Imagine the result

Fort Stewart, Georgia

SWMU 26 Nineteenth Corrective Action Plan Progress Report

Former 724th Tanker Purging Station

Fort Stewart, Georgia
EPA ID # GA9 210 020 872

March 2015 (Revised October 16, 2015)

ARCADIS
Infrastructure · Water · Environment · Buildings

ARCADIS

Eric Killenbeck
Technical Expert

Scott Bostian, PE
Senior Environmental Engineer

Shelley Gibbons
Project Manager

SWMU 26
Nineteenth Corrective Action Plan Progress Report

Former 724th Tanker Purging Station

Prepared for:
U.S. Army Environmental Command

Prepared by:
ARCADIS
801 Corporate Center Drive
Suite 300
Raleigh
North Carolina 27607
Tel 919.854.1282
Fax 919.854.5448

Our Ref.:
GP08HAFS.2013. N26RP

Revised October 16, 2015

GEORGIA REGISTERED PROFESSIONAL ENGINEERING CERTIFICATION

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

Name: Scott Bostian, P.E.

License Number: 026133

Expiration Date: December 31, 2016

Scott Bostian, P.E.

10/29/15

Date

Tables

Figures

Appendices

List of Acronyms

ARCADIS	ARCADIS U.S., Inc.
AST	Above Ground Storage Tank
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
CAP	Corrective Action Plan
DO	Dissolved oxygen
DPT	Direct Push Technology
ft	feet
ft bgs	feet below ground surface
ft/ft	feet per foot
GAEPD	Georgia Environmental Protection Division
JP-4	#4 Jet Propulsion Fuel
MCLs	USEPA Maximum Contaminant Levels
µg/kg	Micrograms per kilogram
µg/L	Micrograms per Liter
µS/cm	Micro Siemens per centimeter
MOGAS	Motor Gasoline
MTBE	Methyl tert-butyl ether
NELAC	National Environmental Laboratory Accreditation Conference
ORP	oxidation reduction potential
O&M	Operation and Maintenance
PBC	Performance Based Contract
PPE	Personal Protective Equipment
psi	Pounds per square inch
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment

List of Acronyms

RFI	RCRA Facility Investigation
RG	Remediation goal
RSL	Regional Screening Level
SAIC	Science Application International Corporation
scfh	Standard cubic feet per hour
SCFM	Standard cubic feet per minute
SWMU	Solid Waste Management Unit
TPS	Former 724th Tanker Purging Station
USAEC	United States Army Environmental Command
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
yd^3	Cubic yards

1. Introduction

ARCADIS U.S. Inc. (ARCADIS) has been retained by the United States Army Environmental Command (USAEC) to perform investigation and remediation activities at Fort Stewart in accordance with the requirements of the Performance Based Contract (PBC) number W91ZLK-05-D-0015. Fort Stewart, originally known as Camp Stewart, was established in June 1940 as an anti-aircraft artillery training center. The current primary mission for Fort Stewart is a training and maneuver area, providing tank, field artillery, helicopter gunnery, and small arms training for regular Army and National Guard units. The 24th Infantry Division, which was reflagged as the 3rd Infantry Division in May 1996, was permanently stationed at Fort Stewart in 1975.

Fort Stewart is located in portions of Liberty, Bryan, Long, Tattnall, and Evans Counties, Georgia, approximately 40 miles west-southwest of Savannah, Georgia. The cantonment, or garrison area, is located within the Liberty County portion on the southern boundary of the reservation. Hinesville, Georgia, is the nearest city to the garrison area and is located immediately outside of the reservation boundary. Figure 1-1 shows the location of Fort Stewart and the Site.

This Nineteenth Corrective Action Plan (CAP) Progress Report provides a summary of the 2013 performance monitoring events and biosparge system operation and maintenance (O&M) in accordance with the current approved CAP Addendum for the Former 724th Tanker Purging Station (TPS), Solid Waste Management Unit (SWMU) 26 (Site) (ARCADIS 2010). Corrective action activities at SWMU 26 are performed in accordance with Section III of the Hazardous Waste Facility Permit No. HW-045 (S), issued by the Georgia Environmental Protection Division (GAEPD) in August 2007.

1.1 Site Location and History

The Former 724th TPS was used to clean tanker trailers that carried diesel, jet propulsion (JP-4) fuel, and motor gasoline (MOGAS). The Former 724th TPS is located in the western cantonment area in the 1800 block of McFarland Avenue, at the western end of the fuel truck parking area. The Former 724th TPS occupied an area approximately 30 feet by 50 feet (Rust 1996) located between the chain-link fence at the parking area (western end) and the wooded area approximately 25 feet to the west (Figure 1-2). The former Site facilities included an underground waste oil tank and oil/water separator, an aboveground storage tank (AST) that received water after oil/water phase separation, and an underground pump with surface access and pumping controls for pumping water into the AST.

The Former 724th TPS was constructed in 1982 and taken out of service in March 1996. During August 1996, the purging station was dismantled, the underground facilities were removed, and approximately 525 cubic yards (yd^3) of impacted soil were excavated and replaced with clean backfill. Soil was excavated to the water table at the former facility (approximate depth of 3 to 10 feet) and to a depth of 6 inches in the adjacent ditch. All associated equipment, above and below ground, was removed from the Site during removal activities.

1.2 Site Geology

The Site geology at SWMU 26 is characterized by an interbedded series of sands and clay, with the sandy units ranging from clayey sand to sand with a low percentage (<10 percent) of silt and clay. The clay units, in general, are comprised of medium to high plasticity clay with a low percentage of sand-sized grains. The lithologies described at SWMU 26 are consistent with those anticipated for this region of the Coastal Plain. Three cross-sections have been prepared for the Site. The locations of the cross sections are shown on Figure 1-3. Cross-section A-A' originates at the edge of the biosparge system, at monitoring well MW-32, and trends to the east-northeast to soil boring SB-41 (Figure 1-4). Interbedded sands and clay extend to approximately 25 feet below ground surface (ft bgs) and clay and sandy clay units begin at approximately 25 ft bgs. In the western portion of the cross section, a soft clay calcareous marine shell-bearing unit was identified between approximately 25 to 30 ft bgs. This unit was underlain by a firm, sandy clay unit. Cross-section B-B' originates northwest of the December 2010 excavation and MW-15R and extends southeast to approximately 30 feet (ft) north of MW-11 (Figure 1-5). Interbedded sand and clay units extend to a depth of approximately 28 ft bgs. Cross-section C-C' originates at monitoring well MW-55 and trends south to monitoring well MW-18 (Figure 1-6). Interbedded sand and clay units extend to a depth of approximately 24 ft bgs. In the southern portion of the cross section, a soft clay calcareous marine shell-bearing unit was identified between approximately 25 to 30 ft bgs. This unit was underlain by a firm, sandy clay unit.

The cross sections were constructed using available boring logs presented in the historical CAP Progress Reports. Boring logs were used to create the cross sections from monitor wells, soil borings, temporary piezometers, and injection wells that have been installed across the Site.

1.3 Report Organization

This report contains seven sections, including the introduction:

§ Section 1: Introduction – summarizes the Site location and provides a brief history.

§ Section 2: Previous Investigations and Corrective Actions – provides a brief summary of the previous investigations and corrective actions conducted at the Site.

§ Section 3: Work Accomplished – summarizes the corrective action activities conducted during the 2013 reporting period.

§ Section 4: Results and Analysis of Trends – summarizes the 2013 groundwater monitoring results.

§ Section 5: Progress Monitoring and Reporting

§ Section 6: Conclusions and Recommendations

§ Section 7: References – lists the references utilized to prepare this Report.

2. Previous Investigations and Corrective Actions

A detailed summary of previous investigations and corrective actions is provided in the Phase II Resource Conservation Recovery Act (RCRA) Facility Investigation (RFI) (Science Application International Corporation [SAIC] 1998), the CAP (SAIC 2000), and the Thirteenth CAP Progress Report (SAIC 2009). A brief summary is provided below.

2.1 RCRA Facility Assessment

A RCRA Facility Assessment (RFA) was submitted to the GAEPD in June 1990 that listed 24 SWMUs, including the then active 724th TPS, as requiring further investigation (Geraghty and Miller 1992).

2.2 Phase I RFI

A Phase I RFI was initiated in 1993 in response to the RFA submittal. The objective of the Phase I RFI was to determine if releases to the environment had occurred from any of the 24 identified SWMUs, including potential contamination due to fuel leakage at the Former 724th TPS Site. The Phase I RFI was completed in April 1996. Analytical results from soil sampling conducted during the Phase I RFI at the Former 724th TPS indicated fuel product and solvent impacts in the soil (SAIC 1998). During August 1996, the TPS was dismantled, the underground facilities were removed, and approximately 525 yds^3 of impacted soil were excavated and replaced with clean backfill. The Site was then reseeded (SAIC 1998).

2.3 Phase II RFI

Between 1997 and 1998, a Phase II RFI was conducted to delineate the horizontal and vertical extent of impacts and to determine if corrective action was necessary. During the investigation, free phase petroleum product was discovered at well MW-2 in the center of the former facility. Free product recovery was initiated to remove the product. Benzene, toluene, ethylbenzene, and xylene (BTEX) compounds were detected above the United States Environmental Protection Agency (USEPA) maximum contaminant levels (MCLs) in the shallow aquifer near the source. Remedial levels were established for BTEX in groundwater and soil during the Phase II RFI. The remedial levels for groundwater are based on MCLs. The groundwater remedial level for benzene is 5 micrograms per liter (µg/L), toluene is 1,000 µg/L, ethylbenzene is 700 µg/L, and xylenes are 10,000 µg/L. The soil remedial levels are based on leaching

from soil to groundwater at levels exceeding MCLs. The soil remedial level for benzene is 20 micrograms per kilogram (µg/kg), toluene is 4,200 µg/kg, ethylbenzene is 3,100 µg/kg, and xylenes are 31,700 µg/kg (SAIC 1998).

