/99	Grab	2	U	2	U	2	U	6	U	ND
MW3	10.4 to 20.4	7J4372	11/01/99	Grab	2	U	2	U	2	U	6	U	ND
MW4	5.9 to 15.9	7J4471	11/01/99	Grab	2	U	2	U	2	U	6	U	ND
MW5	8.8 to 18.8	7J4571	11/02/99	Grab	2	U	2	U	2	U	6	U	ND
MW6	8.7 to 18.7	7J4671	11/01/99	Grab	2	U	2	U	2	U	6	U	ND
MW7	10.0 to 20.0	7J4771	11/01/99	Grab	2	U	2	U	2	U	6	U	ND
MW8	30.9 to 40.9	7J4871	11/03/99	Grab	2	U	2	U	2	U	6	U	ND
MW9	10.3 to 20.3	7J4971	11/02/99	Grab	4.6	=	2	U	2	U	3	J	7.60
MW10	11.0 to 21.0	7J4A71	11/01/99	Grab	8.5	=	6.4	U	4.8	=	19.2	=	32.50

Table 5a. Groundwater Analytical Results (BTEX Compounds)

Well	Screened Interval (ft BGS)	Sample ID	Date	Sample Type	Benzene (µg/L)		Toluene (µg/L)		Ethylbenzene (µg/L)		Xylenes, Total (µg/L)		Total BTEX (µg/L)
MW11	29.4 to 39.4	7J4B71	11/03/99	Grab	2	U	2	U	2	U	6	U	ND
MW13	4.1 to 14.1	7J4D71	11/29/00	Grab	1	U	1	U	1	U	3	U	ND
MW14	2.9 to 12.9	7J4E71	11/30/00	Grab	**79.1**	=	0.85	J	8.9	=	46.3	=	135.15
MW15	3.8 to 13.8	7J4F71	11/29/00	Grab	1	U	1	U	1	U	3	U	ND
MW16	5.0 to 15.0	7J4G71	12/05/00	Grab	2.1	=	1	U	1	U	0.31	J	2.41
MW17	4.9 to 14.9	7J4H71	12/05/00	Grab	2	=	1	U	1	U	0.3	J	2.30
MW18	4.9 to 14.9	7J4J71	12/05/00	Grab	1	U	0.48	J	1	U	3	U	0.48
Supplemental Phase II RCRA Facility Investigation Sampling Event (2001)													
MW1	9.3 to 19.3	7J4172	01/05/01	Grab	1	U	1	U	1	U	3	U	ND
MW2	28.8 to 38.8	7J4272	01/06/01	Grab	1	U	1	U	1	U	3	U	ND
MW3	10.4 to 20.4	7J4372	01/05/01	Grab	1	U	1	U	1	U	3	U	ND
MW4	5.9 to 15.9	7J4472	01/06/01	Grab	1.5	=	0.41	J	1.3	=	6.3	=	9.51
MW5	8.8 to 18.8	7J4572	01/05/01	Grab	1	U	1	U	1	U	3	U	ND
MW6	8.7 to 18.7	7J4672	01/07/01	Grab	0.17	J	1	U	0.1	J	3	U	0.27
MW7	10.0 to 20.0	7J4772	01/06/01	Grab	31.4	=	10	=	4.3	=	20.7	=	66.40
MW8	30.9 to 40.9	7J4872	01/08/01	Grab	1	U	1	U	1	U	3	U	ND
MW9	10.3 to 20.3	7J4972	01/05/01	Grab	5.8	=	1	U	0.44	J	3.6	=	9.84
MW10	11.0 to 21.0	7J4A72	01/07/01	Grab	2.4	=	1.5	=	0.94	J	3.2	=	8.04
MW11	29.4 to 39.4	7J4B72	01/08/01	Grab	1	U	0.33	J	1	U	3	U	0.33
MW13	4.1 to 14.1	7J4D72	01/07/01	Grab	1	U	1	U	1	U	3	U	ND
MW14	2.9 to 12.9	7J4E72	01/06/01	Grab	**61**	=	0.76	J	7	=	38.5	=	107.26
MW15	3.8 to 13.8	7J4F72	01/06/01	Grab	1	U	1	U	1	U	3	U	ND
MW16	5.0 to 15.0	7J4G72	01/06/01	Grab	0.28	J	1	U	1	U	3	U	3.28
MW17	4.9 to 14.9	7J4H72	01/06/01	Grab	1	U	1	U	1	U	3	U	ND
MW18	4.9 to 14.9	7J4J72	01/08/01	Grab	1	U	1	U	0.9	J	1.6	J	2.50
CY 2002 RCRA CAP Bi-annual Sampling Event (2002)													
MW1	9.3 to 19.3	7J4173	09/19/02	Grab	1	U	1	U	1	U	1	U	ND
MW3	10.4 to 20.4	7J4373	09/20/02	Grab	1	U	1	U	1	U	1	U	ND
MW4	5.9 to 15.9	7J4473	09/20/02	Grab	0.53	=	1	U	2.7	=	9.6	=	13.83
MW5	8.8 to 18.8	7J4573	09/19/02	Grab	1	U	1	U	1	U	1	U	ND
MW6	8.7 to 18.7	7J4673	09/20/02	Grab	1	U	1	U	1	U	1	U	ND
MW7	10.0 to 20.0	7J4773	09/19/02	Grab	4.3	=	0.98	J	0.68	J	1.8	=	7.76
MW9	10.3 to 20.3	7J4973	09/19/02	Grab	4.4	=	1	U	0.25	J	1.7	=	6.35

Table 5a. Groundwater Analytical Results (BTEX Compounds)

Well	Screened Interval (ft BGS)	Sample ID	Date	Sample Type	Benzene (µg/L)		Toluene (µg/L)		Ethylbenzene (µg/L)		Xylenes, Total (µg/L)		Total BTEX (µg/L)
MW10	11.0 to 21.0	7J4A73	09/23/02	Grab	2.9	=	2	U	1	=	3.8	=	7.70
MW14	2.9 to 12.9	7J4E73	09/19/02	Grab	**57.3**	=	1	U	2.9	=	27.8	=	89.00
MW15	3.8 to 13.8	7J4F73	09/19/02	Grab	1	U	1	U	1	U	1	U	ND
MW16	5.0 to 15.0	7J4G73	09/20/02	Grab	1	U	1	U	1	U	1	U	ND
MW17	4.9 to 14.9	7J4H73	09/19/02	Grab	1	U	1	U	1	U	1	U	ND
MW18	4.9 to 14.9	7J4J73	09/19/02	Grab	0.38	J	1	U	0.37	J	1	J	1.75
CY 2002 RCRA CAP Bi-annual Sampling Event (2004)													
MW1	9.3 to 19.3	7J4174	08/19/04	Grab	1	U	0.64	J	1	U	1	U	0.64
MW3	10.4 to 20.4	7J4374	08/19/04	Grab	1	U	0.45	J	1	U	1	U	0.45
MW4	5.9 to 15.9	7J4474	8/20/2004	Grab	1	U	1	U	1	U	6.6	=	6.60
MW5	8.8 to 18.8	7J4574	08/19/04	Grab	1	U	0.55	J	0.23	J	3.6	=	4.38
MW6	8.7 to 18.7	7J4674	08/19/04	Grab	1	U	1	U	1	U	1	U	ND
MW7	10.0 to 20.0	7J4774	08/20/04	Grab	12.2	=	2.2	U	1.4	=	4.5	=	18.10
MW9	10.3 to 20.3	7J4974	08/19/04	Grab	16.4	=	1	=	0.86	J	1.8	=	20.06
MW10	11.0 to 21.0	7J4A74	08/20/04	Grab	3.4	=	2.7	U	1.4	=	5.8	=	10.60
MW14	2.9 to 12.9	7J4E74	08/20/04	Grab	42.9	=	1	U	0.76	J	10.8	=	54.46
MW15	3.8 to 13.8	7J4F74	08/20/04	Grab	1	U	1	U	1	U	7.8	=	7.80
MW16	5.0 to 15.0	7J4G74	08/19/04	Grab	1	U	0.52	J	1	U	1	U	0.52
MW17	4.9 to 14.9	7J4H74	08/20/04	Grab	1	U	1	U	1	U	1	U	ND
MW18	4.9 to 14.9	7J4J74	08/19/04	Grab	1	U	1	U	0.66	J	1	=	1.66
CY 2007 RCRA CAP Sampling Event (2007)													
MW1	9.3 to 19.3	7J4178	04/22/07	Grab	1	U	1	U	1	U	1	U	ND
MW3	10.4 to 20.4	7J4378	04/19/07	Grab	1	U	1	U	1	U	1	U	ND
MW4	5.9 to 15.9	7J4478	4/18/2007	Grab	1	U	1	U	0.645	J	1	U	0.65
MW5	8.8 to 18.8	7J4578	04/19/07	Grab	1	U	1	U	1	U	1	U	ND
MW6	8.7 to 18.7	7J4678	04/20/07	Grab	1	U	1	U	1	U	1	U	ND
MW7	10.0 to 20.0	7J4778	04/18/07	Grab	2.6	=	1	U	0.273	J	1	U	2.87
MW9	10.3 to 20.3	7J4978	04/18/07	Grab	6.35	=	1	U	0.366	J	0.323	J	7.04
MW10	11.0 to 21.0	7J4A78	04/18/07	Grab	2.08	=	0.916	J	1.17	=	0.919	J	5.09
MW13	4.1 to 14.1	7J4D78	07/18/07	Grab	1	U	1	U	1	U	1	U	ND
MW14	2.9 to 12.9	7J4E78	04/20/07	Grab	48.4	=	1	U	0.42	J	2.86	J	51.68
MW15	3.8 to 13.8	7J4F78	04/22/07	Grab	1	U	1	U	1	U	1.12	=	1.12
MW16	5.0 to 15.0	7J4G78	04/22/07	Grab	1	U	1	U	1	U	1	U	ND

Table 5a. Groundwater Analytical Results (BTEX Compounds)

Well	Screened Interval (ft BGS)	Sample ID	Date	Sample Type	Benzene (µg/L)		Toluene (µg/L)		Ethylbenzene (µg/L)		Xylenes, Total (µg/L)		Total BTEX (µg/L)
MW17	4.9 to 14.9	7J4H78	04/20/07	Grab	1	U	1	U	1	U	1	U	ND
MW18	4.9 to 14.9	7J4J78	04/22/07	Grab	1	U	1	U	0.35	J	1	U	0.35
July 2007 Direct-Push Soil Boring Groundwater Sampling													
SB-15	12.0 to 16.0	7J4M11	07/11/07	Grab	1	U	1	U	2.33	=	8.61	=	10.94
SB-16	12.0 to 16.0	7J4N11	07/11/07	Grab	1	U	1	U	3.01	=	8.26	=	11.27
SB-17	12.0 to 16.0	7J4P11	07/11/07	Grab	1	U	1	U	2.5	=	8.14	=	10.64
SB-18	12.0 to 16.0	7J4R11	07/11/07	Grab	1	U	1	U	2.2	=	8.12	=	10.32
SB-19	12.0 to 16.0	7J4S11	07/11/07	Grab	**151**	=	3.48	=	14.3	=	30.6	=	199.38
SB-20	12.0 to 16.0	7J4T11	07/11/07	Grab	17.9	=	0.267	J	2.73	=	11.4	=	32.30
SB-21	12.0 to 16.0	7J4U11	07/12/07	Grab	6.05	=	1	U	1	U	1	U	6.05
SB-22	12.0 to 16.0	7J4V11	07/12/07	Grab	1	U	1	U	1	U	1	U	ND
SB-23	12.0 to 16.0	7J4X11	07/12/07	Grab	0.506	J	1	U	1	U	1	U	0.51
January 2008 Direct-Push Soil Boring Groundwater Sampling													
SB-26	9.0 to 13.0	7J42611	01/28/08	Grab	0.628	J	1	U	1.91	=	2.51	=	5.05
SB-27	10.0 to 14.0	7J42711	01/28/08	Grab	0.465	J	1	U	0.794	J	2.71	=	3.97
SB-28	10.0 to 14.0	7J42811	01/29/08	Grab	**347**	=	2.22	U	31.5	=	6.66	=	385.16
SB-29	9.0 to 13.0	7J42911	01/29/08	Grab	**83.2**	=	1	U	13.1	=	9.2	=	105.50
SB-30	9.0 to 13.0	7J43011	01/29/08	Grab	12.4	=	1	U	1.3	=	1.37	U	15.07
SB-31	9.0 to 13.0	7J43111	01/29/08	Grab	**441**	=	98.1	=	54.3	=	166	=	759.40
SB-32	10.0 to 14.0	7J43211	01/29/08	Grab	5.67	=	1	U	1	U	1.39	U	5.67
SB-33	10.0 to 14.0	7J43311	01/29/08	Grab	35	=	1	U	0.515	J	2.11	U	35.52
SB-34	11.0 to 15.0	7J43411	01/30/08	Grab	1	U	1	U	1	U	0.299	J	0.30
SB-35	11.0 to 15.0	7J43511	01/30/08	Grab	1	U	1	U	1	U	0.253	J	0.25
CY 2008 RCRA CAP Sampling Event (2008)													
MW1	9.3 to 19.3	7J4175	04/29/08	Grab	1	U	1	U	1	U	1	U	ND
MW3	10.4 to 20.4	7J4375	04/30/08	Grab	1	U	1	U	1	U	1	U	ND
MW4	5.9 to 15.9	7J4475	5/1/2008	Grab	1	U	1	U	0.988	J	0.488	J	1.48
MW5	8.8 to 18.8	7J4575	04/29/08	Grab	1	U	1	U	1	U	1	U	ND
MW6	8.7 to 18.7	7J4675	04/29/08	Grab	1	U	1	U	1	U	1	U	ND
MW7	10.0 to 20.0	7J4775	04/30/08	Grab	7.24	=	1.68	=	0.936	J	1.44	=	11.30
MW9	10.3 to 20.3	7J4975	04/29/08	Grab	7.35	=	1	U	0.485	J	0.525	J	8.36
MW10	11.0 to 21.0	7J4A75	05/01/08	Grab	1.57	=	0.736	J	1.75	=	3.13	=	7.19
MW13	4.1 to 14.1	7J4D75	04/30/08	Grab	1	U	1	U	1	U	1	U	ND

Table 5a. Groundwater Analytical Results (BTEX Compounds)

Well	Screened Interval (ft BGS)	Sample ID	Date	Sample Type	Benzene (µg/L)		Toluene (µg/L)		Ethylbenzene (µg/L)		Xylenes, Total (µg/L)		Total BTEX (µg/L)
MW14	2.9 to 12.9	7J4E75	04/30/08	Grab	43.8	=	1	U	0.523	J	7.52	=	51.84
MW15	3.8 to 13.8	7J4F75	04/30/08	Grab	1	U	1	U	1	U	1	U	ND
MW16	5.0 to 15.0	7J4G75	04/30/08	Grab	1	U	1	U	1	U	1	U	ND
MW17	4.9 to 14.9	7J4H75	05/01/08	Grab	1	U	1	U	1	U	1	U	ND
MW18	4.9 to 14.9	7J4J75	05/01/08	Grab	1	U	1	U	0.269	J	1	U	0.27
March 2009 Sampling Event													
MW1	9.3 to 19.3	7J4176	03/10/09	Grab	1	U	1	U	1	U	1	U	ND
MW3	10.4 to 20.4	7J4376	03/11/09	Grab	1	U	1	U	1	U	1	U	ND
MW4	5.9 to 15.9	7J4476	3/11/2009	Grab	0.452	J	1	U	1.73	=	1.54	=	3.72
MW5	8.8 to 18.8	7J4576	03/11/09	Grab	1	U	1	U	1	U	1	U	ND
MW6	8.7 to 18.7	7J4676	03/10/09	Grab	1	U	1	U	1	U	1	U	ND
MW7	10.0 to 20.0	7J4776	03/10/09	Grab	14.4	=	2.28	=	1.67	=	3.16	=	21.51
MW9	10.3 to 20.3	7J4976	03/12/09	Grab	12.5	=	1	U	0.705	J	0.914	J	14.12
MW10	11.0 to 21.0	7J4A76	03/11/09	Grab	2.41	=	0.639	J	2.54	=	3.51	=	9.10
MW13	4.1 to 14.1	7J4D76	03/10/09	Grab	1	U	1	U	1	U	1	U	ND
MW14	2.9 to 12.9	7J4E76	03/10/09	Grab	44.8	=	1	U	0.719	J	6.29	=	51.81
MW15	3.8 to 13.8	7J4F76	03/12/09	Grab	1	U	1	U	1	U	1	U	ND
MW16	5.0 to 15.0	7J4G76	03/11/09	Grab	1	U	1	U	1	U	1	U	ND
MW17	4.9 to 14.9	7J4H76	03/11/09	Grab	1	U	1	U	1	U	1	U	ND
MW18	4.9 to 14.9	7J4J76	03/11/09	Grab	1	U	1	U	1	U	1	U	ND
In-Stream Water Quality Standard (February 2009)					51		5,980		2,100		NRC		NRC
Alternate Concentration Limit					510		--		--		--		--

Bold values exceed the In-Stream Water Quality Standard.
BGS = Below ground surface.
BTEX = Benzene, toluene, ethylbenzene, and xylenes.
CAP = Corrective Action Plan.
CY = Calendar year.
ND = Not detected.
NRC = No regulatory criteria.
RCRA = Resource Conservation and Recovery Act
Laboratory Qualifiers
= Indicates that the compound was detected at the concentration reported.
U Indicates that the compound was not detected at the concentration reported.
J Indicates that the value of the compound is an estimated value.