2.4 PHOSter® II Enhanced Bioremediation and Source Area Excavation

Due to the presence of free product and BTEX detections in groundwater above MCLs, a CAP was developed for a PHOSter® II enhanced bioremediation system. The PHOSter® II enhanced bioremediation system began operation in February 2000 and was expanded in March 2000 (SAIC 2009). Despite the PHOSter® injections, the lateral area of the groundwater plume continued to increase. Based on groundwater sample results, it was determined that a potential source area still existed inside the motor pool, where the CAP indicated the highest benzene concentration in soil was located.

A second soil excavation was conducted in January 2001 to remove impacted soil not addressed during the 1996 excavation. During the excavation, a pipe that contained product and product-saturated soil was discovered near MW-02. Closure records for the Former 724th facilities did not indicate the presence of remaining underground piping. Post-excavation confirmatory sampling indicated contamination present above remedial levels remained at the bottom of the excavation and along the northwest wall of the excavation (SAIC 2009).

Additional PHOSter® II injection wells were installed in March 2001 to replace wells destroyed during excavation activities. A final system expansion was completed in April 2001. Injections continued until January 2002, when the PHOSter® II trailer was taken out of service after 2 years of operation (SAIC 2009). Although the groundwater concentrations were decreasing, there was concern that the impacts remaining in the clay layer at the bottom of the 2001 excavation were potentially a continuing source of groundwater contamination. Between 2002 and 2007, additional soil investigations were conducted to evaluate the impacts remaining within the clay at the source area (the bottom of the excavation).

2.5 Corrective Action Plan Addendum

In May 2009, a CAP Addendum was submitted to address residual impacts in the soil and deep groundwater at SWMU 26. As part of the addendum, an excavation of soil impacts remaining in the clay layer in the source area was recommended. In groundwater, benzene was the only constituent above the remedial levels. The

highest detections were in deep groundwater downgradient of the source area. To expedite the attenuation of benzene in deep groundwater, a biosparge system was recommended (ARCADIS 2010). The GAEPD approved the CAP Addendum in April 2010 (GAEPD 2010).

2.6 DPT Investigation

In November 2009, six direct push technology (DPT) points were advanced in the vicinity of the source area (SB-58 through SB-63). The DPT investigation was conducted to confirm results from previous soil investigations, to characterize the soil prior to removal, and to better define the limits of a proposed excavation to remove the remaining impacted soil in the source area. During the investigation, two samples from each boring were collected at intervals determined with field screening equipment and one sample was collected from the bottom of each boring. Samples were transported via courier to Shealy Laboratory and analyzed for volatile organic compounds (VOCs) by USEPA Method 8260B.

Soil borings SB-60 and SB-61 were collected within the proposed excavation area. Soil borings SB-58, SB-59, SB-62, and SB-63 were collected just outside the proposed excavation area to confirm the proposed excavation extent. Three soil samples were collected from each boring. The samples collected from the soil borings outside of the proposed excavation limits were all below the Site remedial action levels for soil. The benzene and ethylbenzene concentrations in soil borings SB-60 and SB- 61, which were collected within the proposed excavation limits, exceeded the Site remedial levels of 20 µg/kg and 3,100 µg/kg, respectively. The sample from soil boring SB-60 taken at the depth interval 11 to 12 ft bgs also exceeded the Site remedial level of 31,700 µg/kg for xylenes.

2.7 Corrective Actions Conducted in 2010 - 2011

In November 2011, the Sixteenth CAP Progress Report was submitted. The report summarized the corrective action activities proposed in the CAP Addendum (ARCADIS 2010) including excavation, a biosparge pilot test, and the installation of the biosparge system. Site wide groundwater level measurements collected in June 2010 and April 2011 and data from samples collected in April 2011 were included in the report.

The excavation was conducted in December 2010 and January 2011. The top 6 ft of soil was visually inspected, segregated, and stockpiled to be reused as backfill.

Groundwater was encountered at approximately 11.5 to 12 ft bgs. The soil was excavated to approximately 12 ft bgs. Several large concrete structures (presumably related to the former tanker purging equipment) were unearthed at depths of 6 to 12 ft bgs. The concrete structures were removed and transported off-site for disposal. Soils surrounding these structures were impacted based on visual and olfactory observations. The visually impacted soils were removed. These soils are presumed to have been the continuing source area of the recalcitrant groundwater impacts. A total of 6,092 tons of impacted soil was taken off-site for disposal. Confirmation samples collected from the sidewalls of the excavation were below the remedial objectives identified in the CAP Addendum. Confirmation samples collected from the base of the excavation reported concentrations of BTEX above the remedial objectives toward the center and southwest corner of the excavation. Calcium peroxide granules were placed at the bottom of the excavation as an *in-situ* soil additive to promote oxidation in the subsurface and increase the natural bioremediation process for any residual impacts remaining in the soil. A total of 2,000 pounds of calcium peroxide was placed in the base of the excavation with a focus on the center and southwest corners. The calcium peroxide was mixed with the base soils using the track-hoe bucket. Prior to the excavation, monitor wells MW-06, MW08, MW-15, MW-24, MW-25, MW-27, MW-28, and MW-36 located within the excavation limits were abandoned. Following the excavation, monitor wells MW-06R, MW-15R, MW-24R, MW-25R, MW-28R, and MW-36R were replaced and two new monitor wells, MW-58 and MW-59, were installed.

A Biosparge Pilot Test was conducted on October 26 and 27, 2010 to evaluate the injection flow rates, pressures, and overall effectiveness of biosparging at SWMU 26. The test was conducted using one injection well and twelve surrounding monitor wells. The twelve monitor wells were installed in clusters of three wells per cluster at distances of 5 to 20 ft from the injection well to monitor the radius of influence at various distances and depths. The pilot test confirmed that Biosparge is a viable technology for SWMU 26. Based on the results of the pilot test, a full scale design was developed including 17 injection wells which were screened within the known area of the benzene plume in the deep portion of the upper aquifer.

Prior to installation of the full scale system, baseline groundwater samples were collected in April 2011. No shallow wells exceeded the remedial level for benzene in April 2011. Deep monitor wells MW-38, MW-50, MW-54, and MW-55 exceeded the remedial level for benzene during the monitoring event. The full scale Biosparge system was installed in May and June 2011 and the system was started in June

2011. Groundwater monitoring is conducted on a semiannual basis to monitor the effectiveness of the Biosparge system.

2.8 Corrective Actions Conducted in June 2011 – April 2013

The Biosparge system continued to operate through April 2013. Site visits were conducted every 4 to 6 weeks to check on system status and make adjustments as necessary. During each operation and maintenance (O&M) event, a YSI 556 multiparameter system was used to collect readings of temperature, specific conductance, dissolved oxygen content (DO), pH, and oxidation reduction potential (ORP) in monitor wells.

In October 2011, flow meters were installed in-line at each injection well. Valves at each injection well were adjusted to control the flow going into each injection well as necessary to ensure coverage throughout the plume.

3. Work Accomplished During Reporting Period

3.1 Groundwater Sampling Events

During this reporting period, a semiannual groundwater monitoring event was conducted in April and October 2013. Groundwater sampling was performed using low-flow, or micropurge, procedures in accordance with Groundwater Sampling Operating Procedure, Number SESDPROC-301-R3 (USEPA 2013). Following each sampling event, the samples were transported via courier in properly cooled and sealed containers to Shealy Laboratory in West Columbia, South Carolina (National Environmental Laboratory Accreditation Conference [NELAC] No. E87653). Laboratory analytical data packages from each event are included in Appendix A.

The hydrology at SWMU 26 has been characterized by groundwater monitor wells installed across the Site at two different depth intervals. The total depth in shallow monitor wells ranges from 12 to 16 ft bgs, while the total depth in deep monitor wells ranges from 21 to 41 ft bgs. Potentiometric maps for both the shallow and deeper intervals of the surficial aquifer for April 2013 are included as Figures 3-1 and 3-2 and for October 2013 are included as Figures 3-3 and 3-4 respectively.

3.1.1 Groundwater Sampling Events

Prior to initiating the groundwater sampling events, site-wide groundwater level measurements were collected from existing monitor wells. The groundwater level measurements are summarized in Table 3-1. Groundwater samples were collected from the select monitor wells listed in the sample matrix (Table 3-2) and analyzed for BTEX and methyl tert-butyl ether (MTBE) by USEPA Method 8260B. The October 2013 samples were also analyzed for Naphthalene. A summary of the April and October 2013 analytical data is included in Table 3-3 and presented in Figures 3-5 through 3-10. Field data collected from the groundwater sampling events are presented in Table 3-4. Sampling field data sheets are included in Appendix F.

3.1.2 Data QA/QC and Validation

The field QA/QC samples included trip blanks and field duplicates. One trip blank was collected for each sample cooler transporting samples for VOC analysis. A field duplicate sample is a second sample collected at the same location as the original sample. A field duplicate was collected at a rate of one per twenty samples. Laboratory

quality assurance protocols included the performance of laboratory control samples and matrix spikes relating to method acceptance criteria.

The analytical data for groundwater samples collected at the Site were validated in accordance with the National Functional Guidelines. The complete results of the data quality evaluation are provided in Appendix B. The purpose of the data quality evaluation was to determine the reliability of the chemical analyses and the accuracy and precision of information acquired from the laboratory. Data quality was assessed through the review and evaluation of field sampling activities, quality control samples, and data associated with the chemical analytical results. The analytical data associated with the Site are considered quantitative and usable for the intended purpose.