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Table 5b. Groundwater

Well	Screened Interval (ft BGS)	Sample ID	Date	Sample Type	2-Methylnaphthalene (µg/L)		Acer
					Phase II RCRA Facility		
MW1	9.3 to 19.3	7J4171	11/02/99	Grab	10	U	
MW2	28.8 to 38.8	7J4271	11/03/99	Grab	10.2	U	
MW3	10.4 to 20.4	7J4372	11/01/99	Grab	4.1	J	
MW4	5.9 to 15.9	7J4471	11/01/99	Grab	10.2	U	
MW5	8.8 to 18.8	7J4571	11/02/99	Grab	10	U	
MW6	8.7 to 18.7	7J4671	11/01/99	Grab	10.2	U	
MW7	10.0 to 20.0	7J4771	11/01/99	Grab	11.5	U	
MW8	30.9 to 40.9	7J4871	11/03/99	Grab	10	U	
MW9	10.3 to 20.3	7J4971	11/02/99	Grab	10.2	U	
MW10	11.0 to 21.0	7J4A71	11/01/99	Grab	10.8	J	
MW11	29.4 to 39.4	7J4B71	11/03/99	Grab	10	U	
					Supplemental Phase II RCRA Facili		
MW1	9.3 to 19.3	7J4172	01/05/01	Grab	1	U	
MW2	28.8 to 38.8	7J4272	01/06/01	Grab	1	U	
MW3	10.4 to 20.4	7J4372	01/05/01	Grab	1	U	
MW4	5.9 to 15.9	7J4472	01/06/01	Grab	15.6	=	
MW5	8.8 to 18.8	7J4572	01/05/01	Grab	1	U	
MW6	8.7 to 18.7	7J4672	01/07/01	Grab	1	U	
MW7	10.0 to 20.0	7J4772	01/06/01	Grab	7.4	=	
MW8	30.9 to 40.9	7J4872	01/08/01	Grab	1	U	
MW9	10.3 to 20.3	7J4972	01/05/01	Grab	2.3	=	
MW10	11.0 to 21.0	7J4A72	01/07/01	Grab	1.7	=	
MW11	29.4 to 39.4	7J4B72	01/08/01	Grab	1	U	
MW13	4.1 to 14.1	7J4D72	01/07/01	Grab	0.99	U	
MW14	2.9 to 12.9	7J4E72	01/06/01	Grab	31.9	=	
MW15	3.8 to 13.8	7J4F72	01/06/01	Grab	0.98	U	
MW16	5.0 to 15.0	7J4G72	01/06/01	Grab	0.99	U	
MW17	4.9 to 14.9	7J4H72	01/06/01	Grab	1	U	
MW18	4.9 to 14.9	7J4J72	01/08/01	Grab	5.4	=	
					CY 2002 RCRA CAP Bi-an		
MW1	9.3 to 19.3	7J4173	09/19/02	Grab	1	U	
MW3	10.4 to 20.4	7J4373	09/20/02	Grab	1	U	
MW4	5.9 to 15.9	7J4473	09/20/02	Grab	33.3	=	
MW5	8.8 to 18.8	7J4573	09/19/02	Grab	1	U	
MW6	8.7 to 18.7	7J4673	09/20/02	Grab	1	U	
MW7	10.0 to 20.0	7J4773	09/19/02	Grab	1.3	=	
MW9	10.3 to 20.3	7J4973	09/19/02	Grab	1.4	=	
MW10	11.0 to 21.0	7J4A73	09/23/02	Grab	4.1	=	
MW14	2.9 to 12.9	7J4E73	09/19/02	Grab	32	=	
MW15	3.8 to 13.8	7J4F73	09/19/02	Grab	1	U	
MW16	5.0 to 15.0	7J4G73	09/20/02	Grab	1	U	
MW17	4.9 to 14.9	7J4H73	09/19/02	Grab	1.1	U	
MW18	4.9 to 14.9	7J4J73	09/19/02	Grab	5.1	=	

ical Results (PAHs) (continued)

aphthene ug/L)		Anthracene (µg/L)		Fluorene (µg/L)		Naphthalene (µg/L)		Phenanthrene (µg/L)		Pyrene (µg/L)		Total PAHs (µg/L)
nual Sampling Event (2004)												
0.96	U	0.96	U	0.96	U	0.96	U	0.96	U	0.96	U	ND
1	U	1	U	1	U	0.4	J	1	U	1	U	0.40
1.4	=	1	U	2.6	=	15.5	=	3.9	=	0.71	J	57.51
1	U	1	U	1	U	1.4	=	1	U	1	U	1.40
1.1	U	1.1	U	1.1	U	1.6	=	1.1	U	1.1	U	1.60
1.2	U	1.2	U	1.2	U	3.7	=	1.2	U	1.2	U	6.50
0.56	J	0.96	U	1.1	=	19.8	=	1.3	=	0.96	U	34.36
1.1	U	1.1	U	0.58	J	4.6	=	0.84	J	1.1	U	12.42
1	J	1	U	2.6	=	43	=	3.3	=	1	U	75.40
1	U	1	U	1	U	4.1	=	1	U	1	U	5.30
1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	ND
1	U	1	U	1	U	1	U	1	U	1	U	ND
1	U	1	U	0.93	J	9.7	=	1.3	=	1	U	22.53
ampling Event (2007)												
1	U	1	U	1	U	1	U	1	U	1	U	ND
.952	U	0.952	U	0.952	U	0.502	J	0.952	U	0.952	U	0.50
.943	U	0.943	U	0.421	J	3.11	=	0.912	J	0.943	U	6.13
.952	U	0.952	U	0.952	U	6.03	=	0.952	U	0.952	U	6.85
.935	U	0.935	U	0.935	U	0.935	U	0.935	U	0.935	U	ND
.952	U	0.952	U	0.952	U	0.42	J	0.952	U	0.952	U	0.72
.901	U	0.901	U	0.359	J	6.53	=	0.37	J	0.901	U	10.56
.962	U	0.962	U	0.962	U	1.47	=	0.248	J	0.962	U	4.05
0.99	U	0.99	U	0.99	U	0.99	U	0.99	U	0.99	U	ND
.673	J	0.935	U	1.61	=	30.8	=	1.96	=	0.935	U	40.53
1	U	1	U	1	U	6.58	=	1	U	1	U	7.04
1	U	1	U	1	U	1	U	1	U	1	U	ND
.935	U	0.935	U	0.935	U	0.935	U	0.935	U	0.935	U	ND
.935	U	0.935	U	0.491	J	4.83	=	0.638	J	0.935	U	12.86
ring Groundwater Sampling												
.971	U	0.971	U	0.971	U	2.67	=	0.971	U	NA		5.94
1	U	1	U	0.284	J	1.93	=	0.492	J	NA		6.02
.908	J	0.952	U	1.05	=	0.782	J	0.952	U	NA		3.20
.971	U	0.971	U	0.971	U	0.971	U	0.971	U	NA		ND
.976	J	0.212	J	1.45	=	31.9	=	1.91	=	NA		68.25
1	U	1	U	0.315	J	8.6	=	0.506	J	NA		12.41
1.01	U	1.01	U	1.14	=	20.5	=	0.775	J	NA		23.40
.931	U	0.931	U	0.73	J	0.931	U	1.21	=	NA		2.69
1.01	U	1.01	U	0.644	J	1.01	U	0.526	J	NA		3.94
Boring Groundwater Sampling												
5.55	=	0.98	U	0.693	J	5.1	=	0.601	J	NA		14.71
0.99	=	0.98	U	1.8	=	12.4	=	1.99	=	NA		30.48
1.93	=	0.393	J	3.06	=	6.41	=	1.04	=	NA		15.55
2.56	=	0.971	U	3.23	=	38.4	=	2.6	=	NA		55.13
.881	J	0.98	U	1.56	=	17.8	=	1.77	=	NA		22.91
2.1	=	0.413	J	3.61	=	86.2	=	3.89	=	NA		157.11
.952	U	0.952	U	0.952	U	1.46	=	0.952	U	NA		2.64

Table 5b. Groundwater Anal

Well	Screened Interval (ft BGS)	Sample ID	Date	Sample Type	2-Methylnaphthalene (µg/L)		Ace
SB-33	10.0 to 14.0	7J43311	01/29/08	Grab	3.1	=	
SB-34	11.0 to 15.0	7J43411	01/30/08	Grab	1.39	=	
SB-35	11.0 to 15.0	7J43511	01/30/08	Grab	1	U	
CY 2008 RCRA CAI							
MW1	9.3 to 19.3	7J4175	04/29/08	Grab	0.98	U	
MW3	10.4 to 20.4	7J4375	04/30/08	Grab	0.971	U	
MW4	5.9 to 15.9	7J4475	5/1/2008	Grab	0.735	J	
MW5	8.8 to 18.8	7J4575	04/29/08	Grab	0.971	U	
MW6	8.7 to 18.7	7J4675	04/29/08	Grab	0.962	U	
MW7	10.0 to 20.0	7J4775	04/30/08	Grab	0.513	J	
MW9	10.3 to 20.3	7J4975	04/29/08	Grab	3.74	=	
MW10	11.0 to 21.0	7J4A75	05/01/08	Grab	2.51	=	
MW13	4.1 to 14.1	7J4D75	04/30/08	Grab	0.98	U	
MW14	2.9 to 12.9	7J4E75	04/30/08	Grab	7.8	=	
MW15	3.8 to 13.8	7J4F75	04/30/08	Grab	0.98	U	
MW16	5.0 to 15.0	7J4G75	04/30/08	Grab	0.971	U	
MW17	4.9 to 14.9	7J4H75	05/01/08	Grab	0.952	U	
MW18	4.9 to 14.9	7J4J75	05/01/08	Grab	7.18	=	
March 2009							
MW1	9.3 to 19.3	7J4176	03/10/09	Grab	1.05	U	
MW3	10.4 to 20.4	7J4376	03/11/09	Grab	1.05	U	
MW4	5.9 to 15.9	7J4476	3/11/2009	Grab	2.12	=	
MW5	8.8 to 18.8	7J4576	03/11/09	Grab	1.05	U	
MW6	8.7 to 18.7	7J4676	03/10/09	Grab	1.05	U	
MW7	10.0 to 20.0	7J4776	03/10/09	Grab	1.34	=	
MW9	10.3 to 20.3	7J4976	03/12/09	Grab	5.66	=	
MW10	11.0 to 21.0	7J4A76	03/11/09	Grab	1.05	U	
MW13	4.1 to 14.1	7J4D76	03/10/09	Grab	1.11	U	
MW14	2.9 to 12.9	7J4E76	03/10/09	Grab	2.11	=	
MW15	3.8 to 13.8	7J4F76	03/12/09	Grab	1.05	U	
MW16	5.0 to 15.0	7J4G76	03/11/09	Grab	0.971	U	
MW17	4.9 to 14.9	7J4H76	03/11/09	Grab	1.05	U	
MW18	4.9 to 14.9	7J4J76	03/11/09	Grab	9.86	=	
In-Stream Water Quality Standard (February 2009)					NRC		
Alternate Concentration Limit					--		

BGS = Below ground surface.
CAP = Corrective Action Plan.
CY = Calendar year.
NA = Not analyzed.
ND = Not detected.
NRC = No regulatory criteria.
PAH = Polycyclic aromatic hydrocarbon.
RCRA = Resource Conservation and Recovery Act.

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APPENDIX III:

CONCENTRATION VERSUS TIME PLOTS

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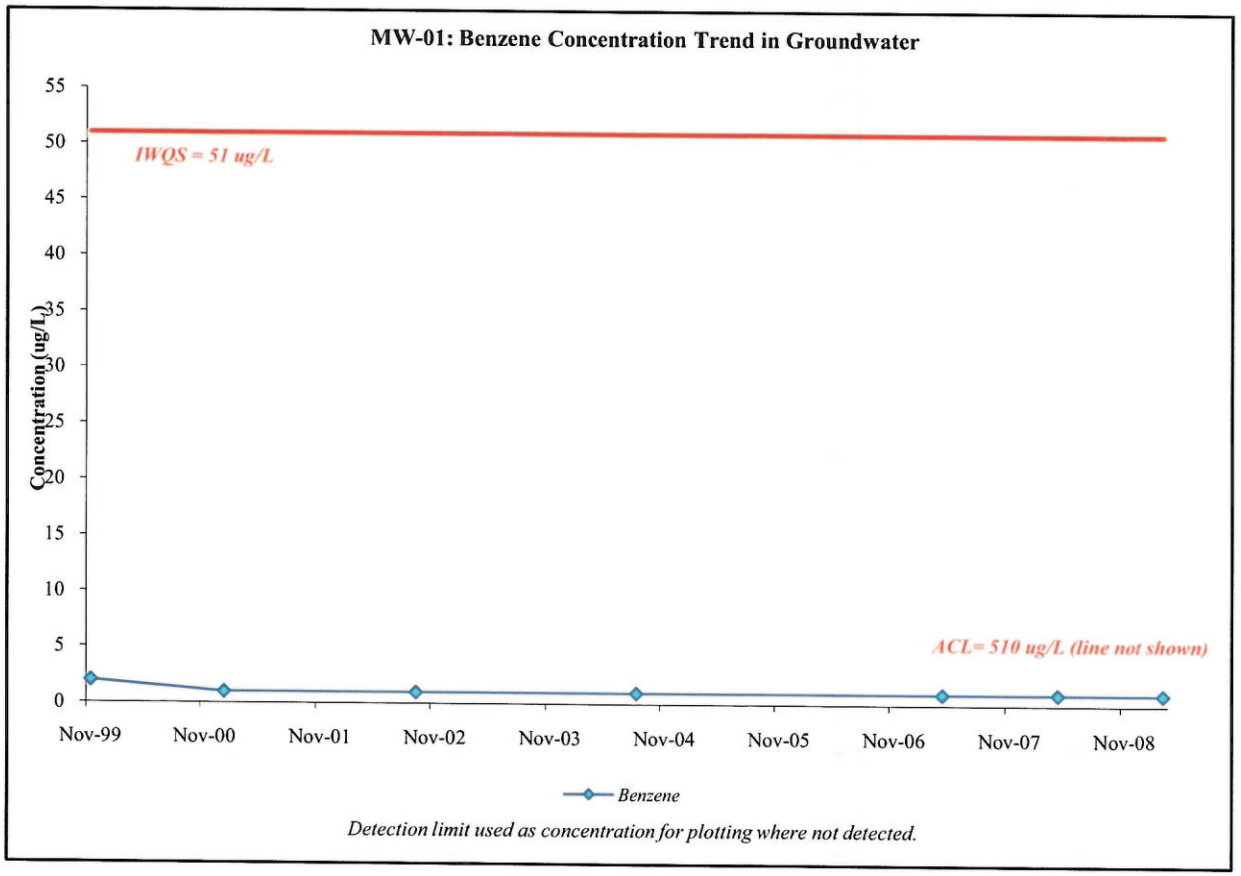
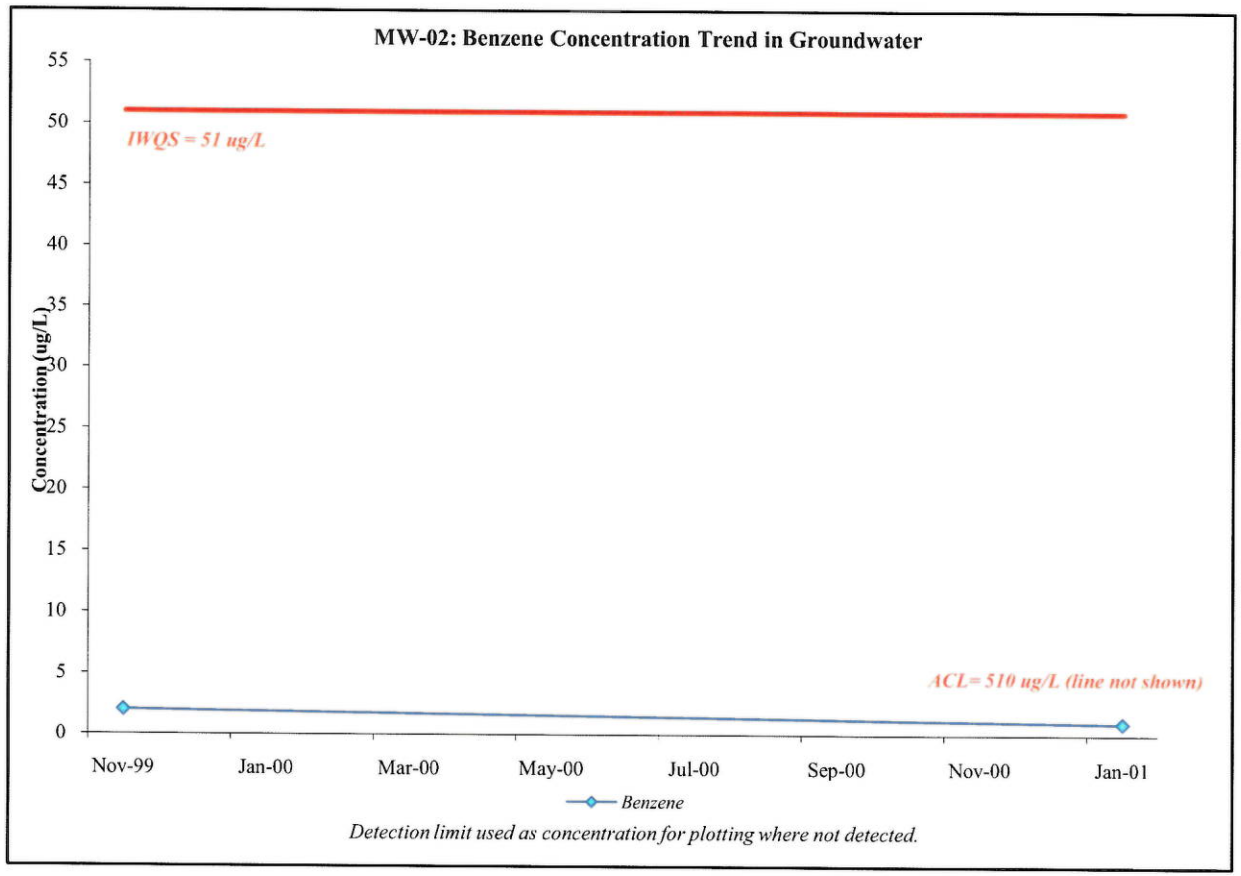
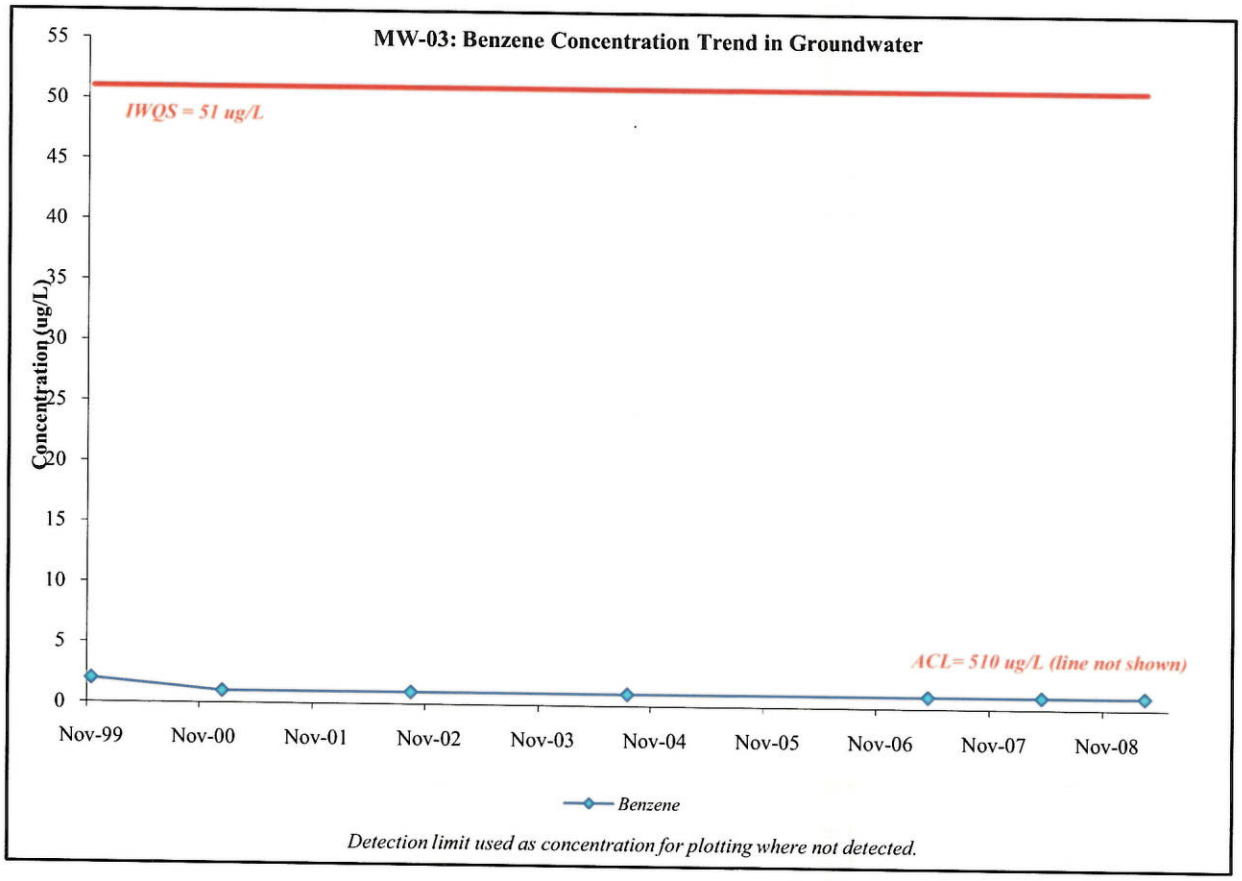
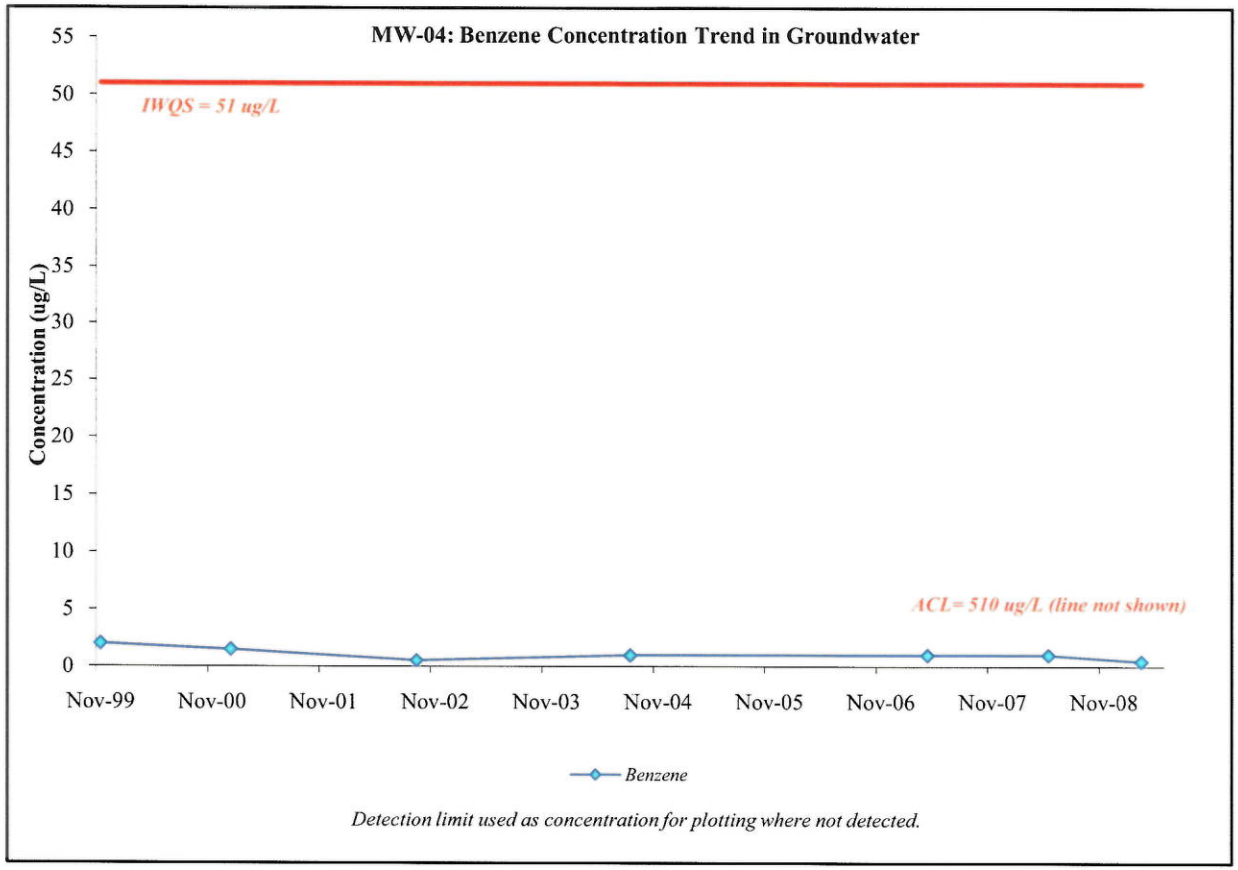
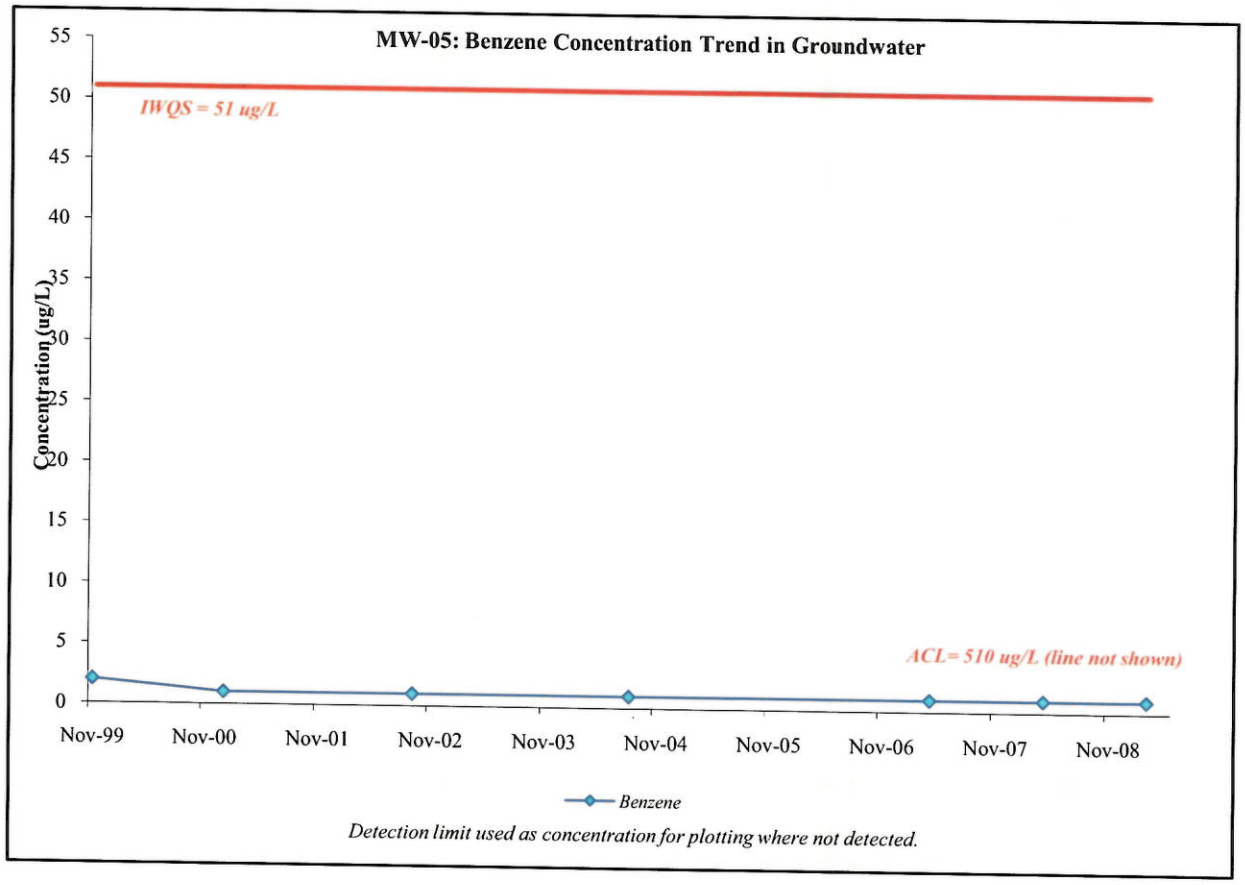
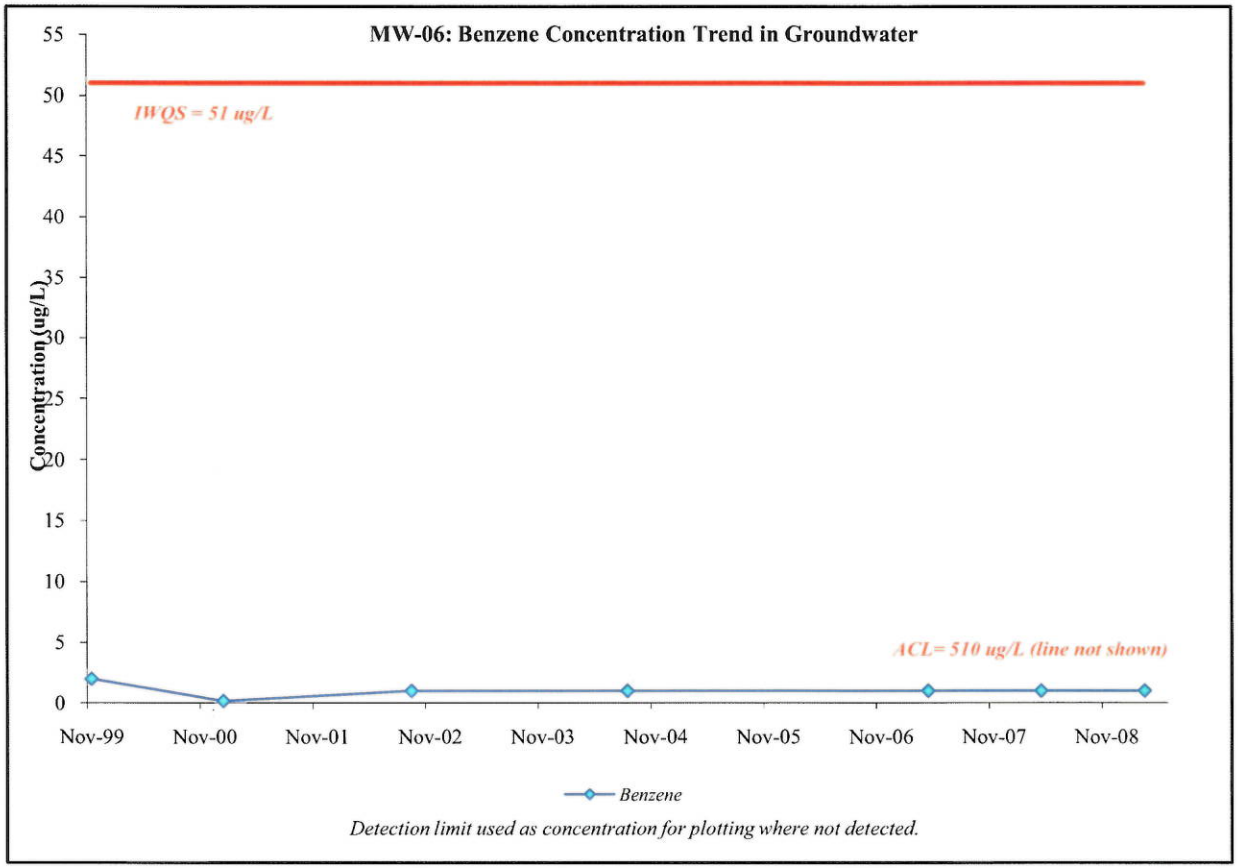

MW-01: Benzene Concentration Trend in Groundwater
55
50
45
40
35
30
25
20
15
10
5
0
Concentration (ug/L)
IWQS = 51 ug/L
ACL= 510 ug/L (line not shown)
Nov-99
Nov-00
Nov-01
Nov-02
Nov-03
Nov-04
Nov-05
Nov-06
Nov-07
Nov-08
Benzene
Detection limit used as concentration for plotting where not detected.

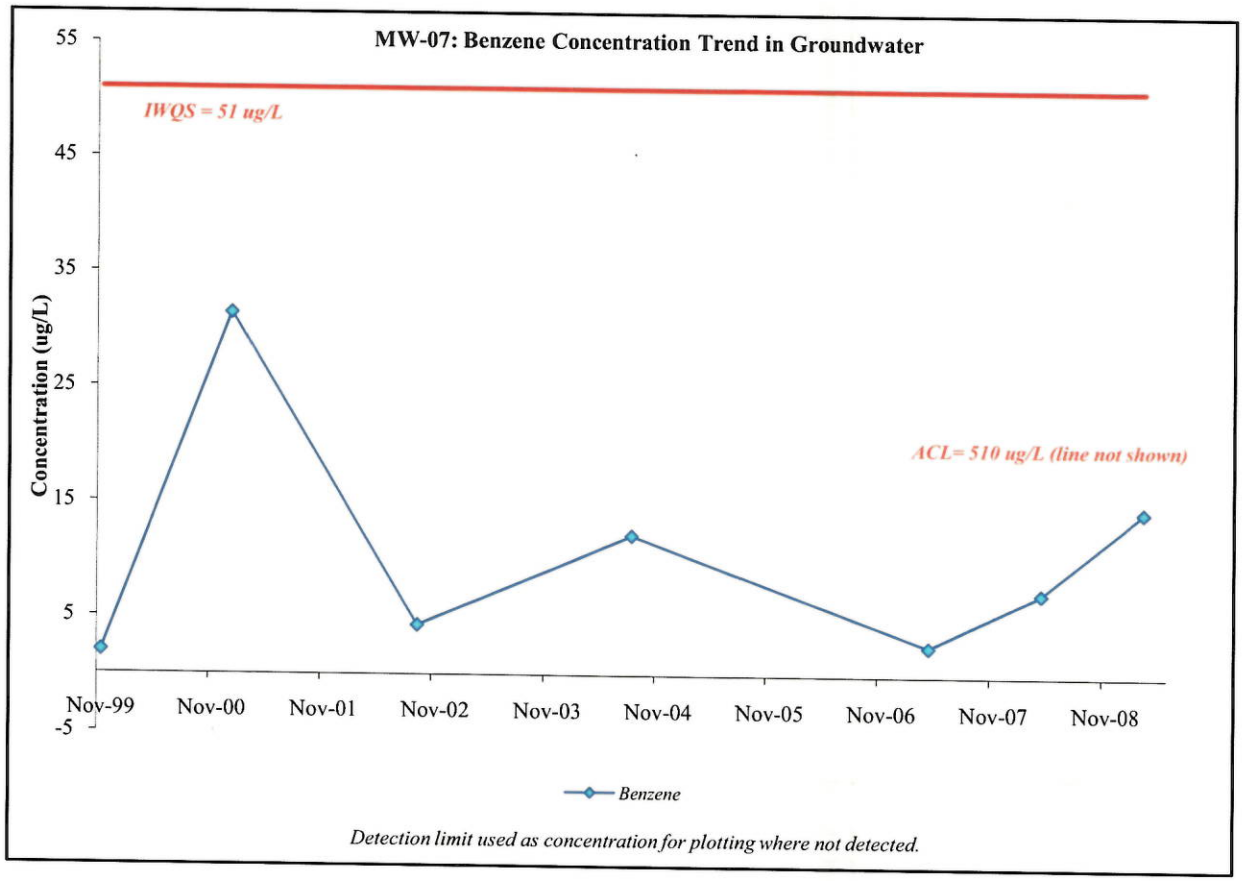

MW-02: Benzene Concentration Trend in Groundwater
55
50
45
40
35
30
25
20
15
10
5
0
Concentration (ug/L)
IWQS = 51 ug/L
ACL= 510 ug/L (line not shown)
Nov-99
Jan-00
Mar-00
May-00
Jul-00
Sep-00
Nov-00
Jan-01
Benzene
Detection limit used as concentration for plotting where not detected.

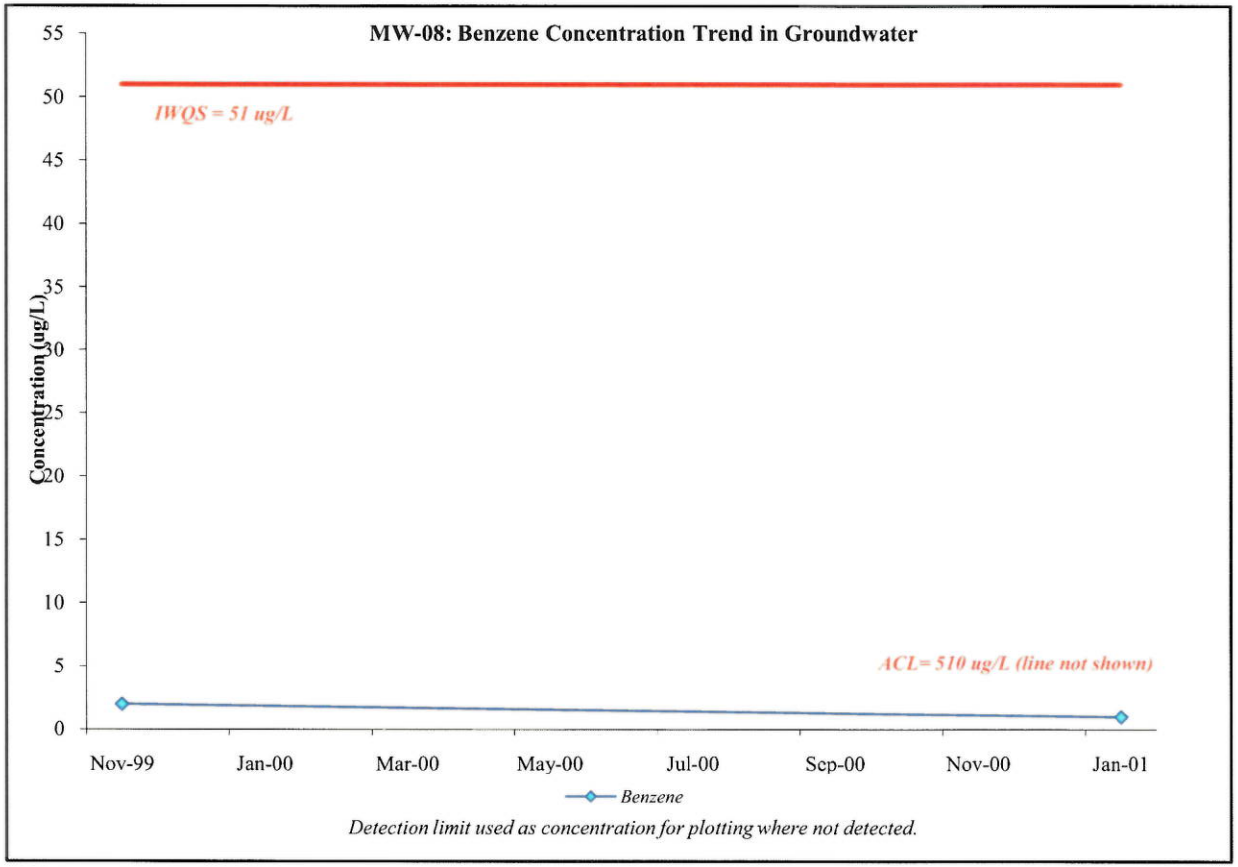

MW-03: Benzene Concentration Trend in Groundwater
IWQS = 51 ug/L
ACL= 510 ug/L (line not shown)
Concentration (ug/L)
55
50
45
40
35
30
25
20
15
10
5
0
Nov-99
Nov-00
Nov-01
Nov-02
Nov-03
Nov-04
Nov-05
Nov-06
Nov-07
Nov-08
Benzene
Detection limit used as concentration for plotting where not detected.