3.1.3 Investigation Derived Waste

The waste generated from activities related to groundwater monitoring consisted of decontamination fluids, purge water, personal protective equipment (PPE), and general refuse (i.e. paper, plastic, etc.). Decontamination fluids and purge water were segregated in 55-gallon drums. The drums were characterized and transported off-site for disposal. All spent PPE was decontaminated if necessary and placed with the general refuse in dumpsters at Fort Stewart.

3.2 Operation and Maintenance

The Biosparge system operated throughout the reporting period. Site visits were conducted to check on system status and make adjustments as necessary on the following dates in 2013: January 30; March 27; April 24; June 5; July 22-23; August 28; October 8; December 4. O&M field logs are included in Appendix G.

During each O&M event, the pressure and air flow rate were recorded at each biosparge point and maintenance tasks including checking lubricants and filters were performed. A YSI 556 multiparameter system was used to collect readings of temperature, specific conductance, dissolved oxygen (DO) content, pH, and oxidation reduction potential (ORP) in monitor wells. Parameters were allowed to stabilize at each sampling interval for a minimum of ten minutes before readings were recorded. Equipment was rinsed with distilled water before being introduced to each well to prevent potential cross contamination. Rinse water was collected with absorbent rags and properly disposed of. Parameters collected during the O&M events are included in Table 3-5.

In October 2011, flow meters were installed in-line at each injection well. A summary of the flow measurements recorded during O&M events is included in Table 3-6. Valves at each injection well were adjusted to control the flow going into each injection well as necessary to ensure coverage throughout the plume.

3.3 Deviations from Corrective Action Plan

The biosparge system was operated in accordance with the approved CAP during 2014. The only notable deviation was biosparge point BSP-07, which was turned off due to high air flow and low pressure in 2012 and remains off. System data collection and groundwater sampling were conducted in accordance with the CAP and approved recommendations in subsequent reports.

3.4 Investigation Derived Waste

The waste generated from activities related to system operation and groundwater monitoring consisted of decontamination fluids, purge water, personal protective equipment (PPE), and general refuse (i.e. paper, plastic, etc.). The decontamination fluids and purge water were segregated in 55-gallon drums. The drums were characterized and transported off-site for disposal. All spent PPE was decontaminated if necessary and placed with the general refuse in dumpsters at Fort Stewart. Manifests for IDW disposal during the period are included in Appendix H.

3.5 Calculation of Remedial Goals for Naphthalene and MTBE

As directed by GAEPD in comments to the Seventeenth and Eighteenth CAP Progress Report, site-specific risk-based remediation goals (RGs) were calculated for both MTBE and naphthalene. Since groundwater is not used as a potable water supply nor is the Site developed at this time, the most likely exposure pathway is direct contact with groundwater by a hypothetical future construction worker. However, as directed by GAEPD, since all groundwater in Georgia is considered to be a potential source for drinking water, RGs were calculated for hypothetical future residents and commercial workers assuming groundwater were used as a potable water supply. Specifically, RGs for MTBE and naphthalene were calculated based on direct contact with groundwater (incidental ingestion, dermal absorption, and inhalation of vapors). Site-specific information was incorporated into the derivation of the RGs.

The site specific calculated RGs for a child resident for MTBE and naphthalene are 124 µg/L and 32 µg/L, respectively. The site specific calculated RGs for an adult resident

for MTBE and naphthalene are 59 µg/L and 7.2 µg/L, respectively. The site specific calculated RGs for a commercial worker for MTBE and naphthalene are 138 µg/L and 23 µg/L, respectively. Finally, the site specific calculated RGs for a construction worker for MTBE and naphthalene are 866 µg/L and 6.1 µg/L, respectively. Based on the above calculations, the recommended remedial goals for MTBE and naphthalene are 59 µg/L and 6.1 µg/L respectively. Information related to the calculation of the RGs is presented in Appendix D.

4. Results and Analysis of Trends and Performance

The Site data for the 2013 reporting period including the sampling results and the data from O&M events are presented below.

4.1 System O&M and Performance Data

During the reporting period, air flow rates in the individual sparge wells ranged from approximately 50 to 200 standard cubic feet per hour (scfh) (1 to 3 standard cubic feet per minute [scfm]). In October 2012, injection well BSP-07, which consistently manifested a flow rate of approximately 500 scfh, was shut off to focus air flow to the remaining injection wells. Injection well BSP-07 remained shut off during this reporting period. The pressure measured at the other individual well heads was approximately 8.5 to 13.0 psi, within the expected range for the air injection depth below the water table and Site lithology.

The field parameters indicate that the radius of influence is approximately 15 ft in most areas, which aligns with the radius used for design well placement. Notably, field parameters indicate low dissolved oxygen values in monitor wells located in the areas of highest impacts, where oxygen would be expected to be depleted at a much faster rate.

4.2 Groundwater Elevation Data

Potentiometric maps for both the shallow and deeper intervals of the surficial aquifer for April 2013 are included as Figures 3-1 and 3-2 and for October 2013 are included as Figures 3-3 and 3-4 respectively. Generally, the water table increased between October 2012 and April 2013 and decreased between April 2013 and October 2013. This is due to normal seasonal variations of the water table. The groundwater table increased an average of 3.4 ft in the shallow portion of the surficial aquifer and 4 ft in the deeper portion of the surficial aquifer between October 2012 and April 2013. Subsequently, the groundwater table decreased an average of 1.6 ft in the shallow portion of the surficial aquifer and 5 ft for the deeper portion of the surficial aquifer between April 2013 and October 2013.

Groundwater flow in the shallow portion of the surficial aquifer is to the west and southwest with an average gradient across the Site of 0.004 feet per foot (ft/ft) in April 2013 and 0.010 feet per foot (ft/ft) in October 2013. Consistent with historical monitoring events, the shallow potentiometric maps indicated a potentiometric low at

the former excavation areas around MW-15R. The April 2013 also indicate a slight potentiometric low at MW-12 and MW-13. The potentiometric map for the deeper wells in the surficial aquifer indicated a groundwater low at MW-38 and in the area of MW-36R. Based on the heterogeneous nature of the sand and semi-confining units at the Site, this feature was likely caused because the wells are screened in slightly different stratigraphic units reflecting the interbedded nature within the surficial aquifer. The characteristics noted on the potentiometric map for the deeper interval were consistent with previously reported groundwater elevations. Groundwater flow in this zone was variable across the site with flow generally to the south and southwest. The average horizontal hydraulic gradient for this zone was also 0.004 ft/ft in April 2013 and 0.010 ft/ft in October 2013.

4.3 Groundwater Analytical Results

Benzene was not detected above the site remedial level of 5 µg/L in any of the shallow monitoring wells during the April and October 2013 monitoring events. Benzene was detected in deep monitoring well MW-55 above the Site remedial level of 5 µg/L with a concentration of 13 µg/L. MTBE was added to the monitoring program in October 2011. During the April 2013 monitoring event, MTBE was detected in 17 shallow monitoring wells and 15 deep monitoring wells. Among the wells that exhibited MTBE detections, five shallow monitoring wells (MW-19, MW-32, MW-33, MW-40, and MW-51) and 11 deep monitoring wells (MW-23, MW-39, MW-42, MW-43, MW-50, MW-52, MW-53, MW-54, MW-55, MW-56, and MW-57) exceeded the Site remedial level of 14 µg/L for MTBE. The maximum MTBE concentration detected in shallow groundwater was 61 µg/L (MW-51) and the maximum MTBE concentration detected in deep groundwater was 210 µg/L (MW-54).

During the October 2013 monitoring event, MTBE was detected in 16 shallow and 16 deep monitoring wells. Among the wells that exhibited MTBE detections, two shallow monitoring wells (MW-21 and MW-33) and 10 deep monitoring wells (MW-39, MW-42, MW-43, MW-50, MW-52, MW-53, MW-54, MW-55, MW-56, and MW-57) exceeded the Site remedial level of 14 µg/L for MTBE. The maximum MTBE concentration detected in shallow groundwater was 46 µg/L (MW-33) and the maximum MTBE concentration detected in deep groundwater was 240 µg/L (MW-55). Naphthalene was added to the monitoring program in October 2013. Naphthalene was not detected in the deep groundwater monitoring wells and only detected in two of the shallow monitoring wells during the October 2013 monitoring event. Both monitoring wells MW-25R and MW-28R exceeded the tap water regional screening level (RSL) for naphthalene (0.17 µg/L), with concentrations of 1.1 and 0.25 µg/L, respectively. The concentrations of

toluene, ethylbenzene, and xylenes remained below the MCLs at all the locations sampled during this reporting period.

Figures 3-3 and 3-4 depict the extent of benzene and MTBE above Site remedial levels in shallow and deep groundwater, respectively. Appendix C includes benzene and MTBE trend plots for wells with concentrations above the applicable Site remedial levels during the April and October 2013 monitoring event.

Conductivity values remained elevated in post-excavation replacement wells MW-06R, MW-15R, MW-24R, and MW-28R (2,896 micro Siemens per centimeter [µS/cm] to 14,393 µS/cm). High conductivity values are likely associated with the calcium peroxide applied to the base of the excavation prior to backfilling with clean soil. The calcium peroxide application is expected to aid in promoting oxidation in the subsurface and natural bioremediation processes. Field parameters for the April 2013 and October 2013 monitoring events are shown in Table 3-4.