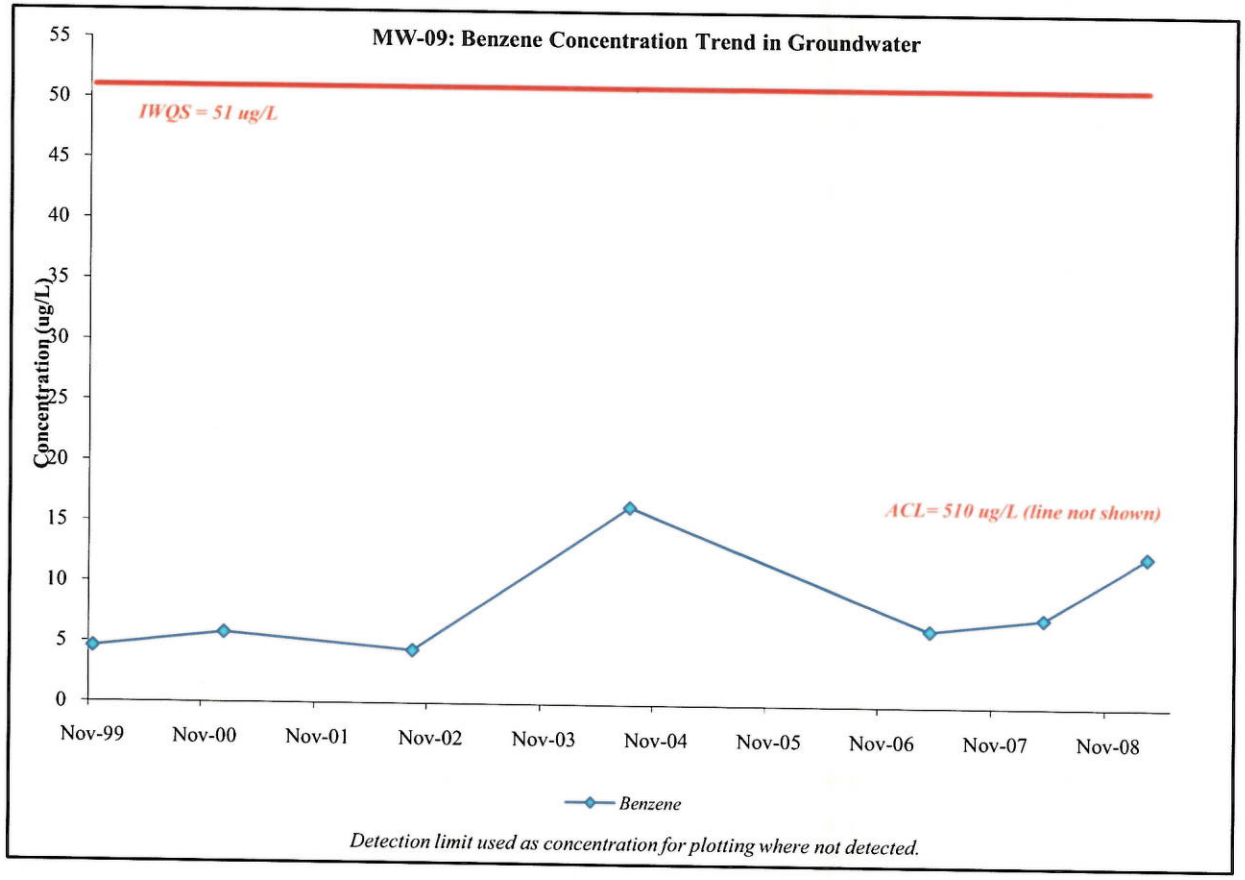

MW-04: Benzene Concentration Trend in Groundwater
IWQS = 51 ug/L
ACL= 510 ug/L (line not shown)
Concentration (ug/L)
55
50
45
40
35
30
25
20
15
10
5
0
Nov-99
Nov-00
Nov-01
Nov-02
Nov-03
Nov-04
Nov-05
Nov-06
Nov-07
Nov-08
Benzene
Detection limit used as concentration for plotting where not detected.

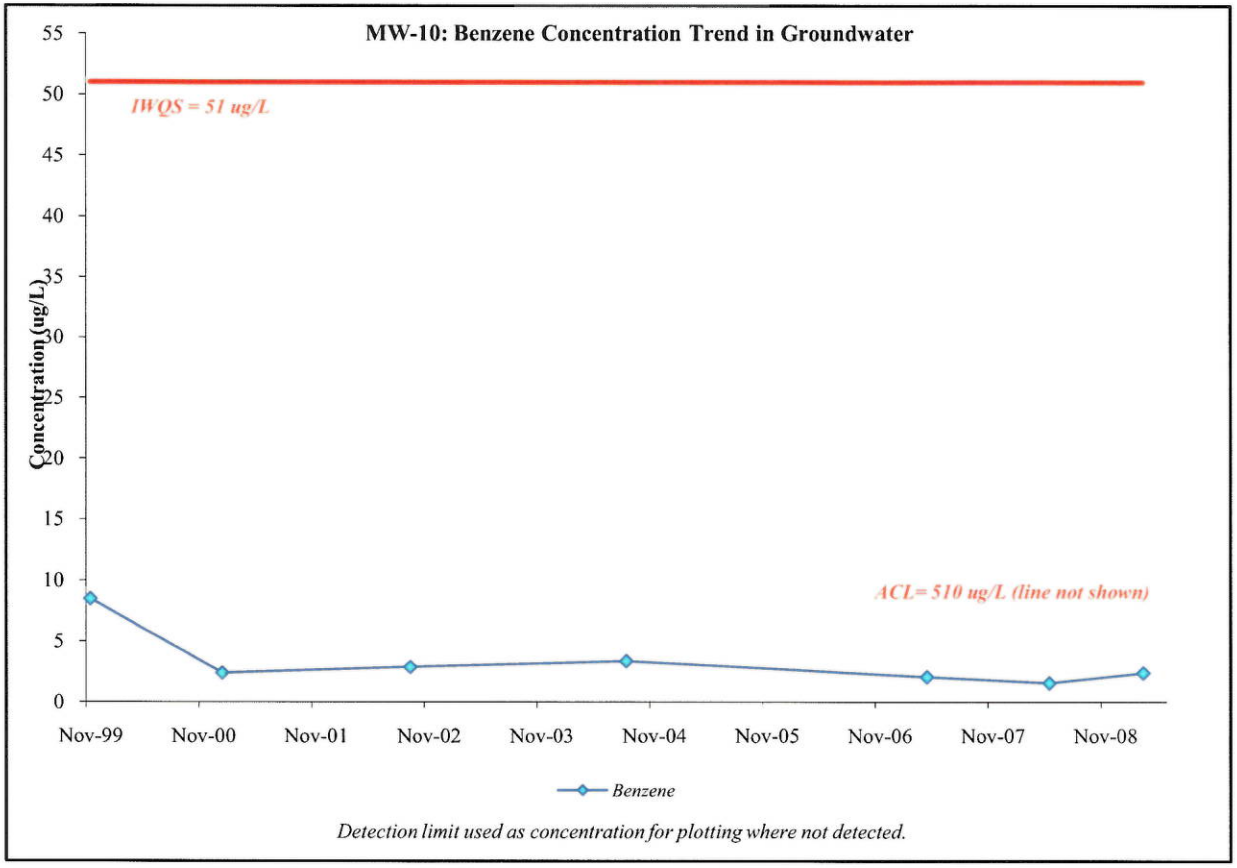

MW-05: Benzene Concentration Trend in Groundwater
IWQS = 51 ug/L
ACL= 510 ug/L (line not shown)
Concentration (ug/L)
55
50
45
40
35
30
25
20
15
10
5
0
Nov-99
Nov-00
Nov-01
Nov-02
Nov-03
Nov-04
Nov-05
Nov-06
Nov-07
Nov-08
Benzene
Detection limit used as concentration for plotting where not detected.

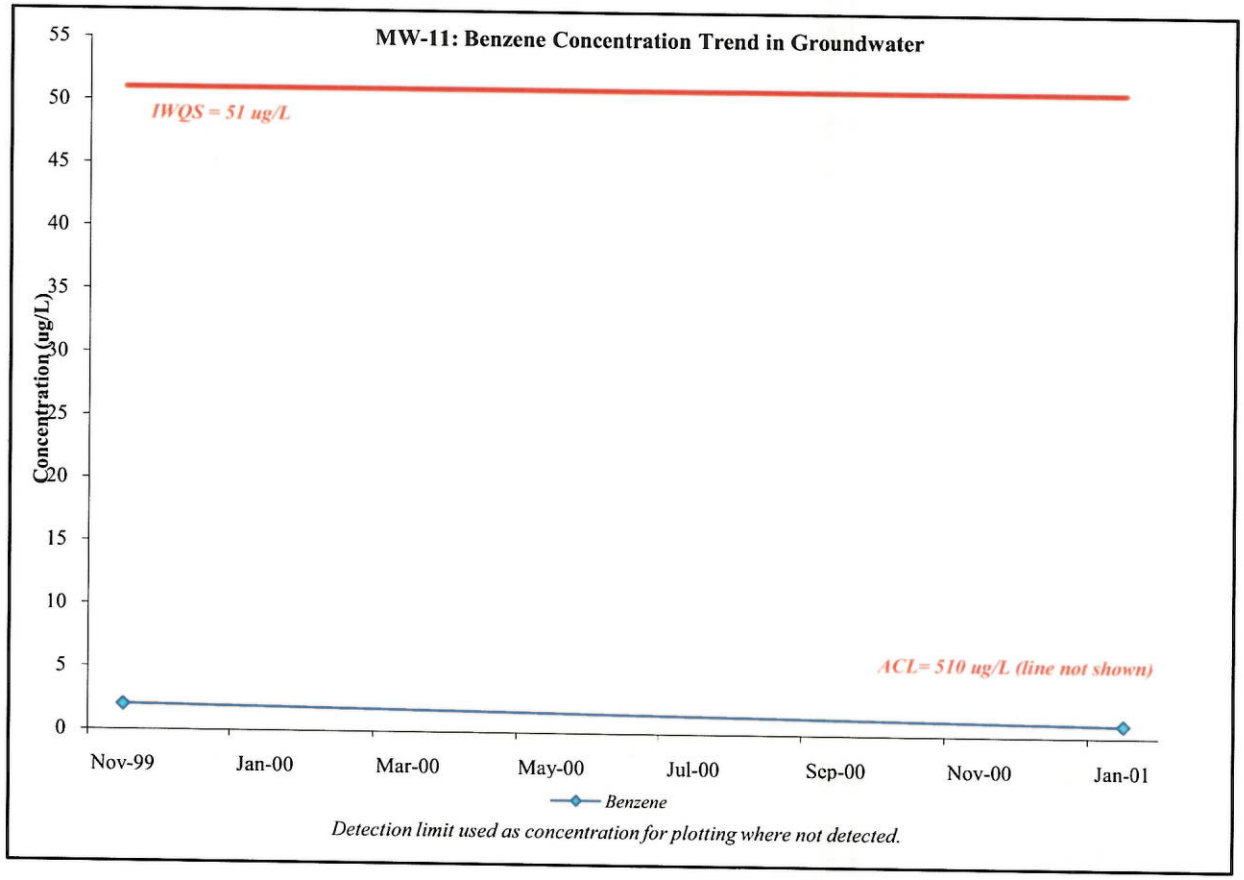

MW-06: Benzene Concentration Trend in Groundwater
IWQS = 51 ug/L
ACL= 510 ug/L (line not shown)
Concentration (ug/L)
55
50
45
40
35
30
25
20
15
10
5
0
Nov-99
Nov-00
Nov-01
Nov-02
Nov-03
Nov-04
Nov-05
Nov-06
Nov-07
Nov-08
Benzene
Detection limit used as concentration for plotting where not detected.

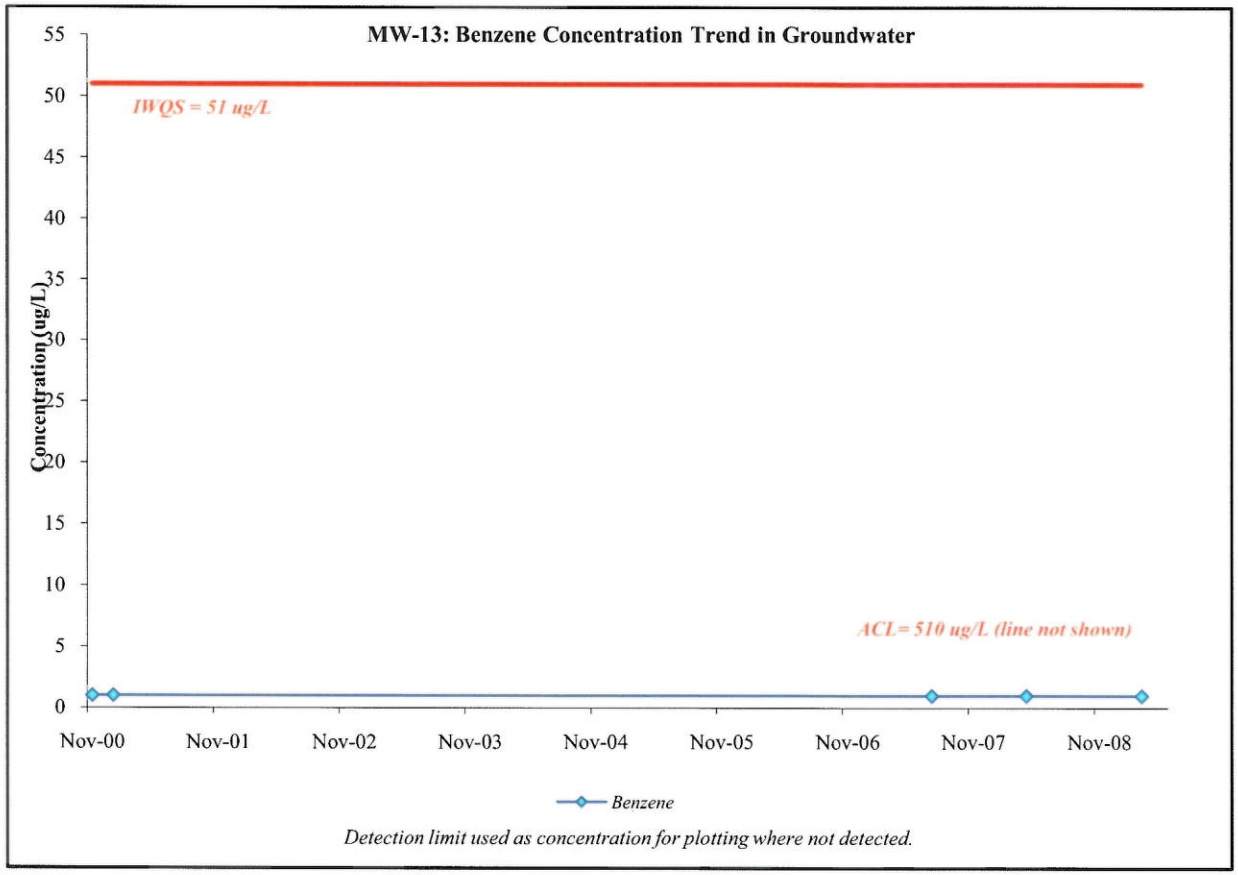

MW-07: Benzene Concentration Trend in Groundwater
IWQS = 51 ug/L
ACL= 510 ug/L (line not shown)
Concentration (ug/L)
55
45
35
25
15
5
-5
Nov-99
Nov-00
Nov-01
Nov-02
Nov-03
Nov-04
Nov-05
Nov-06
Nov-07
Nov-08
Benzene
Detection limit used as concentration for plotting where not detected.

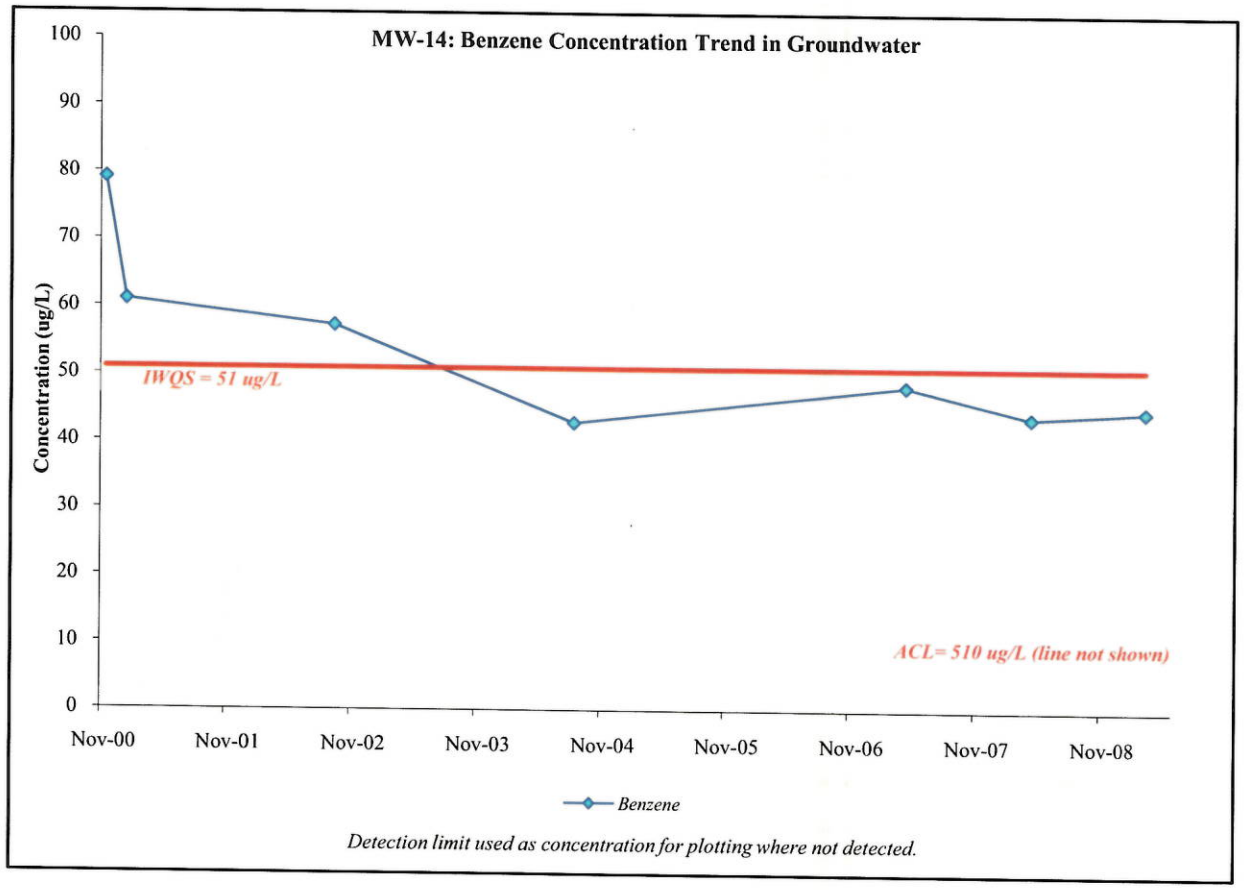

MW-08: Benzene Concentration Trend in Groundwater
IWQS = 51 ug/L
ACL= 510 ug/L (line not shown)
Concentration (ug/L)
55
50
45
40
35
30
25
20
15
10
5
0
Nov-99
Jan-00
Mar-00
May-00
Jul-00
Sep-00
Nov-00
Jan-01
Benzene
Detection limit used as concentration for plotting where not detected.

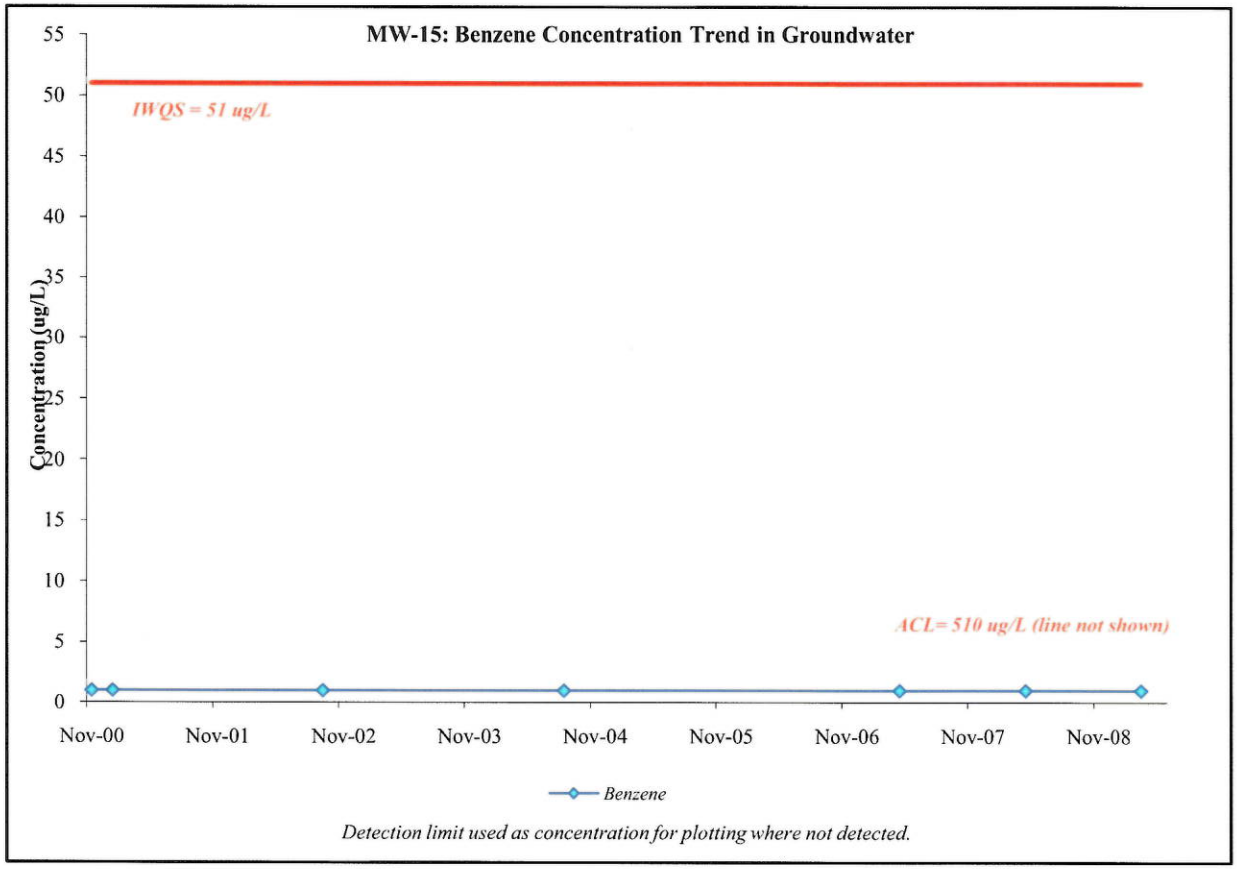

MW-09: Benzene Concentration Trend in Groundwater
IWQS = 51 ug/L
ACL= 510 ug/L (line not shown)
Concentration (ug/L)
55
50
45
40
35
30
25
20
15
10
5
0
Nov-99
Nov-00
Nov-01
Nov-02
Nov-03
Nov-04
Nov-05
Nov-06
Nov-07
Nov-08
Benzene
Detection limit used as concentration for plotting where not detected.

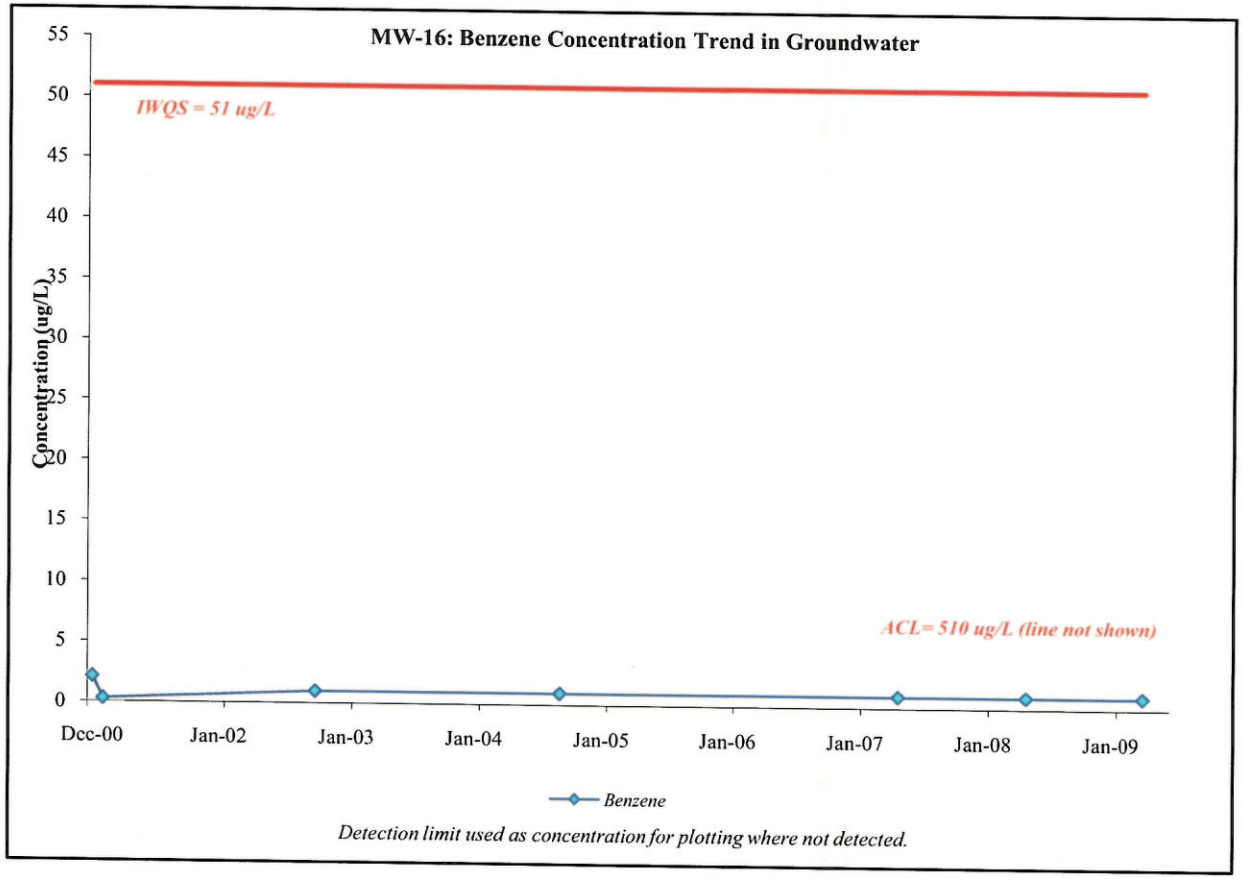

MW-10: Benzene Concentration Trend in Groundwater
IWQS = 51 ug/L
ACL= 510 ug/L (line not shown)
Concentration (ug/L)
55
50
45
40
35
30
25
20
15
10
5
0
Nov-99
Nov-00
Nov-01
Nov-02
Nov-03
Nov-04
Nov-05
Nov-06
Nov-07
Nov-08
Benzene
Detection limit used as concentration for plotting where not detected.

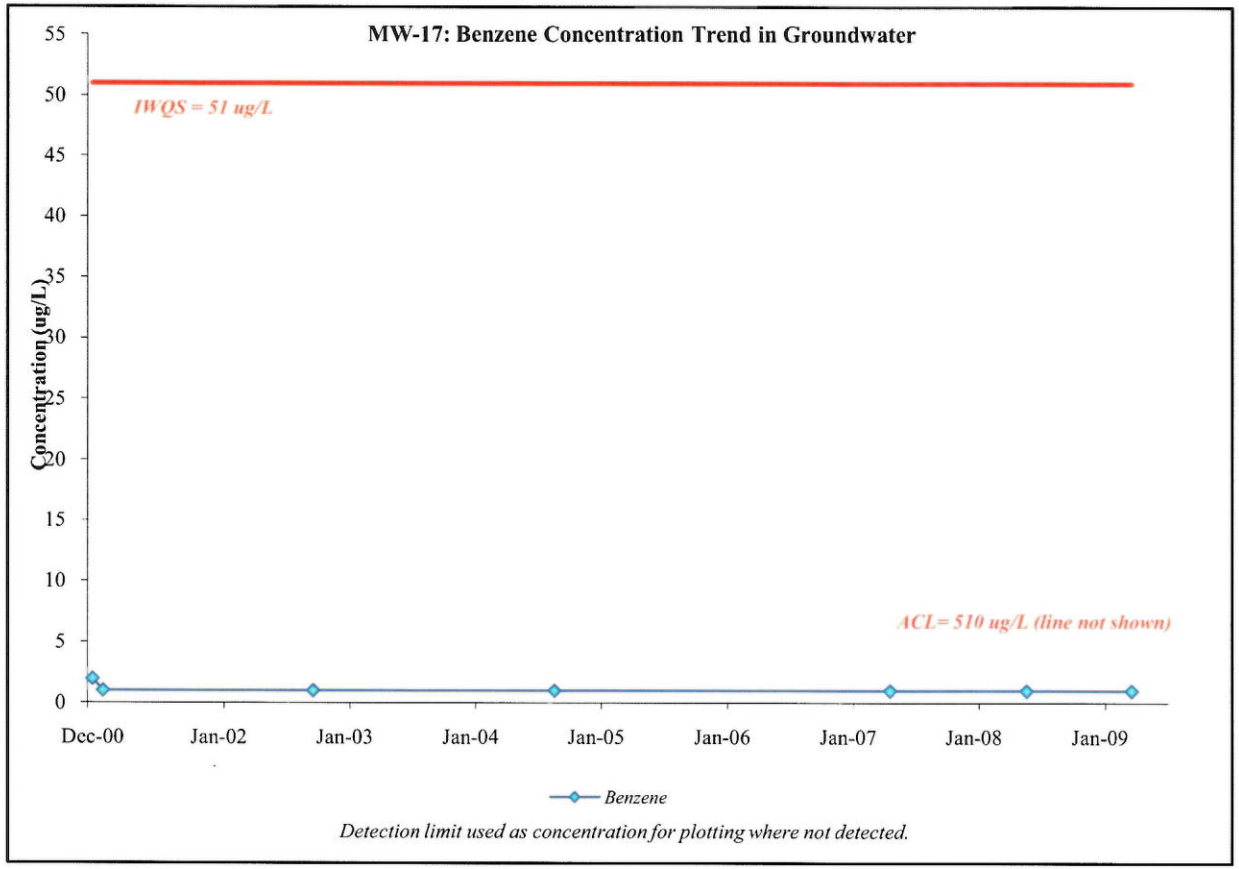

MW-11: Benzene Concentration Trend in Groundwater
IWQS = 51 ug/L
ACL= 510 ug/L (line not shown)
Concentration (ug/L)
55
50
45
40
35
30
25
20
15
10
5
0
Nov-99
Jan-00
Mar-00
May-00
Jul-00
Sep-00
Nov-00
Jan-01
Benzene
Detection limit used as concentration for plotting where not detected.

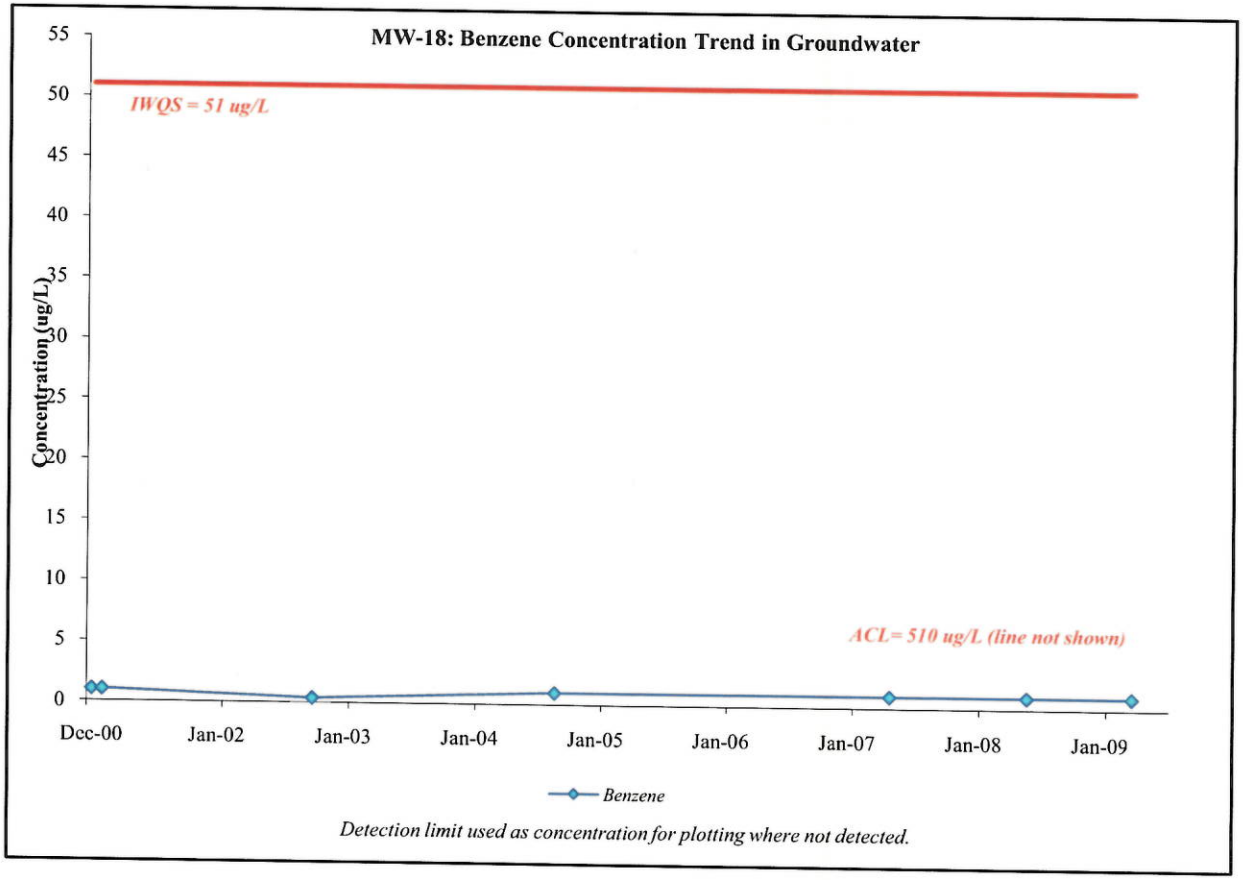

MW-13: Benzene Concentration Trend in Groundwater
IWQS = 51 ug/L
ACL= 510 ug/L (line not shown)
Concentration (ug/L)
55
50
45
40
35
30
25
20
15
10
5
0
Nov-00
Nov-01
Nov-02
Nov-03
Nov-04
Nov-05
Nov-06
Nov-07
Nov-08
Benzene
Detection limit used as concentration for plotting where not detected.


MW-14: Benzene Concentration Trend in Groundwater
Concentration (ug/L)
100
90
80
70
60
50
40
30
20
10
0
IWQS = 51 ug/L
ACL= 510 ug/L (line not shown)
Nov-00
Nov-01
Nov-02
Nov-03
Nov-04
Nov-05
Nov-06
Nov-07
Nov-08
Benzene
Detection limit used as concentration for plotting where not detected.


MW-15: Benzene Concentration Trend in Groundwater
IWQS = 51 ug/L
ACL= 510 ug/L (line not shown)
Concentration (ug/L)
55
50
45
40
35
30
25
20
15
10
5
0
Nov-00
Nov-01
Nov-02
Nov-03
Nov-04
Nov-05
Nov-06
Nov-07
Nov-08
Benzene
Detection limit used as concentration for plotting where not detected.


MW-16: Benzene Concentration Trend in Groundwater
IWQS = 51 ug/L
ACL= 510 ug/L (line not shown)
Concentration (ug/L)
55
50
45
40
35
30
25
20
15
10
5
0
Dec-00
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Benzene
Detection limit used as concentration for plotting where not detected.


MW-17: Benzene Concentration Trend in Groundwater
IWQS = 51 ug/L
ACL= 510 ug/L (line not shown)
Concentration (ug/L)
55
50
45
40
35
30
25
20
15
10
5
0
Dec-00
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Benzene
Detection limit used as concentration for plotting where not detected.