4.4 Groundwater Quality Trends and System Performance Summary

Based on the data collected during the reporting period, the following observations and trends are presented:

Benzene Concentrations

- Benzene concentrations in shallow monitor wells were below the MCL of 5.0 µg/L across the Site.
- The benzene plume in deep groundwater has considerably decreased, and only one area remained above the remedial level for benzene during the 2013 reporting period (MW-55).

MTBE Concentrations

- MTBE exceeded the tap water RSL in two shallow monitor wells and 10 deep monitor wells during the October 2013 monitoring event.
- Between April 2013 and October 2013, the MTBE concentrations in shallow monitor wells generally decreased.
- In October 2013, MTBE concentrations at shallow monitoring locations in the excavation area remained below the applicable RSL.
- Concentrations downgradient of the excavation area in the shallow groundwater also decreased, reducing the plume size.

- The majority of the MTBE impacts in deep groundwater are downgradient of the excavation area.
- MTBE concentrations in deep monitor wells MW-23, MW-52, and MW-54 demonstrated notable decreases between April 2013 and October 2013.
- Deep monitor wells MW-39, MW-43, MW-53, MW-55, and MW-57 demonstrated increases in MTBE concentrations between April 2013 and October 2013.

Naphthalene Concentrations

- Naphthalene was added to the monitoring program in October 2013. Naphthalene exceeded the tap water RSL of 0.17 µg/L in two shallow monitor wells, MW-25R (1.1 µg/L) and MW-28R (0.25 µg/L).

Biosparge System Performance

- The flow rates and pressures in system biosparge points were within target ranges.
- Field parameters and dissolved concentrations indicate that the biosparge system is achieving the 15-foot design radius of influence in most areas.

Excavation Area (Former Source Location)

- Continued low groundwater concentrations in the former source area indicate that the excavation was effective in eliminating the residual source.
- Conductivity values remained elevated in post-excavation replacement wells MW-06R, MW-15R, MW-24R, and MW-28R. High conductivity values are likely associated with the calcium peroxide placed in the open excavation.

5. Progress Monitoring and Reporting

Routine semi-annual groundwater monitoring will continue in accordance with the CAP. Monitor wells MW-6R, MW-7, MW-9, MW-15R, MW-16, MW-19, MW-20, MW-21, MW-23, MW-24R, MW-25R, MW-28R, MW-31, MW-32, MW-33, MW-35, MW-36R, MW-38, MW-39, MW-41, MW-42, MW-43, MW-49, MW-50, MW-51, MW-52, MW-53, MW-54, MW-55, MW-56, MW-57, MW-58, and MW-59 will be monitored on a semi-annual basis for BTEX, MTBE, and Naphthalene by USEPA Method 8260B. Additional wells may be added during the monitoring events to evaluate the biosparge system performance. The results from the groundwater monitoring will continue to be used to evaluate the effectiveness of the excavation and the biosparge system. Routine O&M events will continue to monitor the biosparge system and make adjustments as necessary. As the concentrations in wells decrease below the MCL for benzene or RSL for MTBE and Naphthalene, the biosparge system will be adjusted to focus flow in areas where concentrations remain above the screening criteria. CAP Progress Reports will be prepared to summarize the sample results and evaluate the effectiveness of the CAP.

6. Conclusions and Recommendations

As recommended in the CAP Addendum for the Former 724th TPS, SWMU 26 (ARCADIS 2010) and reported in the Sixteenth CAP Progress Report (ARCADIS 2012), additional remedial actions were conducted to meet established remedial levels for soil and groundwater at SWMU 26. In order to meet established remedial criteria, source area soil was excavated and a biosparge system installed to address benzene impacts in deep groundwater (ARCADIS 2012). The effectiveness of the implemented remedial actions has been evaluated through continuous, semi-annual groundwater monitoring. Data indicate that the excavation was effective in removing the residual source mass and that the biosparge system is reducing chemical of concern concentrations across much of the impacted area.

The results from semi-annual groundwater monitoring events indicate that MTBE and naphthalene have been detected above the applicable tap water RSL value of 14 µg/L and 0.17 µg/L, respectively, at several monitoring wells across the Site. As directed by GAEPD, site-specific risk-based remediation goals (RGs) were calculated for both MTBE and naphthalene (Appendix D). The calculated RGs for MTBE and naphthalene are 59 and 6.1 µg/L respectively.

To complete the delineation of downgradient impacts, a deep monitor well was installed west of MW-39 in the same location as shallow well MW-05 during the first quarter of calendar year 2014. A boring log and well construction diagram are included in Appendix E.

The operation of the biosparge system should continue with the current focus on areas with higher concentration impacts. Future operation should be optimized to address areas that recent data indicate are not currently being influenced. The next sampling event occurred in April 2014 and will be included in the Twentieth CAP Progress Report.

7. References

ARCADIS 2010. SWMU 26 Corrective Action Plan Addendum, Former 724th Tanker Purging Station, Fort Stewart, Georgia, January 2010.

ARCADIS 2012. SWMU 26 Sixteenth Corrective Action Plan Progress Report, Former 724th Tanker Purging Station, Fort Stewart, Georgia, April 2012.

ARCADIS 2014. SWMU 26 Seventeenth Corrective Action Plan Progress Report Revision 1, Former 724th Tanker Purging Station, Fort Stewart, Georgia, January 2014.

ARCADIS 2014. SWMU 26 Eighteenth Corrective Action Plan Progress Report Revision 1, Former 724th Tanker Purging Station, Fort Stewart, Georgia, January 2014.

GAEPD 2010. Correspondence from Amy Potter (GAEPD) to Robert R. Baumgardt (Fort Stewart, Georgia), RE: Review of Response to Comments and Replacement Pages for the 12th Corrective Action Plan Progress Report for the Former 724th Tanker Purging Station [SWMU 26] dated January 6, 2010, April 2010.

Geraghty and Miller 1992. RCRA Facility Investigation Final Work Plan, Fort Stewart. Georgia, June 1992.

Rust 1996. Phase I RCRA Facility Investigation Report for 24 Solid Waste Management Units at Fort Stewart. Georgia, Vols. I-III, May 1996.

Science Applications International Corporation (SAIC) 1998. Revised Final Phase II RCRA Facility Investigation Report for the Former 724th Tanker Purging Station (SWMU 26), Fort Stewart, Georgia, Revised Final, November 1998.

SAIC 2000. Corrective Action Plan for the Former 724th Tanker Purging Station (SWMU 26), Fort Stewart, Georgia, Revised Final, January 2000.

SAIC 2009. Thirteenth Corrective Action Plan Progress Report for the Enhanced Bioremediation (PHOSter® II) at the Former 724th Tanker Purging Station (SWMU 26), Fort Stewart, Georgia, January 2009.

USEPA 2013. Groundwater Sampling Operating Procedure, Number SESDPROC-301-R3, March 2013.

ARCADIS

Tables

Table 3-1
Groundwater Level Measurements - October 2011 - October 2013
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

Well Number	Date Measured	Depth of Screened Interval (ft bgs)	Hydrologic Unit	Top of Casing Elevation (ft amsl)	Water Depth (ft btoc)	Water Elevation (ft amsl)	Difference (ft)
MW-01	10/17/11	4.0 - 14.0	Shallow	67.39	7.44	59.95	
	04/16/12	4.0 - 14.0	Shallow	67.39	8.62	58.77	-1.18
	10/22/12	4.0 - 14.0	Shallow	67.39	6.14	61.25	2.48
	04/02/13	4.0 - 14.0	Shallow	67.39	4.44	62.95	1.70
	10/15/13	4.0 - 14.0	Shallow	67.39	4.97	62.42	-0.53
MW-03	10/17/11	4.0 - 14.0	Shallow	67.86	9.38	58.48	
	04/16/12	4.0 - 14.0	Shallow	67.86	10.66	57.20	-1.28
	10/22/12	4.0 - 14.0	Shallow	67.86	8.23	59.63	2.43
	04/02/13	4.0 - 14.0	Shallow	67.86	4.88	62.98	3.35
	10/15/13	4.0 - 14.0	Shallow	67.86	6.50	61.36	-1.62
MW-05	10/17/11	5.0 - 15.0	Shallow	63.10	NM	NM	
	04/16/12	5.0 - 15.0	Shallow	63.10	NM	NM	NA
	10/22/12	5.0 - 15.0	Shallow	63.10	NM	NM	NA
	04/02/13	5.0 - 15.0	Shallow	63.10	NM	NM	NA
	10/15/13	5.0 - 15.0	Shallow	63.10	NM	NM	NA
MW-06	Well abandoned						
MW-06R *	10/17/11	3.0 - 13.0	Shallow	67.43	10.32	57.11	
	04/16/12	3.0 - 13.0	Shallow	67.43	9.51	57.92	0.81
	10/22/12	3.0 - 13.0	Shallow	67.43	7.25	60.18	2.26
	04/02/13	3.0 - 13.0	Shallow	67.43	5.25	62.18	2.00
	10/15/13	3.0 - 13.0	Shallow	67.43	5.92	61.51	-0.67
MW-07	10/17/11	5.25 - 15.25	Shallow	67.43	8.37	59.06	
	04/16/12	5.25 - 15.25	Shallow	67.43	6.50	60.93	1.87
	10/22/12	5.25 - 15.25	Shallow	67.43	7.41	60.02	-0.91
	04/02/13	5.25 - 15.25	Shallow	67.43	4.52	62.91	2.89
	10/15/13	5.25 - 15.25	Shallow	67.43	5.76	61.67	-1.24
MW-08	Well abandoned						
MW-09	10/17/11	6.0 - 16.0	Shallow	67.67	9.36	58.31	
	04/16/12	6.0 - 16.0	Shallow	67.67	10.36	57.31	-1
	10/22/12	6.0 - 16.0	Shallow	67.67	8.05	59.62	2.31
	04/02/13	6.0 - 16.0	Shallow	67.67	4.78	62.89	3.27
	10/15/13	6.0 - 16.0	Shallow	67.67	6.40	61.27	-1.62
MW-10	10/17/11	31.0 - 41.0	Deep	67.71	11.03	56.68	
	04/16/12	31.0 - 41.0	Deep	67.71	11.57	56.14	-0.54
	10/22/12	31.0 - 41.0	Deep	67.71	9.89	57.82	1.68
	04/02/13	31.0 - 41.0	Deep	67.71	6.44	61.27	3.45
	10/15/13	31.0 - 41.0	Deep	67.71	9.86	57.85	-3.42
MW-11	10/17/11	4.13 - 16.95	Shallow	68.62	8.45	60.17	
	04/16/12	4.13 - 16.95	Shallow	68.62	10.24	58.38	-1.79
	10/22/12	4.13 - 16.95	Shallow	68.62	8.06	60.56	2.18
	04/02/13	4.13 - 16.95	Shallow	68.62	5.02	63.60	3.04
	10/15/13	4.13 - 16.95	Shallow	68.62	6.43	62.19	-1.41
MW-12	10/17/11	2.92 - 12.64	Shallow	67.60	8.60	59.00	
	04/16/12	2.92 - 12.64	Shallow	67.60	10.42	57.18	-1.82
	10/22/12	2.92 - 12.64	Shallow	67.60	8.22	59.38	2.2
	04/02/13	2.92 - 12.64	Shallow	67.60	4.72	62.88	3.50
	10/15/13	2.92 - 12.64	Shallow	67.60	6.52	61.08	-1.80
MW-13	10/17/11	3.43 - 12.88	Shallow	67.36	9.06	58.30	
	04/16/12	3.43 - 12.88	Shallow	67.36	10.74	56.62	-1.68
	10/22/12	3.43 - 12.88	Shallow	67.36	8.22	59.14	2.52
	04/02/13	3.43 - 12.88	Shallow	67.36	4.60	62.76	3.62
	10/15/13	3.43 - 12.88	Shallow	67.36	6.95	60.41	-2.35
MW-14	10/17/11	3.48 - 12.91	Shallow	67.73	9.53	58.20	
	04/16/12	3.48 - 12.91	Shallow	67.73	10.83	56.90	-1.3
	10/22/12	3.48 - 12.91	Shallow	67.73	8.38	59.35	2.45
	04/02/13	3.48 - 12.91	Shallow	67.73	5.16	62.57	3.22
	10/15/13	3.48 - 12.91	Shallow	67.73	6.92	60.81	-1.76
MW-15	Well abandoned						