MW-18: Benzene Concentration Trend in Groundwater
IWQS = 51 ug/L
ACL= 510 ug/L (line not shown)
Concentration (ug/L)
55
50
45
40
35
30
25
20
15
10
5
0
Dec-00
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Benzene
Detection limit used as concentration for plotting where not detected.

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APPENDIX IV:

ANALYTICAL RESULTS

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GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4176
Sample ID: 226139011
Matrix: Water
Collect Date: 10-MAR-09 15:30
Receive Date: 13-MAR-09
Collector: Client

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Semi-volatile Mass spec Organics Federal											
3510/8270 PAH Extend list Liquid "As Received"											
2-Chloronaphthalene	U	ND	0.368	1.05	ug/L	1	JMB3	03/18/09	1541	851278	1
2-Methylnaphthalene	U	ND	0.316	1.05	ug/L	1					
Acenaphthene	U	ND	0.326	1.05	ug/L	1					
Acenaphthylene	U	ND	0.211	1.05	ug/L	1					
Anthracene	U	ND	0.211	1.05	ug/L	1					
Benzo(a)anthracene	U	ND	0.211	1.05	ug/L	1					
Benzo(a)pyrene	U	ND	0.211	1.05	ug/L	1					
Benzo(b)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Benzo(ghi)perylene	U	ND	0.211	1.05	ug/L	1					
Benzo(k)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Dibenzo(a,h)anthracene	U	ND	0.211	1.05	ug/L	1					
Fluoranthene	U	ND	0.211	1.05	ug/L	1					
Fluorene	U	ND	0.211	1.05	ug/L	1					
Indeno(1,2,3-cd)pyrene	U	ND	0.211	1.05	ug/L	1					
Naphthalene	U	ND	0.316	1.05	ug/L	1					
Phenanthrene	U	ND	0.211	1.05	ug/L	1					
Pyrene	U	ND	0.316	1.05	ug/L	1					
Volatile Organics Federal											
5030B/8260B BTEX in Liquid Federal "As Received"											
Benzene	U	ND	0.300	1.00	ug/L	1	ACJ	03/21/09	0027	852950	2
Ethylbenzene	U	ND	0.250	1.00	ug/L	1					
Toluene	U	ND	0.250	1.00	ug/L	1					
Xylenes (total)	U	ND	0.600	1.00	ug/L	1					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C BNA Liq. Prep-8270 Analysis Fed	TXA2	03/17/09	2252	851276

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8270C	
2	SW846 8260B	

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)

Client Sample ID: 7J4176
Sample ID: 226139011

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
2-Fluorobiphenyl	3510/8270 PAH Extend list Liquid "As Received"	35.4 ug/L	52.6	67	(39%-100%)
Nitrobenzene-d5	3510/8270 PAH Extend list Liquid "As Received"	39.2 ug/L	52.6	74	(47%-107%)
p-Terphenyl-d14	3510/8270 PAH Extend list Liquid "As Received"	44.2 ug/L	52.6	84	(43%-123%)
1,2-Dichloroethane-d4	5030B/8260B BTEX in Liquid Federal "As Received"	52.8 ug/L	50.0	106	(67%-126%)
Bromofluorobenzene	5030B/8260B BTEX in Liquid Federal "As Received"	54.4 ug/L	50.0	109	(76%-121%)
Toluene-d8	5030B/8260B BTEX in Liquid Federal "As Received"	46.6 ug/L	50.0	93	(77%-128%)

Notes:
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)

Client Sample ID: 7J4176
Sample ID: 226139011

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded

The above sample is reported on an "as received" basis.
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Valerie Davis

Reviewed by

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4376
Sample ID: 226139008
Matrix: Water
Collect Date: 11-MAR-09 13:50
Receive Date: 13-MAR-09
Collector: Client

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Semi-volatile Mass spec Organics Federal											
3510/8270 PAH Extend list Liquid "As Received"											
2-Chloronaphthalene	U	ND	0.368	1.05	ug/L	1	JMB3	03/18/09	1439	851278	1
2-Methylnaphthalene	U	ND	0.316	1.05	ug/L	1					
Acenaphthene	U	ND	0.326	1.05	ug/L	1					
Acenaphthylene	U	ND	0.211	1.05	ug/L	1					
Anthracene	U	ND	0.211	1.05	ug/L	1					
Benzo(a)anthracene	U	ND	0.211	1.05	ug/L	1					
Benzo(a)pyrene	U	ND	0.211	1.05	ug/L	1					
Benzo(b)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Benzo(ghi)perylene	U	ND	0.211	1.05	ug/L	1					
Benzo(k)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Dibenzo(a,h)anthracene	U	ND	0.211	1.05	ug/L	1					
Fluoranthene	U	ND	0.211	1.05	ug/L	1					
Fluorene	U	ND	0.211	1.05	ug/L	1					
Indeno(1,2,3-cd)pyrene	U	ND	0.211	1.05	ug/L	1					
Naphthalene	U	ND	0.316	1.05	ug/L	1					
Phenanthrene	U	ND	0.211	1.05	ug/L	1					
Pyrene	U	ND	0.316	1.05	ug/L	1					
Volatile Organics Federal											
5030B/8260B BTEX in Liquid Federal "As Received"											
Benzene	U	ND	0.300	1.00	ug/L	1	ACJ	03/20/09	2305	852950	2
Ethylbenzene	U	ND	0.250	1.00	ug/L	1					
Toluene	U	ND	0.250	1.00	ug/L	1					
Xylenes (total)	U	ND	0.600	1.00	ug/L	1					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C BNA Liq. Prep-8270 Analysis Fed	TXA2	03/17/09	2252	851276

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8270C	
2	SW846 8260B	

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)

Client Sample ID: 7J4376
Sample ID: 226139008

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
2-Fluorobiphenyl	3510/8270 PAH Extend list Liquid "As Received"	40.0 ug/L	52.6	76	(39%-100%)
Nitrobenzene-d5	3510/8270 PAH Extend list Liquid "As Received"	45.1 ug/L	52.6	86	(47%-107%)
p-Terphenyl-d14	3510/8270 PAH Extend list Liquid "As Received"	42.4 ug/L	52.6	81	(43%-123%)
1,2-Dichloroethane-d4	5030B/8260B BTEX in Liquid Federal "As Received"	53.8 ug/L	50.0	108	(67%-126%)
.ofluorobenzene	5030B/8260B BTEX in Liquid Federal "As Received"	54.7 ug/L	50.0	109	(76%-121%)
Toluene-d8	5030B/8260B BTEX in Liquid Federal "As Received"	47.1 ug/L	50.0	94	(77%-128%)

Notes:
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 734376
Sample ID: 226139008

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded

The above sample is reported on an "as received" basis.
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Valerie Davis

Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)

Client Sample ID: 7J4426
Sample ID: 226139005
Matrix: Water
Collect Date: 11-MAR-09 09:00
Receive Date: 13-MAR-09
Collector: Client

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Semi-volatile Mass spec Organics Federal										
3510/8270 PAH Extend list Liquid "As Received"										
2-Chloronaphthalene	U	ND	0.368	1.05	ug/L	1	JMB3 03/18/09	1337	851278	1
2-Methylnaphthalene		1.62	0.316	1.05	ug/L	1				
Acenaphthene	J	0.890	0.326	1.05	ug/L	1				
Acenaphthylene	U	ND	0.211	1.05	ug/L	1				
[illegible]cene	U	ND	0.211	1.05	ug/L	1				
[illegible](a)anthracene	U	ND	0.211	1.05	ug/L	1				
Benzo(a)pyrene	U	ND	0.211	1.05	ug/L	1				
Benzo(b)fluoranthene	U	ND	0.211	1.05	ug/L	1				
Benzo(ghi)perylene	U	ND	0.211	1.05	ug/L	1				
Benzo(k)fluoranthene	U	ND	0.211	1.05	ug/L	1				
Dibenzo(a,h)anthracene	U	ND	0.211	1.05	ug/L	1				
Fluoranthene	U	ND	0.211	1.05	ug/L	1				
Fluorene	J	1.04	0.211	1.05	ug/L	1				
Indeno(1,2,3-cd)pyrene	U	ND	0.211	1.05	ug/L	1				
Naphthalene		10.5	0.316	1.05	ug/L	1				
Phenanthrene		1.28	0.211	1.05	ug/L	1				
Pyrene	U	ND	0.316	1.05	ug/L	1				
Volatile Organics Federal										
5030B/8260B BTEX in Liquid Federal "As Received"										
Benzene	U	ND	0.300	1.00	ug/L	1	ACJ 03/20/09	2144	852950	2
Ethylbenzene		1.54	0.250	1.00	ug/L	1				
Toluene	U	ND	0.250	1.00	ug/L	1				
Xylenes (total)		1.34	0.600	1.00	ug/L	1				

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C BNA Liq. Prep-8270 Analysis Fed	TXA2	03/17/09	2252	851276

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8270C	
2	SW846 8260B	

[illegible]ogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4426
Sample ID: 226139005

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
2-Fluorobiphenyl	3510/8270 PAH Extend list Liquid "As Received"	36.8 ug/L	52.6	70	(39%-100%)
Nitrobenzene-d5	3510/8270 PAH Extend list Liquid "As Received"	42.0 ug/L	52.6	80	(47%-107%)
p-Terphenyl-d14	3510/8270 PAH Extend list Liquid "As Received"	39.1 ug/L	52.6	74	(43%-123%)
1,2-Dichloroethane-d4	5030B/8260B BTEX in Liquid Federal "As Received"	51.2 ug/L	50.0	102	(67%-126%)
Bromofluorobenzene	5030B/8260B BTEX in Liquid Federal "As Received"	54.1 ug/L	50.0	108	(76%-121%)
Toluene-d8	5030B/8260B BTEX in Liquid Federal "As Received"	45.7 ug/L	50.0	91	(77%-128%)

Notes:
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4426
Sample ID: 226139005

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded

The above sample is reported on an "as received" basis.
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Valerie Davis
Reviewed by

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)

Client Sample ID: 7J4476
Sample ID: 226139004
Matrix: Water
Collect Date: 11-MAR-09 09:00
Receive Date: 13-MAR-09
Collector: Client

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Semi-volatile Mass spec Organics Federal											
3510/8270 PAH Extend list Liquid "As Received"											
2-Chloronaphthalene	U	ND	0.368	1.05	ug/L	1	JMB3	03/18/09	1316	851278	1
2-Methylnaphthalene		2.12	0.316	1.05	ug/L	1					
Acenaphthene	J	1.04	0.326	1.05	ug/L	1					
Acenaphthylene	U	ND	0.211	1.05	ug/L	1					
Anthracene	U	ND	0.211	1.05	ug/L	1					
Benzo(a)anthracene	U	ND	0.211	1.05	ug/L	1					
Benzo(a)pyrene	U	ND	0.211	1.05	ug/L	1					
Benzo(b)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Benzo(ghi)perylene	U	ND	0.211	1.05	ug/L	1					
Benzo(k)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Dibenzo(a,h)anthracene	U	ND	0.211	1.05	ug/L	1					
Fluoranthene	U	ND	0.211	1.05	ug/L	1					
Fluorene		1.26	0.211	1.05	ug/L	1					
Indeno(1,2,3-cd)pyrene	U	ND	0.211	1.05	ug/L	1					
Naphthalene		13.3	0.316	1.05	ug/L	1					
Phenanthrene		1.43	0.211	1.05	ug/L	1					
Pyrene	U	ND	0.316	1.05	ug/L	1					
Volatile Organics Federal											
5030B/8260B BTEX in Liquid Federal "As Received"											
Benzene	J	0.452	0.300	1.00	ug/L	1	ACJ	03/20/09	2117	852950	2
Ethylbenzene		1.73	0.250	1.00	ug/L	1					
Toluene	U	ND	0.250	1.00	ug/L	1					
Xylenes (total)		1.54	0.600	1.00	ug/L	1					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C BNA Liq. Prep-8270 Analysis Fed	TXA2	03/17/09	2252	851276

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8270C	
2	SW846 8260B	

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4476
Sample ID: 226139004

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
2-Fluorobiphenyl	3510/8270 PAH Extend list Liquid "As Received"	38.5 ug/L	52.6	73	(39%-100%)
Nitrobenzene-d5	3510/8270 PAH Extend list Liquid "As Received"	42.1 ug/L	52.6	80	(47%-107%)
p-Terphenyl-d14	3510/8270 PAH Extend list Liquid "As Received"	45.6 ug/L	52.6	87	(43%-123%)
1,2-Dichloroethane-d4	5030B/8260B BTEX in Liquid Federal "As Received"	52.8 ug/L	50.0	106	(67%-126%)
...ofluorobenzene	5030B/8260B BTEX in Liquid Federal "As Received"	53.8 ug/L	50.0	108	(76%-121%)
Toluene-d8	5030B/8260B BTEX in Liquid Federal "As Received"	46.8 ug/L	50.0	94	(77%-128%)

Notes:
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** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4476
Sample ID: 226139004

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded

The above sample is reported on an "as received" basis.
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Valerie Davis
Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4576
Sample ID: 226139007
Matrix: Water
Collect Date: 11-MAR-09 12:20
Receive Date: 13-MAR-09
Collector: Client

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Semi-volatile Mass spec Organics Federal											
3510/8270 PAH Extend list Liquid "As Received"											
2-Chloronaphthalene	U	ND	0.368	1.05	ug/L	1	JMB3	03/18/09	1418	851278	1
2-Methylnaphthalene	U	ND	0.316	1.05	ug/L	1					
Acenaphthene	U	ND	0.326	1.05	ug/L	1					
Acenaphthylene	U	ND	0.211	1.05	ug/L	1					
[illegible]cene	U	ND	0.211	1.05	ug/L	1					
[illegible](a)anthracene	U	ND	0.211	1.05	ug/L	1					
Benzo(a)pyrene	U	ND	0.211	1.05	ug/L	1					
Benzo(b)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Benzo(ghi)perylene	U	ND	0.211	1.05	ug/L	1					
Benzo(k)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Dibenzo(a,h)anthracene	U	ND	0.211	1.05	ug/L	1					
Fluoranthene	U	ND	0.211	1.05	ug/L	1					
Fluorene	U	ND	0.211	1.05	ug/L	1					
Indeno(1,2,3-cd)pyrene	U	ND	0.211	1.05	ug/L	1					
Naphthalene	U	ND	0.316	1.05	ug/L	1					
Phenanthrene	U	ND	0.211	1.05	ug/L	1					
Pyrene	U	ND	0.316	1.05	ug/L	1					
Volatile Organics Federal											
5030B/8260B BTEX in Liquid Federal "As Received"											
Benzene	U	ND	0.300	1.00	ug/L	1	ACJ	03/20/09	2238	852950	2
Ethylbenzene	U	ND	0.250	1.00	ug/L	1					
Toluene	U	ND	0.250	1.00	ug/L	1					
Xylenes (total)	U	ND	0.600	1.00	ug/L	1					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C BNA Liq. Prep-8270 Analysis Fed	TXA2	03/17/09	2252	851276

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8270C	
2	SW846 8260B	

ogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)

Client Sample ID: 7J4576
Sample ID: 226139007

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
2-Fluorobiphenyl	3510/8270 PAH Extend list Liquid "As Received"	39.9 ug/L	52.6	76	(39%-100%)
Nitrobenzene-d5	3510/8270 PAH Extend list Liquid "As Received"	44.5 ug/L	52.6	85	(47%-107%)
p-Terphenyl-d14	3510/8270 PAH Extend list Liquid "As Received"	45.4 ug/L	52.6	86	(43%-123%)
1,2-Dichloroethane-d4	5030B/8260B BTEX in Liquid Federal "As Received"	54.1 ug/L	50.0	108	(67%-126%)
Bromofluorobenzene	5030B/8260B BTEX in Liquid Federal "As Received"	55.2 ug/L	50.0	110	(76%-121%)
Toluene-d8	5030B/8260B BTEX in Liquid Federal "As Received"	47.4 ug/L	50.0	95	(77%-128%)

Notes:
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B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected.
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4576
Sample ID: 226139007

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded

The above sample is reported on an "as received" basis.
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

s data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Valerie Davis
Reviewed by

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)

Client Sample ID: 7J4676
Sample ID: 226139003
Matrix: Water
Collect Date: 10-MAR-09 11:35
Receive Date: 13-MAR-09
Collector: Client

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Semi-volatile Mass spec Organics Federal											
3510/8270 PAH Extend list Liquid "As Received"											
2-Chloronaphthalene	U	ND	0.368	1.05	ug/L	1	JMB3	03/18/09	1255	851278	1
2-Methylnaphthalene	U	ND	0.316	1.05	ug/L	1					
Acenaphthene	U	ND	0.326	1.05	ug/L	1					
Acenaphthylene	U	ND	0.211	1.05	ug/L	1					
Anthracene	U	ND	0.211	1.05	ug/L	1					
Benzo(a)anthracene	U	ND	0.211	1.05	ug/L	1					
Benzo(a)pyrene	U	ND	0.211	1.05	ug/L	1					
Benzo(b)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Benzo(ghi)perylene	U	ND	0.211	1.05	ug/L	1					
Benzo(k)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Dibenzo(a,h)anthracene	U	ND	0.211	1.05	ug/L	1					
Fluoranthene	U	ND	0.211	1.05	ug/L	1					
Fluorene	U	ND	0.211	1.05	ug/L	1					
Indeno(1,2,3-cd)pyrene	U	ND	0.211	1.05	ug/L	1					
Naphthalene	J	0.756	0.316	1.05	ug/L	1					
Phenanthrene	U	ND	0.211	1.05	ug/L	1					
Pyrene	U	ND	0.316	1.05	ug/L	1					
Volatile Organics Federal											
5030B/8260B BTEX in Liquid Federal "As Received"											
Benzene	U	ND	0.300	1.00	ug/L	1	ACJ	03/20/09	2050	852950	2
Ethylbenzene	U	ND	0.250	1.00	ug/L	1					
Toluene	U	ND	0.250	1.00	ug/L	1					
Xylenes (total)	U	ND	0.600	1.00	ug/L	1					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C BNA Liq. Prep-8270 Analysis Fed	TXA2	03/17/09	2252	851276

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8270C	
2	SW846 8260B	

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)

Client Sample ID: 7J4676
Sample ID: 226139003

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
2-Fluorobiphenyl	3510/8270 PAH Extend list Liquid "As Received"	37.9 ug/L	52.6	72	(39%-100%)
Nitrobenzene-d5	3510/8270 PAH Extend list Liquid "As Received"	43.1 ug/L	52.6	82	(47%-107%)
p-Terphenyl-d14	3510/8270 PAH Extend list Liquid "As Received"	42.0 ug/L	52.6	80	(43%-123%)
1,2-Dichloroethane-d4	5030B/8260B BTEX in Liquid Federal "As Received"	53.3 ug/L	50.0	107	(67%-126%)
Bromofluorobenzene	5030B/8260B BTEX in Liquid Federal "As Received"	54.8 ug/L	50.0	110	(76%-121%)
Toluene-d8	5030B/8260B BTEX in Liquid Federal "As Received"	47.0 ug/L	50.0	94	(77%-128%)

Notes:
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
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A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4676
Sample ID: 226139003

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded

The above sample is reported on an "as received" basis.
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Valerie Davis
Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)

Client Sample ID: 7J4776
Sample ID: 226139010
Matrix: Water
Collect Date: 10-MAR-09 13:20
Receive Date: 13-MAR-09
Collector: Client

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate Time	Batch	Method
Semi-volatile Mass spec Organics Federal									
3510/8270 PAH Extend list Liquid "As Received"									
2-Chloronaphthalene	U	ND	0.368	1.05	ug/L	1	JMB3 03/18/09 1520	851278	1
2-Methylnaphthalene		1.34	0.316	1.05	ug/L	1			
Acenaphthene	U	ND	0.326	1.05	ug/L	1			
Acenaphthylene	U	ND	0.211	1.05	ug/L	1			
Anthracene	U	ND	0.211	1.05	ug/L	1			
Benzo(a)anthracene	U	ND	0.211	1.05	ug/L	1			
Benzo(a)pyrene	U	ND	0.211	1.05	ug/L	1			
Benzo(b)fluoranthene	U	ND	0.211	1.05	ug/L	1			
Benzo(ghi)perylene	U	ND	0.211	1.05	ug/L	1			
Benzo(k)fluoranthene	U	ND	0.211	1.05	ug/L	1			
Dibenzo(a,h)anthracene	U	ND	0.211	1.05	ug/L	1			
Fluoranthene	U	ND	0.211	1.05	ug/L	1			
Fluorene	U	ND	0.211	1.05	ug/L	1			
Indeno(1,2,3-cd)pyrene	U	ND	0.211	1.05	ug/L	1			
Naphthalene		2.50	0.316	1.05	ug/L	1			
Phenanthrene	U	ND	0.211	1.05	ug/L	1			
Pyrene	U	ND	0.316	1.05	ug/L	1			
Volatile Organics Federal									
5030B/8260B BTEX in Liquid Federal "As Received"									
Benzene		14.4	0.300	1.00	ug/L	1	ACJ 03/20/09 2359	852950	2
Ethylbenzene		1.67	0.250	1.00	ug/L	1			
Toluene		2.28	0.250	1.00	ug/L	1			
Xylenes (total)		3.16	0.600	1.00	ug/L	1			

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C BNA Liq. Prep-8270 Analysis Fed	TXA2	03/17/09	2252	851276

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8270C	
2	SW846 8260B	

ogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)

Client Sample ID: 7J4776
Sample ID: 226139010

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
2-Fluorobiphenyl	3510/8270 PAH Extend list Liquid "As Received"	34.8 ug/L	52.6	66	(39%-100%)
Nitrobenzene-d5	3510/8270 PAH Extend list Liquid "As Received"	38.8 ug/L	52.6	74	(47%-107%)
p-Terphenyl-d14	3510/8270 PAH Extend list Liquid "As Received"	41.7 ug/L	52.6	79	(43%-123%)
1,2-Dichloroethane-d4	5030B/8260B BTEX in Liquid Federal "As Received"	52.0 ug/L	50.0	104	(67%-126%)
Bromofluorobenzene	5030B/8260B BTEX in Liquid Federal "As Received"	54.5 ug/L	50.0	109	(76%-121%)
Toluene-d8	5030B/8260B BTEX in Liquid Federal "As Received"	46.4 ug/L	50.0	93	(77%-128%)

Notes:
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4776
Sample ID: 226139010

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded

The above sample is reported on an "as received" basis.
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

, data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Valerie Davis
Reviewed by

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)

Client Sample ID: 7J4976
Sample ID: 226139015
Matrix: Water
Collect Date: 12-MAR-09 09:15
Receive Date: 13-MAR-09
Collector: Client

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Semi-volatile Mass spec Organics Federal											
3510/8270 PAH Extend list Liquid "As Received"											
2-Chloronaphthalene	U	ND	0.368	1.05	ug/L	1	JMB3	03/18/09	1705	851278	1
2-Methylnaphthalene		5.66	0.316	1.05	ug/L	1					
Acenaphthene	U	ND	0.326	1.05	ug/L	1					
Acenaphthylene	U	ND	0.211	1.05	ug/L	1					
Anthracene	U	ND	0.211	1.05	ug/L	1					
Benzo(a)anthracene	U	ND	0.211	1.05	ug/L	1					
Benzo(a)pyrene	U	ND	0.211	1.05	ug/L	1					
Benzo(b)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Benzo(ghi)perylene	U	ND	0.211	1.05	ug/L	1					
Benzo(k)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Dibenzo(a,h)anthracene	U	ND	0.211	1.05	ug/L	1					
Fluoranthene	U	ND	0.211	1.05	ug/L	1					
Fluorene	J	0.709	0.211	1.05	ug/L	1					
Indeno(1,2,3-cd)pyrene	U	ND	0.211	1.05	ug/L	1					
Naphthalene		13.4	0.316	1.05	ug/L	1					
Phenanthrene	J	0.445	0.211	1.05	ug/L	1					
Pyrene	U	ND	0.316	1.05	ug/L	1					
Volatile Organics Federal											
5030B/8260B BTEX in Liquid Federal "As Received"											
Benzene		12.5	0.300	1.00	ug/L	1	ACJ	03/21/09	0215	852950	2
Ethylbenzene	J	0.705	0.250	1.00	ug/L	1					
Toluene	U	ND	0.250	1.00	ug/L	1					
Xylenes (total)	J	0.914	0.600	1.00	ug/L	1					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C BNA Liq. Prep-8270 Analysis Fed	TXA2	03/17/09	2252	851276

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8270C	
2	SW846 8260B	

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)

Client Sample ID: 7J4976
Sample ID: 226139015

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
2-Fluorobiphenyl	3510/8270 PAH Extend list Liquid "As Received"	35.7 ug/L	52.6	68	(39%-100%)
Nitrobenzene-d5	3510/8270 PAH Extend list Liquid "As Received"	40.0 ug/L	52.6	76	(47%-107%)
p-Terphenyl-d14	3510/8270 PAH Extend list Liquid "As Received"	46.4 ug/L	52.6	88	(43%-123%)
1,2-Dichloroethane-d4	5030B/8260B BTEX in Liquid Federal "As Received"	51.2 ug/L	50.0	102	(67%-126%)
.ofluorobenzene	5030B/8260B BTEX in Liquid Federal "As Received"	54.2 ug/L	50.0	108	(76%-121%)
Toluene-d8	5030B/8260B BTEX in Liquid Federal "As Received"	46.7 ug/L	50.0	93	(77%-128%)

Notes:
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
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A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4976
Sample ID: 226139015

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded

The above sample is reported on an "as received" basis.
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Valerie Davis
Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4A76
Sample ID: 226139006
Matrix: Water
Collect Date: 11-MAR-09 10:30
Receive Date: 13-MAR-09
Collector: Client

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Semi-volatile Mass spec Organics Federal											
3510/8270 PAH Extend list Liquid "As Received"											
2-Chloronaphthalene	U	ND	0.368	1.05	ug/L	1	JMB3	03/18/09	1357	851278	1
2-Methylnaphthalene	U	ND	0.316	1.05	ug/L	1					
Acenaphthene	U	ND	0.326	1.05	ug/L	1					
Acenaphthylene	U	ND	0.211	1.05	ug/L	1					
[illegible]acene	U	ND	0.211	1.05	ug/L	1					
[illegible](a)anthracene	U	ND	0.211	1.05	ug/L	1					
Benzo(a)pyrene	U	ND	0.211	1.05	ug/L	1					
Benzo(b)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Benzo(ghi)perylene	U	ND	0.211	1.05	ug/L	1					
Benzo(k)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Dibenzo(a,h)anthracene	U	ND	0.211	1.05	ug/L	1					
Fluoranthene	U	ND	0.211	1.05	ug/L	1					
Fluorene	U	ND	0.211	1.05	ug/L	1					
Indeno(1,2,3-cd)pyrene	U	ND	0.211	1.05	ug/L	1					
Naphthalene	J	0.414	0.316	1.05	ug/L	1					
Phenanthrene	U	ND	0.211	1.05	ug/L	1					
Pyrene	U	ND	0.316	1.05	ug/L	1					
Volatile Organics Federal											
5030B/8260B BTEX in Liquid Federal "As Received"											
Benzene		2.41	0.300	1.00	ug/L	1	ACJ	03/20/09	2211	852950	2
Ethylbenzene		2.54	0.250	1.00	ug/L	1					
Toluene	J	0.639	0.250	1.00	ug/L	1					
Xylenes (total)		3.51	0.600	1.00	ug/L	1					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C BNA Liq. Prep-8270 Analysis Fed	TXA2	03/17/09	2252	851276

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8270C	
2	SW846 8260B	

ogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4A76
Sample ID: 226139006

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
2-Fluorobiphenyl	3510/8270 PAH Extend list Liquid "As Received"	35.2 ug/L	52.6	67	(39%-100%)
Nitrobenzene-d5	3510/8270 PAH Extend list Liquid "As Received"	40.1 ug/L	52.6	76	(47%-107%)
p-Terphenyl-d14	3510/8270 PAH Extend list Liquid "As Received"	41.4 ug/L	52.6	79	(43%-123%)
1,2-Dichloroethane-d4	5030B/8260B BTEX in Liquid Federal "As Received"	51.2 ug/L	50.0	102	(67%-126%)
Bromofluorobenzene	5030B/8260B BTEX in Liquid Federal "As Received"	54.9 ug/L	50.0	110	(76%-121%)
Toluene-d8	5030B/8260B BTEX in Liquid Federal "As Received"	46.2 ug/L	50.0	92	(77%-128%)

Notes:
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B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4A76
Sample ID: 226139006

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded

The above sample is reported on an "as received" basis.
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This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Valerie Davis

Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4D76
Sample ID: 226139002
Matrix: Water
Collect Date: 10-MAR-09 15:45
Receive Date: 13-MAR-09
Collector: Client

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Semi-volatile Mass spec Organics Federal											
3510/8270 PAH Extend list Liquid "As Received"											
2-Chloronaphthalene	U	ND	0.389	1.11	ug/L	1	JMB3	03/18/09	1153	851278	1
2-Methylnaphthalene	U	ND	0.333	1.11	ug/L	1					
Acenaphthene	U	ND	0.344	1.11	ug/L	1					
Acenaphthylene	U	ND	0.222	1.11	ug/L	1					
Anthracene	U	ND	0.222	1.11	ug/L	1					
Benzo(a)anthracene	U	ND	0.222	1.11	ug/L	1					
Benzo(a)pyrene	U	ND	0.222	1.11	ug/L	1					
Benzo(b)fluoranthene	U	ND	0.222	1.11	ug/L	1					
Benzo(ghi)perylene	U	ND	0.222	1.11	ug/L	1					
Benzo(k)fluoranthene	U	ND	0.222	1.11	ug/L	1					
Dibenzo(a,h)anthracene	U	ND	0.222	1.11	ug/L	1					
Fluoranthene	U	ND	0.222	1.11	ug/L	1					
Fluorene	U	ND	0.222	1.11	ug/L	1					
Indeno(1,2,3-cd)pyrene	U	ND	0.222	1.11	ug/L	1					
Naphthalene	U	ND	0.333	1.11	ug/L	1					
Phenanthrene	U	ND	0.222	1.11	ug/L	1					
Pyrene	U	ND	0.333	1.11	ug/L	1					
Volatile Organics Federal											
5030B/8260B BTEX in Liquid Federal "As Received"											
Benzene	U	ND	0.300	1.00	ug/L	1	ACJ	03/20/09	2023	852950	2
Ethylbenzene	U	ND	0.250	1.00	ug/L	1					
Toluene	U	ND	0.250	1.00	ug/L	1					
Xylenes (total)	U	ND	0.600	1.00	ug/L	1					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C BNA Liq. Prep-8270 Analysis Fed	TXA2	03/17/09	2252	851276

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8270C	
2	SW846 8260B	

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4D76
Sample ID: 226139002

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
2-Fluorobiphenyl	3510/8270 PAH Extend list Liquid "As Received"	35.0 ug/L	55.6	63	(39%-100%)
Nitrobenzene-d5	3510/8270 PAH Extend list Liquid "As Received"	38.4 ug/L	55.6	69	(47%-107%)
p-Terphenyl-d14	3510/8270 PAH Extend list Liquid "As Received"	43.9 ug/L	55.6	79	(43%-123%)
1,2-Dichloroethane-d4	5030B/8260B BTEX in Liquid Federal "As Received"	52.3 ug/L	50.0	105	(67%-126%)
4-Bromofluorobenzene	5030B/8260B BTEX in Liquid Federal "As Received"	54.0 ug/L	50.0	108	(76%-121%)
Toluene-d8	5030B/8260B BTEX in Liquid Federal "As Received"	46.6 ug/L	50.0	93	(77%-128%)

Notes:
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C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4D76
Sample ID: 226139002

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded

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Valerie Davis
Reviewed by

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2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4E76
Sample ID: 226139009
Matrix: Water
Collect Date: 10-MAR-09 10:30
Receive Date: 13-MAR-09
Collector: Client

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Semi-volatile Mass spec Organics Federal											
3510/8270 PAH Extend list Liquid "As Received"											
2-Chloronaphthalene	U	ND	0.368	1.05	ug/L	1	JMB3	03/18/09	1500	851278	1
2-Methylnaphthalene		2.11	0.316	1.05	ug/L	1					
Acenaphthene		1.06	0.326	1.05	ug/L	1					
Acenaphthylene	U	ND	0.211	1.05	ug/L	1					
Anthracene	U	ND	0.211	1.05	ug/L	1					
Benzo(a)anthracene	U	ND	0.211	1.05	ug/L	1					
Benzo(a)pyrene	U	ND	0.211	1.05	ug/L	1					
Benzo(b)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Benzo(ghi)perylene	U	ND	0.211	1.05	ug/L	1					
Benzo(k)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Dibenzo(a,h)anthracene	U	ND	0.211	1.05	ug/L	1					
Fluoranthene	U	ND	0.211	1.05	ug/L	1					
Fluorene		1.99	0.211	1.05	ug/L	1					
Indeno(1,2,3-cd)pyrene	U	ND	0.211	1.05	ug/L	1					
Naphthalene		26.2	0.316	1.05	ug/L	1					
Phenanthrene		2.03	0.211	1.05	ug/L	1					
Pyrene	U	ND	0.316	1.05	ug/L	1					
Volatile Organics Federal											
5030B/8260B BTEX in Liquid Federal "As Received"											
Benzene		44.8	0.300	1.00	ug/L	1	ACJ	03/20/09	2332	852950	2
Ethylbenzene	J	0.719	0.250	1.00	ug/L	1					
Toluene	U	ND	0.250	1.00	ug/L	1					
Xylenes (total)		6.29	0.600	1.00	ug/L	1					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C BNA Liq. Prep-8270 Analysis Fed	TXA2	03/17/09	2252	851276

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8270C	
2	SW846 8260B	

ogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits

Certificate of Analysis

Company: SAIC
Address: 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)

Client Sample ID: 7J4E76
Sample ID: 226139009

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
2-Fluorobiphenyl	3510/8270 PAH Extend list Liquid "As Received"	35.3 ug/L	52.6	67	(39%-100%)
Nitrobenzene-d5	3510/8270 PAH Extend list Liquid "As Received"	38.5 ug/L	52.6	73	(47%-107%)
p-Terphenyl-d14	3510/8270 PAH Extend list Liquid "As Received"	41.5 ug/L	52.6	79	(43%-123%)
1,2-Dichloroethane-d4	5030B/8260B BTEX in Liquid Federal "As Received"	51.4 ug/L	50.0	103	(67%-126%)
Bromofluorobenzene	5030B/8260B BTEX in Liquid Federal "As Received"	53.9 ug/L	50.0	108	(76%-121%)
Toluene-d8	5030B/8260B BTEX in Liquid Federal "As Received"	46.5 ug/L	50.0	93	(77%-128%)

Notes:
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4E76
Sample ID: 226139009

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded

The above sample is reported on an "as received" basis.
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Valerie Davis
Reviewed by

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4F46
Sample ID: 226139017
Matrix: Water
Collect Date: 12-MAR-09 10:40
Receive Date: 13-MAR-09
Collector: Client

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Semi-volatile Mass spec Organics Federal											
3510/8270 PAH Extend list Liquid "As Received"											
2-Chloronaphthalene	U	ND	0.350	1.00	ug/L	1	JMB3	03/18/09	1746	851278	1
2-Methylnaphthalene	U	ND	0.300	1.00	ug/L	1					
Acenaphthene	U	ND	0.310	1.00	ug/L	1					
Acenaphthylene	U	ND	0.200	1.00	ug/L	1					
Anthracene	U	ND	0.200	1.00	ug/L	1					
Benzo(a)anthracene	U	ND	0.200	1.00	ug/L	1					
Benzo(a)pyrene	U	ND	0.200	1.00	ug/L	1					
Benzo(b)fluoranthene	U	ND	0.200	1.00	ug/L	1					
Benzo(ghi)perylene	U	ND	0.200	1.00	ug/L	1					
Benzo(k)fluoranthene	U	ND	0.200	1.00	ug/L	1					
Dibenzo(a,h)anthracene	U	ND	0.200	1.00	ug/L	1					
Fluoranthene	U	ND	0.200	1.00	ug/L	1					
Fluorene	U	ND	0.200	1.00	ug/L	1					
Indeno(1,2,3-cd)pyrene	U	ND	0.200	1.00	ug/L	1					
Naphthalene	U	ND	0.300	1.00	ug/L	1					
Phenanthrene	U	ND	0.200	1.00	ug/L	1					
Pyrene	U	ND	0.300	1.00	ug/L	1					
Volatile Organics Federal											
5030B/8260B BTEX in Liquid Federal "As Received"											
Benzene	U	ND	0.300	1.00	ug/L	1	ACJ	03/21/09	0309	852950	2
Ethylbenzene	U	ND	0.250	1.00	ug/L	1					
Toluene	U	ND	0.250	1.00	ug/L	1					
Xylenes (total)	U	ND	0.600	1.00	ug/L	1					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C BNA Liq. Prep-8270 Analysis Fed	TXA2	03/17/09	2252	851276

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8270C	
2	SW846 8260B	

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4F46
Sample ID: 226139017

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
2-Fluorobiphenyl	3510/8270 PAH Extend list Liquid "As Received"	37.5 ug/L	50.0	75	(39%-100%)
Nitrobenzene-d5	3510/8270 PAH Extend list Liquid "As Received"	41.6 ug/L	50.0	83	(47%-107%)
p-Terphenyl-d14	3510/8270 PAH Extend list Liquid "As Received"	46.7 ug/L	50.0	93	(43%-123%)
1,2-Dichloroethane-d4	5030B/8260B BTEX in Liquid Federal "As Received"	51.7 ug/L	50.0	103	(67%-126%)
[illegible]ofluorobenzene	5030B/8260B BTEX in Liquid Federal "As Received"	54.6 ug/L	50.0	109	(76%-121%)
Toluene-d8	5030B/8260B BTEX in Liquid Federal "As Received"	46.2 ug/L	50.0	92	(77%-128%)