Table 3-1
Groundwater Level Measurements - October 2011 - October 2013
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

Well Number	Date Measured	Depth of Screened Interval (ft bgs)	Hydrologic Unit	Top of Casing Elevation (ft amsl)	Water Depth (ft btoc)	Water Elevation (ft amsl)	Difference (ft)
MW-15R *	10/17/11	3.0 - 13.0	Shallow	65.90	10.68	55.22	
	04/16/12	3.0 - 13.0	Shallow	65.90	9.91	55.99	0.77
	10/22/12	3.0 - 13.0	Shallow	65.90	7.75	58.15	2.16
	04/02/13	3.0 - 13.0	Shallow	65.90	6.03	59.87	1.72
	10/15/13	3.0 - 13.0	Shallow	65.90	6.36	59.54	-0.33
MW-16	10/17/11	6.0 - 16.0	Shallow	67.91	8.83	59.08	
	04/16/12	6.0 - 16.0	Shallow	67.91	8.22	59.69	0.61
	10/22/12	6.0 - 16.0	Shallow	67.91	6.61	61.30	1.61
	04/02/13	6.0 - 16.0	Shallow	67.91	5.45	62.46	1.16
	10/15/13	6.0 - 16.0	Shallow	67.91	4.96	62.95	0.49
MW-17	10/17/11	6.0 - 16.0	Shallow	67.34	9.30	58.04	
	04/16/12	6.0 - 16.0	Shallow	67.34	11.75	55.59	-2.45
	10/22/12	6.0 - 16.0	Shallow	67.34	9.66	57.68	2.09
	04/02/13	6.0 - 16.0	Shallow	67.34	5.81	61.53	3.85
	10/15/13	6.0 - 16.0	Shallow	67.34	7.70	59.64	-1.89
MW-18	10/17/11	4.9 - 14.9	Shallow	67.84	12.16	55.68	
	04/16/12	4.9 - 14.9	Shallow	67.84	13.37	54.47	-1.21
	10/22/12	4.9 - 14.9	Shallow	67.84	11.99	55.85	1.38
	04/02/13	4.9 - 14.9	Shallow	67.84	6.76	61.08	5.23
	10/15/13	4.9 - 14.9	Shallow	67.84	8.92	58.92	-2.16
MW-19	10/17/11	6.3 - 16.3	Shallow	67.57	11.71	55.86	
	04/16/12	6.3 - 16.3	Shallow	67.57	12.93	54.64	-1.22
	10/22/12	6.3 - 16.3	Shallow	67.57	10.56	57.01	2.37
	04/02/13	6.3 - 16.3	Shallow	67.57	5.97	61.60	4.59
	10/15/13	6.3 - 16.3	Shallow	67.57	9.32	58.25	-3.35
MW-20	10/17/11	6.0 - 16.0	Shallow	67.63	11.56	56.07	
	04/16/12	6.0 - 16.0	Shallow	67.63	12.41	55.22	-0.85
	10/22/12	6.0 - 16.0	Shallow	67.63	10.31	57.32	2.1
	04/03/13	6.0 - 16.0	Shallow	67.63	5.72	61.91	4.59
	10/15/13	6.0 - 16.0	Shallow	67.63	8.15	59.48	-2.43
MW-21	10/17/11	5.1 - 15.1	Shallow	67.84	11.77	56.07	
	04/16/12	5.1 - 15.1	Shallow	67.84	12.65	55.19	-0.88
	10/22/12	5.1 - 15.1	Shallow	67.84	10.61	57.23	2.04
	04/02/13	5.1 - 15.2	Shallow	67.84	5.28	62.56	5.33
	10/15/13	5.1 - 15.2	Shallow	67.84	9.74	58.10	-4.46
MW-22	10/17/11	4.0 - 14.0	Shallow	67.11	9.99	57.12	
	04/16/12	4.0 - 14.0	Shallow	67.11	11.15	55.96	-1.16
	10/22/12	4.0 - 14.0	Shallow	67.11	8.11	59.00	3.04
	04/02/13	4.0 - 14.1	Shallow	67.11	3.80	63.31	4.31
	10/15/13	4.0 - 14.1	Shallow	67.11	7.58	59.53	-3.78
MW-23	10/17/11	13.0 - 23.0	Deep	67.65	11.11	56.54	
	04/16/12	13.0 - 23.0	Deep	67.65	11.76	55.89	-0.65
	10/22/12	13.0 - 23.0	Deep	67.65	10.19	57.46	1.57
	04/02/13	13.0 - 23.1	Deep	67.65	6.30	61.35	3.89
	10/15/13	13.0 - 23.1	Deep	67.65	11.50	56.15	-5.20
MW-24	Well abandoned						
MW-24R *	10/17/11	3.0 - 13.0	Shallow	66.84	9.14	57.70	
	04/16/12	3.0 - 13.0	Shallow	66.84	NM	NM	NA
	10/22/12	3.0 - 13.0	Shallow	66.84	6.18	60.66	NA
	04/02/13	3.0 - 13.1	Shallow	66.84	4.88	61.96	1.30
	10/15/13	3.0 - 13.1	Shallow	66.84	4.72	62.12	0.16
MW-25	Well abandoned						
MW-25R *	10/17/11	3.0 - 13.0	Shallow	67.16	8.92	58.24	
	04/16/12	3.0 - 13.0	Shallow	67.16	8.11	59.05	0.81
	10/22/12	3.0 - 13.0	Shallow	67.16	6.51	60.65	1.6
	04/02/13	3.0 - 13.0	Shallow	67.16	4.89	62.27	1.62
	10/15/13	3.0 - 13.0	Shallow	67.16	4.70	62.46	0.19
MW-26	10/17/11	3.6 - 13.6	Shallow	67.81	9.24	58.57	
	04/16/12	3.6 - 13.6	Shallow	67.81	10.60	57.21	-1.36
	10/22/12	3.6 - 13.6	Shallow	67.81	8.08	59.73	2.52
	04/02/13	3.6 - 13.6	Shallow	67.81	4.79	63.02	3.29
	10/15/13	3.6 - 13.6	Shallow	67.81	6.47	61.34	-1.68

Table 3-1
Groundwater Level Measurements - October 2011 - October 2013
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

Well Number	Date Measured	Depth of Screened Interval (ft bgs)	Hydrologic Unit	Top of Casing Elevation (ft amsl)	Water Depth (ft btoc)	Water Elevation (ft amsl)	Difference (ft)
MW-27	Well abandoned						
MW-28	Well abandoned						
MW-28R *	10/17/11	3.0 - 13.0	Shallow	69.06	11.86	57.20	
	04/16/12	3.0 - 13.0	Shallow	69.06	9.70	59.36	2.16
	10/22/12	3.0 - 13.0	Shallow	69.06	8.10	60.96	1.6
	04/02/13	3.0 - 13.0	Shallow	69.06	6.61	62.45	1.49
	10/15/13	3.0 - 13.0	Shallow	69.06	6.80	62.26	-0.19
MW-29	10/17/11	3.3 - 13.3	Shallow	67.82	9.45	58.37	
	04/16/12	3.3 - 13.3	Shallow	67.82	10.43	57.39	-0.98
	10/22/12	3.3 - 13.3	Shallow	67.82	7.26	60.56	3.17
	04/02/13	3.3 - 13.3	Shallow	67.82	4.81	63.01	2.45
	10/15/13	3.3 - 13.3	Shallow	67.82	5.61	62.21	-0.80
MW-30	10/17/11	7.0 - 17.0	Shallow	68.17	12.65	55.52	
	04/16/12	7.0 - 17.0	Shallow	68.17	12.56	55.61	0.09
	10/22/12	7.0 - 17.0	Shallow	68.17	10.59	57.58	1.97
	04/02/13	7.0 - 17.0	Shallow	68.17	6.09	62.08	4.50
	10/15/13	7.0 - 17.0	Shallow	68.17	7.92	60.25	-1.83
MW-31	10/17/11	4.0 - 14.0	Shallow	67.66	12.14	55.52	
	04/16/12	4.0 - 14.0	Shallow	67.66	13.03	54.63	-0.89
	10/22/12	4.0 - 14.0	Shallow	67.66	10.98	56.68	2.05
	04/02/13	4.0 - 14.0	Shallow	67.66	6.36	61.30	4.62
	10/15/13	4.0 - 14.0	Shallow	67.66	8.41	59.25	-2.05
MW-32	10/17/11	3.6 - 13.6	Shallow	67.57	12.20	55.37	
	04/16/12	3.6 - 13.6	Shallow	67.57	14.08	53.49	-1.88
	10/22/12	3.6 - 13.6	Shallow	67.57	12.29	55.28	1.79
	04/02/13	3.6 - 13.6	Shallow	67.57	6.90	60.67	5.39
	10/15/13	3.6 - 13.6	Shallow	67.57	9.81	57.76	-2.91
MW-33	10/17/11	3.6 - 13.6	Shallow	66.00	10.75	55.25	
	04/16/12	3.6 - 13.6	Shallow	66.00	11.84	54.16	-1.09
	10/22/12	3.6 - 13.6	Shallow	66.00	9.86	56.14	1.98
	04/02/13	3.6 - 13.6	Shallow	66.00	5.04	60.96	4.82
	10/15/13	3.6 - 13.6	Shallow	66.00	7.28	58.72	-2.24
MW-34	10/17/11	3.6 - 13.6	Shallow	68.41	13.07	55.34	
	04/16/12	3.6 - 13.6	Shallow	68.41	13.45	54.96	-0.38
	10/22/12	3.6 - 13.6	Shallow	68.41	11.34	57.07	2.11
	04/02/13	3.6 - 13.6	Shallow	68.41	6.90	61.51	4.44
	10/15/13	3.6 - 13.6	Shallow	68.41	8.23	60.18	-1.33
MW-35	10/17/11	23.0 - 28.0	Deep	67.78	10.52	57.26	
	04/16/12	23.0 - 28.0	Deep	67.78	10.52	57.26	0
	10/22/12	23.0 - 28.0	Deep	67.78	4.30	63.48	6.22
	04/02/13	23.0 - 28.0	Deep	67.78	6.44	61.34	-2.14
	10/15/13	23.0 - 28.0	Deep	67.78	9.42	58.36	-2.98
MW-36	Well abandoned						
MW-36R *	10/17/11	20.0 - 25.0	Deep	67.58	11.70	55.88	
	04/16/12	20.0 - 25.0	Deep	67.58	11.91	55.67	-0.21
	10/22/12	20.0 - 25.0	Deep	67.58	10.52	57.06	1.39
	04/02/13	20.0 - 25.0	Deep	67.58	7.40	60.18	3.12
	10/15/13	20.0 - 25.0	Deep	67.58	9.96	57.62	-2.56
MW-37	10/17/11	19.0 - 24.0	Deep	66.88	10.28	56.60	
	04/16/12	19.0 - 24.0	Deep	66.88	10.81	56.07	-0.53
	10/22/12	19.0 - 24.0	Deep	66.88	9.22	57.66	1.59
	04/02/13	19.0 - 24.0	Deep	66.88	5.58	61.30	3.64
	10/15/13	19.0 - 24.0	Deep	66.88	9.81	57.07	-4.23
MW-38	10/17/11	24.1 - 29.1	Deep	66.17	11.23	54.94	
	04/16/12	24.1 - 29.1	Deep	66.17	12.34	53.83	-1.11
	10/22/12	24.1 - 29.1	Deep	66.17	10.61	55.56	1.73
	04/02/13	24.1 - 29.1	Deep	66.17	6.05	60.12	4.56
	10/15/13	24.1 - 29.1	Deep	66.17	13.41	52.76	-7.36

Table 3-1
Groundwater Level Measurements - October 2011 - October 2013
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

Well Number	Date Measured	Depth of Screened Interval (ft bgs)	Hydrologic Unit	Top of Casing Elevation (ft amsl)	Water Depth (ft btoc)	Water Elevation (ft amsl)	Difference (ft)
MW-39	10/17/11	20.1 - 25.1	Deep	65.23	10.69	54.54	
	04/16/12	20.1 - 25.1	Deep	65.23	12.18	53.05	-1.49
	10/22/12	20.1 - 25.1	Deep	65.23	10.56	54.67	1.62
	04/02/13	20.1 - 25.1	Deep	65.23	5.50	59.73	5.06
	10/15/13	20.1 - 25.1	Deep	65.23	9.92	55.31	-4.42
MW-40	10/17/11	2.3 - 12.3	Shallow	65.21	10.87	54.34	
	04/16/12	2.3 - 12.3	Shallow	65.21	12.05	53.16	-1.18
	10/22/12	2.3 - 12.3	Shallow	65.21	11.03	54.18	1.02
	04/02/13	2.3 - 12.3	Shallow	65.21	5.40	59.81	5.63
	10/15/13	2.3 - 12.3	Shallow	65.21	6.85	58.36	-1.45
MW-41	10/17/11	2.0 - 12.0	Shallow	67.40	11.71	55.69	
	04/16/12	2.0 - 12.0	Shallow	67.40	12.75	54.65	-1.04
	10/22/12	2.0 - 12.0	Shallow	67.40	10.74	56.66	2.01
	04/02/13	2.0 - 12.0	Shallow	67.40	5.90	61.50	4.84
	10/15/13	2.0 - 12.0	Shallow	67.40	8.53	58.87	-2.63
MW-42	10/17/11	17.0 - 22.0	Deep	67.30	11.81	55.49	
	04/16/12	17.0 - 22.0	Deep	67.30	13.60	53.70	-1.79
	10/22/12	17.0 - 22.0	Deep	67.30	11.91	55.39	1.69
	04/02/13	17.0 - 22.0	Deep	67.30	6.57	60.73	5.34
	10/15/13	17.0 - 22.0	Deep	67.30	10.36	56.94	-3.79
MW-43	10/17/11	17.7 - 22.7	Deep	66.49	11.02	55.47	
	04/16/12	17.7 - 22.7	Deep	66.49	12.33	54.16	-1.31
	10/22/12	17.7 - 22.7	Deep	66.49	10.56	55.93	1.77
	04/02/13	17.7 - 22.7	Deep	66.49	5.71	60.78	4.85
	10/15/13	17.7 - 22.7	Deep	66.49	9.78	56.71	-4.07
MW-44	10/17/11	16.7 - 21.7	Deep	67.96	12.31	55.65	
	04/16/12	16.7 - 21.7	Deep	67.96	12.78	55.18	-0.47
	10/22/12	16.7 - 21.7	Deep	67.96	10.84	57.12	1.94
	04/02/13	16.7 - 21.7	Deep	67.96	6.59	61.37	4.25
	10/15/13	16.7 - 21.7	Deep	67.96	9.48	58.48	-2.89
MW-45	10/17/11	18.0 - 23.0	Deep	68.79	12.61	56.18	
	04/16/12	18.0 - 23.0	Deep	68.79	13.10	55.69	-0.49
	10/22/12	18.0 - 23.0	Deep	68.79	11.34	57.45	1.76
	04/02/13	18.0 - 23.0	Deep	68.79	7.45	61.34	3.89
	10/15/13	18.0 - 23.0	Deep	68.79	11.46	57.33	-4.01
MW-46	10/17/11	19.9 - 24.5	Deep	68.09	11.34	56.75	
	04/16/12	19.9 - 24.5	Deep	68.09	11.62	56.47	-0.28
	10/22/12	19.9 - 24.5	Deep	68.09	10.04	58.05	1.58
	04/02/13	19.9 - 24.5	Deep	68.09	7.58	60.51	2.46
	10/15/13	19.9 - 24.5	Deep	68.09	9.43	58.66	-1.85
MW-47	10/17/11	3.9 - 13.5	Shallow	65.30	10.20	55.10	
	04/16/12	3.9 - 13.5	Shallow	65.30	11.35	53.95	-1.15
	10/22/12	3.9 - 13.5	Shallow	65.30	5.59	59.71	5.76
	04/02/13	3.9 - 13.5	Shallow	65.30	4.32	60.98	1.27
	10/15/13	3.9 - 13.5	Shallow	65.30	3.91	61.39	0.41
MW-48	10/17/11	23.4 - 27.9	Deep	65.20	10.05	55.15	
	04/16/12	23.4 - 27.9	Deep	65.20	11.22	53.98	-1.17
	10/22/12	23.4 - 27.9	Deep	65.20	9.45	55.75	1.77
	04/02/13	23.4 - 27.9	Deep	65.20	4.42	60.78	5.03
	10/15/13	23.4 - 27.9	Deep	65.20	8.94	56.26	-4.52
MW-49	10/17/11	3.9 - 13.5	Shallow	67.60	11.93	55.67	
	04/16/12	3.9 - 13.5	Shallow	67.60	13.08	54.52	-1.15
	10/22/12	3.9 - 13.5	Shallow	67.60	12.05	55.55	1.03
	04/02/13	3.9 - 13.5	Shallow	67.60	6.65	60.95	5.40
	10/15/13	3.9 - 13.5	Shallow	67.60	9.02	58.58	-2.37
MW-50	10/17/11	29.6 - 31.4	Deep	67.52	11.79	55.73	
	04/16/12	29.6 - 31.4	Deep	67.52	13.53	53.99	-1.74
	10/22/12	29.6 - 31.4	Deep	67.52	12.15	55.37	1.38
	04/02/13	29.6 - 31.4	Deep	67.52	6.88	60.64	5.27
	10/15/13	29.6 - 31.4	Deep	67.52	13.73	53.79	-6.85
MW-51	10/17/11	3.9 - 13.5	Shallow	66.34	10.90	55.44	
	04/16/12	3.9 - 13.5	Shallow	66.34	12.56	53.78	-1.66
	10/22/12	3.9 - 13.5	Shallow	66.34	10.64	55.70	1.92
	04/02/13	3.9 - 13.5	Shallow	66.34	5.46	60.88	5.18
	10/15/13	3.9 - 13.5	Shallow	66.34	7.92	58.42	-2.46