Notes:
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** Analyte is a surrogate compound
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> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4F46
Sample ID: 226139017

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded

The above sample is reported on an "as received" basis.
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Valerie Davis
Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)

Client Sample ID: 7J4F76
Sample ID: 226139016
Matrix: Water
Collect Date: 12-MAR-09 10:05
Receive Date: 13-MAR-09
Collector: Client

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Semi-volatile Mass spec Organics Federal											
3510/8270 PAH Extend list Liquid "As Received"											
2-Chloronaphthalene	U	ND	0.368	1.05	ug/L	1	JMB3	03/18/09	1726	851278	1
2-Methylnaphthalene	U	ND	0.316	1.05	ug/L	1					
Acenaphthene	U	ND	0.326	1.05	ug/L	1					
Acenaphthylene	U	ND	0.211	1.05	ug/L	1					
acene	U	ND	0.211	1.05	ug/L	1					
(a)anthracene	U	ND	0.211	1.05	ug/L	1					
Benzo(a)pyrene	U	ND	0.211	1.05	ug/L	1					
Benzo(b)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Benzo(ghi)perylene	U	ND	0.211	1.05	ug/L	1					
Benzo(k)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Dibenzo(a,h)anthracene	U	ND	0.211	1.05	ug/L	1					
Fluoranthene	U	ND	0.211	1.05	ug/L	1					
Fluorene	U	ND	0.211	1.05	ug/L	1					
Indeno(1,2,3-cd)pyrene	U	ND	0.211	1.05	ug/L	1					
Naphthalene	J	0.316	0.316	1.05	ug/L	1					
Phenanthrene	U	ND	0.211	1.05	ug/L	1					
Pyrene	U	ND	0.316	1.05	ug/L	1					
Volatile Organics Federal											
5030B/8260B BTEX in Liquid Federal "As Received"											
Benzene	U	ND	0.300	1.00	ug/L	1	ACJ	03/21/09	0242	852950	2
Ethylbenzene	U	ND	0.250	1.00	ug/L	1					
Toluene	U	ND	0.250	1.00	ug/L	1					
Xylenes (total)	U	ND	0.600	1.00	ug/L	1					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C BNA Liq. Prep-8270 Analysis Fed	TXA2	03/17/09	2252	851276

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8270C	
2	SW846 8260B	

ogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)

Client Sample ID: 7J4F76
Sample ID: 226139016

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
2-Fluorobiphenyl	3510/8270 PAH Extend list Liquid "As Received"	40.8 ug/L	52.6	78	(39%-100%)
Nitrobenzene-d5	3510/8270 PAH Extend list Liquid "As Received"	44.9 ug/L	52.6	85	(47%-107%)
p-Terphenyl-d14	3510/8270 PAH Extend list Liquid "As Received"	46.6 ug/L	52.6	89	(43%-123%)
1,2-Dichloroethane-d4	5030B/8260B BTEX in Liquid Federal "As Received"	51.1 ug/L	50.0	102	(67%-126%)
Bromofluorobenzene	5030B/8260B BTEX in Liquid Federal "As Received"	55.1 ug/L	50.0	110	(76%-121%)
Toluene-d8	5030B/8260B BTEX in Liquid Federal "As Received"	46.4 ug/L	50.0	93	(77%-128%)

Notes:
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B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4F76
Sample ID: 226139016

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded

The above sample is reported on an "as received" basis.
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Valerie Davis
Reviewed by

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)

Client Sample ID: 7J4G76
Sample ID: 226139014
Matrix: Water
Collect Date: 11-MAR-09 13:50
Receive Date: 13-MAR-09
Collector: Client

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Semi-volatile Mass spec Organics Federal											
3510/8270 PAH Extend list Liquid "As Received"											
2-Chloronaphthalene	U	ND	0.340	0.971	ug/L	1	JMB3	03/18/09	1644	851278	1
2-Methylnaphthalene	U	ND	0.291	0.971	ug/L	1					
Acenaphthene	U	ND	0.301	0.971	ug/L	1					
Acenaphthylene	U	ND	0.194	0.971	ug/L	1					
Anthracene	U	ND	0.194	0.971	ug/L	1					
Benzo(a)anthracene	U	ND	0.194	0.971	ug/L	1					
Benzo(a)pyrene	U	ND	0.194	0.971	ug/L	1					
Benzo(b)fluoranthene	U	ND	0.194	0.971	ug/L	1					
Benzo(ghi)perylene	U	ND	0.194	0.971	ug/L	1					
Benzo(k)fluoranthene	U	ND	0.194	0.971	ug/L	1					
Dibenzo(a,h)anthracene	U	ND	0.194	0.971	ug/L	1					
Fluoranthene	U	ND	0.194	0.971	ug/L	1					
Fluorene	U	ND	0.194	0.971	ug/L	1					
Indeno(1,2,3-cd)pyrene	U	ND	0.194	0.971	ug/L	1					
Naphthalene	U	ND	0.291	0.971	ug/L	1					
Phenanthrene	U	ND	0.194	0.971	ug/L	1					
Pyrene	U	ND	0.291	0.971	ug/L	1					
Volatile Organics Federal											
5030B/8260B BTEX in Liquid Federal "As Received"											
Benzene	U	ND	0.300	1.00	ug/L	1	ACJ	03/21/09	0148	852950	2
Ethylbenzene	U	ND	0.250	1.00	ug/L	1					
Toluene	U	ND	0.250	1.00	ug/L	1					
Xylenes (total)	U	ND	0.600	1.00	ug/L	1					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C BNA Liq. Prep-8270 Analysis Fed	TXA2	03/17/09	2252	851276

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8270C	
2	SW846 8260B	

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)

Client Sample ID: 7J4G76
Sample ID: 226139014

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
2-Fluorobiphenyl	3510/8270 PAH Extend list Liquid "As Received"	37.0 ug/L	48.5	76	(39%-100%)
Nitrobenzene-d5	3510/8270 PAH Extend list Liquid "As Received"	41.5 ug/L	48.5	86	(47%-107%)
p-Terphenyl-d14	3510/8270 PAH Extend list Liquid "As Received"	42.3 ug/L	48.5	87	(43%-123%)
1,2-Dichloroethane-d4	5030B/8260B BTEX in Liquid Federal "As Received"	50.8 ug/L	50.0	102	(67%-126%)
4-Bromofluorobenzene	5030B/8260B BTEX in Liquid Federal "As Received"	54.3 ug/L	50.0	109	(76%-121%)
Toluene-d8	5030B/8260B BTEX in Liquid Federal "As Received"	45.5 ug/L	50.0	91	(77%-128%)

Notes:
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E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4G76
Sample ID: 226139014

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded

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Valerie Davis
Reviewed by

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2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4H76
Sample ID: 226139013
Matrix: Water
Collect Date: 11-MAR-09 11:40
Receive Date: 13-MAR-09
Collector: Client

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Semi-volatile Mass spec Organics Federal											
3510/8270 PAH Extend list Liquid "As Received"											
2-Chloronaphthalene	U	ND	0.368	1.05	ug/L	1	JMB3	03/18/09	1623	851278	1
2-Methylnaphthalene	U	ND	0.316	1.05	ug/L	1					
Acenaphthene	U	ND	0.326	1.05	ug/L	1					
Acenaphthylene	U	ND	0.211	1.05	ug/L	1					
[illegible]acene	U	ND	0.211	1.05	ug/L	1					
[illegible](a)anthracene	U	ND	0.211	1.05	ug/L	1					
Benzo(a)pyrene	U	ND	0.211	1.05	ug/L	1					
Benzo(b)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Benzo(ghi)perylene	U	ND	0.211	1.05	ug/L	1					
Benzo(k)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Dibenzo(a,h)anthracene	U	ND	0.211	1.05	ug/L	1					
Fluoranthene	U	ND	0.211	1.05	ug/L	1					
Fluorene	U	ND	0.211	1.05	ug/L	1					
Indeno(1,2,3-cd)pyrene	U	ND	0.211	1.05	ug/L	1					
Naphthalene	U	ND	0.316	1.05	ug/L	1					
Phenanthrene	U	ND	0.211	1.05	ug/L	1					
Pyrene	U	ND	0.316	1.05	ug/L	1					
Volatile Organics Federal											
5030B/8260B BTEX in Liquid Federal "As Received"											
Benzene	U	ND	0.300	1.00	ug/L	1	ACJ	03/21/09	0121	852950	2
Ethylbenzene	U	ND	0.250	1.00	ug/L	1					
Toluene	U	ND	0.250	1.00	ug/L	1					
Xylenes (total)	U	ND	0.600	1.00	ug/L	1					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C BNA Liq. Prep-8270 Analysis Fed	TXA2	03/17/09	2252	851276

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8270C	
2	SW846 8260B	

[illegible]ogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)

Client Sample ID: 7J4H76
Sample ID: 226139013

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
2-Fluorobiphenyl	3510/8270 PAH Extend list Liquid "As Received"	37.2 ug/L	52.6	71	(39%-100%)
Nitrobenzene-d5	3510/8270 PAH Extend list Liquid "As Received"	41.0 ug/L	52.6	78	(47%-107%)
p-Terphenyl-d14	3510/8270 PAH Extend list Liquid "As Received"	43.5 ug/L	52.6	83	(43%-123%)
1,2-Dichloroethane-d4	5030B/8260B BTEX in Liquid Federal "As Received"	52.1 ug/L	50.0	104	(67%-126%)
Bromofluorobenzene	5030B/8260B BTEX in Liquid Federal "As Received"	55.2 ug/L	50.0	110	(76%-121%)
Toluene-d8	5030B/8260B BTEX in Liquid Federal "As Received"	46.6 ug/L	50.0	93	(77%-128%)

Notes:
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4H76
Sample ID: 226139013

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded

The above sample is reported on an "as received" basis.
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

, data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Valerie Davis

Reviewed by

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4J76
Sample ID: 226139012
Matrix: Water
Collect Date: 11-MAR-09 09:50
Receive Date: 13-MAR-09
Collector: Client

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Semi-volatile Mass spec Organics Federal											
3510/8270 PAH Extend list Liquid "As Received"											
2-Chloronaphthalene	U	ND	0.368	1.05	ug/L	1	JMB3	03/18/09	1602	851278	1
2-Methylnaphthalene		9.86	0.316	1.05	ug/L	1					
Acenaphthene	U	ND	0.326	1.05	ug/L	1					
Acenaphthylene	U	ND	0.211	1.05	ug/L	1					
Anthracene	U	ND	0.211	1.05	ug/L	1					
Benzo(a)anthracene	U	ND	0.211	1.05	ug/L	1					
Benzo(a)pyrene	U	ND	0.211	1.05	ug/L	1					
Benzo(b)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Benzo(ghi)perylene	U	ND	0.211	1.05	ug/L	1					
Benzo(k)fluoranthene	U	ND	0.211	1.05	ug/L	1					
Dibenzo(a,h)anthracene	U	ND	0.211	1.05	ug/L	1					
Fluoranthene	U	ND	0.211	1.05	ug/L	1					
Fluorene	J	0.787	0.211	1.05	ug/L	1					
Indeno(1,2,3-cd)pyrene	U	ND	0.211	1.05	ug/L	1					
Naphthalene		6.46	0.316	1.05	ug/L	1					
Phenanthrene	J	0.832	0.211	1.05	ug/L	1					
Pyrene	U	ND	0.316	1.05	ug/L	1					
Volatile Organics Federal											
5030B/8260B BTEX in Liquid Federal "As Received"											
Benzene	U	ND	0.300	1.00	ug/L	1	ACJ	03/21/09	0054	852950	2
Ethylbenzene	U	ND	0.250	1.00	ug/L	1					
Toluene	U	ND	0.250	1.00	ug/L	1					
Xylenes (total)	U	ND	0.600	1.00	ug/L	1					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C BNA Liq. Prep-8270 Analysis Fed	TXA2	03/17/09	2252	851276

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8270C	
2	SW846 8260B	

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson
Project: SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)

Client Sample ID: 7J4J76
Sample ID: 226139012

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
2-Fluorobiphenyl	3510/8270 PAH Extend list Liquid "As Received"	41.0 ug/L	52.6	78	(39%-100%)
Nitrobenzene-d5	3510/8270 PAH Extend list Liquid "As Received"	46.2 ug/L	52.6	88	(47%-107%)
p-Terphenyl-d14	3510/8270 PAH Extend list Liquid "As Received"	43.7 ug/L	52.6	83	(43%-123%)
1,2-Dichloroethane-d4	5030B/8260B BTEX in Liquid Federal "As Received"	50.6 ug/L	50.0	101	(67%-126%)
4-Bromofluorobenzene	5030B/8260B BTEX in Liquid Federal "As Received"	53.0 ug/L	50.0	106	(76%-121%)
Toluene-d8	5030B/8260B BTEX in Liquid Federal "As Received"	45.7 ug/L	50.0	91	(77%-128%)

Notes:
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B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
M Matrix Related Failure
N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: 7J4176
Sample ID: 226139012

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded

The above sample is reported on an "as received" basis.
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Valerie Davis

Reviewed by

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: TB0610
Sample ID: 226139001
Matrix: Water
Collect Date: 10-MAR-09 07:00
Receive Date: 13-MAR-09
Collector: Client

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Volatile Organics Federal											
5030B/8260B BTEX in Liquid Federal "As Received"											
Benzene	U	ND	0.300	1.00	ug/L	1	ACJ	03/20/09	1956	852950	1
Ethylbenzene	U	ND	0.250	1.00	ug/L	1					
Toluene	U	ND	0.250	1.00	ug/L	1					
Xylenes (total)	U	ND	0.600	1.00	ug/L	1					

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 8260B	

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	5030B/8260B BTEX in Liquid Federal "As Received"	54.9 ug/L	50.0	110	(67%-126%)
Bromofluorobenzene	5030B/8260B BTEX in Liquid Federal "As Received"	54.0 ug/L	50.0	108	(76%-121%)
Toluene-d8	5030B/8260B BTEX in Liquid Federal "As Received"	46.5 ug/L	50.0	93	(77%-128%)

Notes:
The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound
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B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
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D Results are reported from a diluted aliquot of the sample
E Organics--Concentration of the target analyte exceeds the instrument calibration range
F Estimated Value
H Analytical holding time was exceeded
J Value is estimated
N Matrix Related Failure
Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC).

Certificate of Analysis

Company : SAIC
Address : 151 Lafayette Drive
Oak Ridge, Tennessee 37831

Report Date: April 14, 2009

Contact: Ms. Marie Simpson

Project: **SWMU 27F/Bldg 1290 Ft. Stewart, GA (06-6199-34-5831-400)**

Client Sample ID: TB0610
Sample ID: 226139001

Project: SAIC10600
Client ID: SAIC106

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

Quantitation is based on nearest internal standard response factor
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded

The above sample is reported on an "as received" basis.
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Valerie Davis
Reviewed by

An Employee-Owned Company
Science Applications International Corporation
151 Lafayette Dr. Oak Ridge, Tennessee 37830 (865) 481-4600

CHAIN OF CUSTODY RECORD

COC NO.: 27F031209

PROJECT NAME: Fort Stewart SWMU-27F

PROJECT NUMBER: 06-6199-04-5831-400 (34)

PROJECT MANAGER: Jeff Longaker

Sampler (Signature): Wayne H. Parker (Printed Name): WAYNE H. PARKER

226/39% REQUESTED PARAMETERS

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29417

PHONE NO: (843) 556-8171

Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	No. of Bottles/ Vials	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
TB0610	03/10/09	0700	WATER	2		2		
7J4D76	03/10/09	1545	WATER	2	2	4		
7J4676	03/10/09	1135	WATER	2	2	4		
7J4476	03/11/09	0900	WATER	2	2	4		
IV-53 J4426	03/11/09	0900	WATER	2	2	4		
IV-53 J4A76	03/11/09	1030	WATER	2	2	4		
IV-53 J4576	03/11/09	1220	WATER	2	2	4		
IV-53 J4376	03/11/09	1350	WATER	2	2	4		
7J4E76	03/10/09	1030	WATER	2	2	4		
7J4776	03/10/09	1320	WATER	2	2	4		
7J4176	03/10/09	1530	WATER	2	2	4		
7J4J76	03/11/09	0950	WATER	2	2	4		
7J4H76	03/11/09	1140	WATER	2	2	4		

RELINQUISHED BY: Wayne H. Parker	Date/Time: 03/12/09 1400	RECEIVED BY: [illegible]	Date/Time: 3/13/09 10:00	TOTAL NUMBER OF CONTAINERS:	Cooler Temperature:
COMPANY NAME: SAIC		COMPANY NAME: GEL		Cooler ID:	FEDEX NUMBER:
RECEIVED BY: FEDEX	Date/Time: 03/12/09 1400	RELINQUISHED BY:	Date/Time:		
COMPANY NAME: FEDEX		COMPANY NAME:			
RELINQUISHED BY:	Date/Time:	RECEIVED BY:	Date/Time:		
COMPANY NAME:		COMPANY NAME:			

SAIC An Employee-Owned Company
Science Applications International Corporation
151 Lafayette Dr. Oak Ridge, Tennessee 37830 (865) 481-4600

CHAIN OF CUSTODY RECORD

COC NO.: 27F031209

PROJECT NAME: Fort Stewart SWMU-27F

PROJECT NUMBER: 06-6199-04-5831-400 34

PROJECT MANAGER: Jeff Longaker

Sampler (Signature): Wayne H. Parker (Printed Name): WAYNE H. PARKER

LABORATORY NAME: General Engineering Laboratory

LABORATORY ADDRESS: 2040 Savage Road, Charleston, SC 29417

PHONE NO: (843) 556-8171

Sample ID	Date Collected	Time Collected	Matrix	BTEX	PAH	No. of Bottles/ Vials:	OVA SCREENING	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
7J4G76	03/11/09	1350	WATER	2	2	4		
7J4976	03/12/09	0915	WATER	2	2	4		
7J4F76	03/12/09	1005	WATER	2	2	4		
7J4F46	03/12/09	1040	WATER	2	2	4		

IV-54

REQUESTED PARAMETERS

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS: 66	Cooler Temperature:
Wayne H. Parker	03/12/09	[illegible]	3/13/09	Cooler ID:	FEDEX NUMBER:
COMPANY NAME: SAIC	1400	COMPANY NAME: GER	1000		
RECEIVED BY: FEDEX	Date/Time 03/12/09	RELINQUISHED BY:	Date/Time		
COMPANY NAME: FEDEX	1400	COMPANY NAME:			
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time		
COMPANY NA		COMPANY NAME:			