Table 3-1
Groundwater Level Measurements - October 2011 - October 2013
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

Well Number	Date Measured	Depth of Screened Interval (ft bgs)	Hydrologic Unit	Top of Casing Elevation (ft amsl)	Water Depth (ft btoc)	Water Elevation (ft amsl)	Difference (ft)
MW-52	10/17/11	25.9 - 30.4	Deep	66.44	10.81	55.63	
	04/16/12	25.9 - 30.4	Deep	66.44	12.49	53.95	-1.68
	10/22/12	25.9 - 30.4	Deep	66.44	11.01	55.43	1.48
	04/02/13	25.9 - 30.4	Deep	66.44	5.80	60.64	5.21
	10/15/13	25.9 - 30.4	Deep	66.44	12.06	54.38	-6.26
MW-53	10/17/11	26.7 - 31.1	Deep	67.84	11.89	55.95	
	04/16/12	26.7 - 31.1	Deep	67.84	13.38	54.46	-1.49
	10/22/12	26.7 - 31.1	Deep	67.84	12.06	55.78	1.32
	04/02/13	26.7 - 31.1	Deep	67.84	7.11	60.73	4.95
	10/15/13	26.7 - 31.1	Deep	67.84	13.81	54.03	-6.70
MW-54	10/17/11	26.9 - 31.4	Deep	67.79	11.70	56.09	
	04/16/12	26.9 - 31.4	Deep	67.79	12.92	54.87	-1.22
	10/22/12	26.9 - 31.4	Deep	67.79	11.25	56.54	1.67
	04/02/13	26.9 - 31.4	Deep	67.79	6.55	61.24	4.70
	10/15/13	26.9 - 31.4	Deep	67.79	14.09	53.70	-7.54
MW-55	10/17/11	26.9 - 31.4	Deep	67.68	11.47	56.21	
	04/16/12	26.9 - 31.4	Deep	67.68	12.28	55.40	-0.81
	10/22/12	26.9 - 31.4	Deep	67.68	10.49	57.19	1.79
	04/02/13	26.9 - 31.4	Deep	67.68	6.41	61.27	4.08
	10/15/13	26.9 - 31.4	Deep	67.68	13.06	54.62	-6.65
MW-56	10/17/11	26.9 - 31.4	Deep	68.08	11.71	56.37	
	04/16/12	26.9 - 31.4	Deep	68.08	12.70	55.38	-0.99
	10/22/12	26.9 - 31.4	Deep	68.08	11.11	56.97	1.59
	04/02/13	26.9 - 31.4	Deep	68.08	6.90	61.18	4.21
	10/15/13	26.9 - 31.4	Deep	68.08	14.16	53.92	-7.26
MW-57	10/17/11	26.9 - 31.4	Deep	67.75	11.92	55.83	
	04/16/12	26.9 - 31.4	Deep	67.75	12.87	54.88	-0.95
	10/22/12	26.9 - 31.4	Deep	67.75	11.00	56.75	1.87
	04/02/13	26.9 - 31.4	Deep	67.75	6.51	61.24	4.49
	10/15/13	26.9 - 31.4	Deep	67.75	12.47	55.28	-5.96
MW-58	10/17/11	26.0 - 31.0	Deep	66.20	11.71	54.49	
	04/16/12	26.0 - 31.0	Deep	66.20	13.74	52.46	-2.03
	10/22/12	26.0 - 31.0	Deep	66.20	12.46	53.74	1.28
	04/02/13	26.0 - 31.0	Deep	66.20	6.91	59.29	5.55
	10/15/13	26.0 - 31.0	Deep	66.20	13.56	52.64	-6.65
MW-59	10/17/11	3.0 - 13.0	Shallow	66.73	8.14	58.59	
	04/16/12	3.0 - 13.0	Shallow	66.73	5.90	60.83	2.24
	10/22/12	3.0 - 13.0	Shallow	66.73	5.12	61.61	0.78
	04/02/13	3.0 - 13.0	Shallow	66.73	4.07	62.66	1.05
	10/15/13	3.0 - 13.0	Shallow	66.73	4.35	62.38	-0.28

Notes:
ft amsl - feet above mean sea level
ft bgs - feet below ground surface
ft btoc - feet below top of casing
NA - Not applicable
NM - Not measured
* - Replacement well

Table 3-2
Performance Monitoring Program
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

Well Number	Hydrologic Unit	April 2013 Monitoring Event	October 2013 Monitoring Event
MW-01	Shallow	--	--
MW-03	Shallow	--	--
MW-05	Shallow	--	--
MW-06R	Shallow	BTEX, MTBE	BTEX, MTBE, NP
MW-07	Shallow	BTEX, MTBE	BTEX, MTBE, NP
MW-08	Shallow	--	--
MW-09	Shallow	BTEX, MTBE	BTEX, MTBE, NP
MW-10	Deep	--	--
MW-11	Shallow	--	--
MW-12	Shallow	--	--
MW-13	Shallow	--	--
MW-14	Shallow	--	--
MW-15R	Shallow	BTEX, MTBE	BTEX, MTBE, NP
MW-16	Shallow	BTEX, MTBE	BTEX, MTBE, NP
MW-17	Shallow	--	--
MW-18	Shallow	--	--
MW-19	Shallow	BTEX, MTBE	BTEX, MTBE, NP
MW-20	Shallow	BTEX, MTBE	BTEX, MTBE, NP
MW-21	Shallow	BTEX, MTBE	BTEX, MTBE, NP
MW-22	Shallow	--	--
MW-23	Deep	BTEX, MTBE	BTEX, MTBE, NP
MW-24R	Shallow	BTEX, MTBE	BTEX, MTBE, NP
MW-25R	Shallow	BTEX, MTBE	BTEX, MTBE, NP
MW-26	Shallow	--	--
MW-27	Shallow	--	--
MW-28R	Shallow	BTEX, MTBE	BTEX, MTBE, NP
MW-29	Shallow	--	--
MW-30	Shallow	--	--
MW-31	Shallow	BTEX, MTBE	BTEX, MTBE, NP
MW-32	Shallow	BTEX, MTBE	BTEX, MTBE, NP
MW-33	Shallow	BTEX, MTBE	BTEX, MTBE, NP
MW-34	Shallow	--	--
MW-35	Deep	BTEX, MTBE	BTEX, MTBE, NP
MW-36R	Deep	BTEX, MTBE	BTEX, MTBE, NP
MW-37	Deep	--	--
MW-38	Deep	BTEX, MTBE	BTEX, MTBE, NP
MW-39	Deep	BTEX, MTBE	BTEX, MTBE, NP
MW-40	Shallow	BTEX, MTBE	BTEX, MTBE, NP
MW-41	Shallow	BTEX, MTBE	BTEX, MTBE, NP
MW-42	Deep	BTEX, MTBE	Clay and Silt in Well. No Sample Collected.
MW-43	Deep	BTEX, MTBE	BTEX, MTBE, NP
MW-44	Deep	--	--
MW-45	Deep	--	--
MW-46	Deep	--	--
MW-47	Shallow	--	--
MW-48	Deep	--	--
MW-49	Shallow	BTEX, MTBE	BTEX, MTBE, NP
MW-50	Deep	BTEX, MTBE	BTEX, MTBE, NP
MW-51	Shallow	BTEX, MTBE	BTEX, MTBE, NP
MW-52	Deep	BTEX, MTBE	BTEX, MTBE, NP
MW-53	Deep	BTEX, MTBE	BTEX, MTBE, NP
MW-54	Deep	BTEX, MTBE	BTEX, MTBE, NP
MW-55	Deep	BTEX, MTBE	BTEX, MTBE, NP
MW-56	Deep	BTEX, MTBE	BTEX, MTBE, NP
MW-57	Deep	BTEX, MTBE	BTEX, MTBE, NP
MW-58	Deep	BTEX, MTBE	BTEX, MTBE, NP
MW-59	Shallow	BTEX, MTBE	BTEX, MTBE, NP

Notes:

--	Not Sampled
BTEX	Benzene, toluene, ethylbenzene, and xylene compounds
MTBE	Methy tert-butyl ether
NP	Naphthalene

Table 3-3
Groundwater Analtical Data - April 2011 through October 2013
SWMU 26, Former 724th Tanker Purging Area
Fort Stewart, Georgia

	VOCs - USEPA Method SW8260 (µg/L)						
	Chemical Name	Benzene	Toluene	Ethylbenzene	Xylenes (total)	MTBE	Naphthalene
	MCL	5	1000	700	10000	14*	0.17*
Location ID	Sample Date						
MW-01	4/18/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	NA
MW-06R	4/12/2011	**2.9**	**0.17 J**	**2**	**5.2**	NA	NA
	10/18/2011	**2.5**	< 1 U	**7.8**	**9.4**	**20**	NA
	4/18/2012	**0.66**	< 0.5 U	**1.8**	**1.6**	**4.6**	NA
	10/24/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	NA
	4/3/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**0.18 J**	NA
	10/15/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U
MW-07	4/12/2011	**0.1 J**	< 0.5 U	< 0.5 U	< 0.5 U	NA	NA
	10/18/2011	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA
	4/18/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**0.46 J**	NA
	10/24/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**0.95**	NA
	4/3/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**0.31 J**	NA
	10/15/2013	<0.5 U	**7.7**	<0.5 U	<0.5 U	**1.6**	<0.5 U
MW-09	4/18/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	NA
	4/3/2013	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	NA
	10/15/2013	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW-11	4/18/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	NA
MW-15R	4/12/2011	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA
	10/18/2011	< 10 U	< 10 U	< 10 U	< 10 U	**29**	NA
	4/18/2012	**0.22 J**	< 0.5 U	< 0.5 U	< 0.5 U	**2.6**	NA
	10/24/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**0.88**	NA
	4/3/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**0.71**	NA
	10/15/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U
MW-16	4/13/2011	< 0.5 U	< 0.5 U	< 0.5 U	**0.17 J**	NA	NA
	10/18/2011	< 1 U	< 1 U	< 1 U	< 1 U	**22**	NA
	4/19/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**18**	NA
	10/24/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**5.2**	NA
	4/3/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**8.3**	NA
	10/15/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**1.4**	<0.5 U
MW-17	4/17/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**48**	NA
	10/24/2012	<0.5	**7.1**	<0.5	<0.5	<0.5	NA
MW-19	4/13/2011	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	NA	NA
	10/18/2011	< 1 U	< 1 U	< 1 U	< 1 U	**61**	NA
	10/23/2012	<5.0 U	<5.0 U	<5.0 U	<5.0 U	**39**	NA
	4/3/2013	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**14**	NA
	10/16/2013	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**6.2**	< 0.5 U
MW-20	4/13/2011	< 0.5 U	< 0.5 U	< 0.5 U	**0.31 J**	NA	NA
	10/18/2011	< 1 U	< 1 U	< 1 U	< 1 U	**3.2**	NA
	4/18/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**2.4**	NA
	10/24/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**2.0**	NA
	4/3/2013	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**0.24 J**	NA
	10/15/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**0.28 J**	< 0.5 U
MW-21	4/13/2011	< 0.5 U	< 0.5 U	< 0.5 U	**0.24 J**	NA	NA
	10/19/2011	< 1 U	< 1 U	< 1 U	< 1 U	**45**	NA
	4/17/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**19**	NA
	10/23/2012	<0.5 U	**2.1**	<0.5 U	<0.5 U	**17**	NA
	4/3/2013	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	NA
	10/16/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**21**	< 0.5 U
MW-22	4/13/2011	< 0.5 U	**11**	< 0.5 U	< 0.5 U	NA	NA
	10/19/2011	< 1 U	**80**	< 1 U	< 1 U	**4.3**	NA
	4/17/2012	**0.15 J**	< 0.5 U	< 0.5 U	< 0.5 U	**76**	NA
	10/23/2012	<0.5 U	**0.24 J**	<0.5 U	<0.5 U	**1.4**	NA

Notes appear on last page.

Table 3-3
Groundwater Analtical Data - April 2011 through October 2013
SWMU 26, Former 724th Tanker Purging Area
Fort Stewart, Georgia

	VOCs - USEPA Method SW8260 (µg/L)						
	Chemical Name	Benzene	Toluene	Ethylbenzene	Xylenes (total)	MTBE	Naphthalene
	MCL	5	1000	700	10000	14*	0.17*
Location ID	Sample Date						
MW-23	4/13/2011	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	NA	NA
	10/19/2011	< 1 U	< 1 U	< 1 U	< 1 U	**4.7**	NA
	4/17/2012	**6.6**	< 0.5 U	< 0.5 U	< 0.5 U	**2.8**	NA
	10/23/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**27**	NA
	4/3/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**22**	NA
	10/15/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**5.6**	< 0.5 U
MW-24R	4/12/2011	< 0.5 U	**0.24 J**	< 0.5 U	< 0.5 U	NA	NA
	10/19/2011	< 1 U	< 1 U	< 1 U	< 1 U	**10**	NA
	10/24/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**4.3**	NA
	4/3/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**5.3**	NA
	10/15/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**1.6**	<0.5 U
MW-25R	4/12/2011	**3.7**	**0.32 J**	**14**	**18**	NA	NA
	10/19/2011	**3.3**	< 1 U	**25**	**0.42 J**	**59**	NA
	4/19/2012	**5.2**	< 0.5 U	**11**	**1.7**	**28**	NA
	10/24/2012	<0.5 U	<0.5 U	**60**	**1.1**	**9.1**	NA
	4/3/2013	**0.5**	< 0.5 U	**2.6**	< 0.5 U	**5.2**	NA
	10/15/2013	**0.32 J**	**1.6**	<0.5 U	<0.5 U	**0.8**	**1.1**
MW-26	4/13/2011	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	NA	NA
	10/19/2011	< 1 U	< 1 U	< 1 U	< 1 U	**6.3**	NA
	4/18/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**9.4**	NA
	10/24/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	NA
MW-28R	4/12/2011	**0.7**	**1.2**	**3.1**	**15**	NA	NA
	10/18/2011	**4.9**	**0.56 J**	**1.3**	**9.3**	**81**	NA
	4/18/2012	**0.27 J**	< 0.5 U	< 0.5 U	< 0.5 U	**30**	NA
	10/24/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**3.8**	NA
	4/3/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**0.37**	NA
	10/15/2013	**0.19 J**	**0.25 J**	<0.5 U	<0.5 U	**1.5**	**0.25 J**
MW-29	4/18/2012	< 0.5 U	**11**	< 0.5 U	< 0.5 U	< 0.5 U	NA
MW-30	10/24/2012	<0.5 U	**2.9**	<0.5 U	<0.5 U	**2.9**	NA
MW-31	4/13/2011	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	NA	NA
	10/18/2011	< 1 U	< 1 U	< 1 U	< 1 U	**24**	NA
	4/18/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**44**	NA
	10/23/2012	<0.50 U	**8.0**	<0.50 U	<0.50 U	**15**	NA
	4/3/2013	<0.50 U	<0.50 U	<0.50 U	<0.50 U	**1.9**	NA
	10/16/2013	<0.50 U	**0.34 J**	<0.50 U	<0.50 U	**6.5**	< 0.5 U
MW-32	4/12/2011	< 0.5 U	**0.62**	< 0.5 U	< 0.5 U	NA	NA
	10/18/2011	**0.21 J**	< 1 U	< 1 U	< 1 U	**19**	NA
	4/17/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**33**	NA
	10/23/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**22**	NA
	4/3/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**17**	NA
	10/16/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**9.9**	< 0.5 U
MW-33	4/13/2011	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	NA	NA
	10/19/2011	< 1 U	< 1 U	< 1 U	< 1 U	**43**	NA
	10/23/2012	<0.5 U	**17**	<0.5 U	<0.5 U	**31**	NA
	4/3/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**31**	NA
	10/16/2013	<0.5 U	**0.67**	<0.5 U	<0.5 U	**46**	< 0.5 U
MW-34	4/17/2012	**0.25 J**	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	NA
MW-35	4/13/2011	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	NA	NA
	10/18/2011	< 1 U	< 1 U	< 1 U	< 1 U	**0.78 J**	NA
	4/19/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**1**	NA
	10/24/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**0.17 J**	NA
	4/3/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**0.83**	NA
	10/15/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**1**	<0.5 U

Notes appear on last page.

Table 3-3
Groundwater Analtical Data - April 2011 through October 2013
SWMU 26, Former 724th Tanker Purging Area
Fort Stewart, Georgia

	VOCs - USEPA Method SW8260 (µg/L)						
	Chemical Name	Benzene	Toluene	Ethylbenzene	Xylenes (total)	MTBE	Naphthalene
	MCL	5	1000	700	10000	14*	0.17*
Location ID	Sample Date						
MW-36R	4/12/2011	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	NA	NA
	10/18/2011	< 1 U	< 1 U	< 1 U	< 1 U	**20**	NA
	4/18/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**11**	NA
	10/24/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**5.3**	NA
	4/3/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**11**	NA
	10/18/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**11**	<0.5 U
MW-37	4/18/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**50**	NA
MW-38	4/13/2011 (Dup)	**360**	< 5 U	**3.5 J**	< 5 U	NA	NA
	4/13/2011	**380**	< 5 U	**3.6 J**	< 5 U	NA	NA
	10/19/2011 (Dup)	**360**	< 5 U	**2.1 J**	< 5 U	**630**	NA
	10/19/2011	**370**	< 10 U	< 10 U	< 10 U	**610**	NA
	1/31/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**87**	NA
	4/18/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**7.4 J**	NA
	4/18/2012 (Dup)	**0.31 J**	< 0.5 U	< 0.5 U	< 0.5 U	**35 J**	NA
	10/24/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**8.7**	NA
	4/3/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**4.8**	NA
	10/16/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**4.9**	< 0.5 U
MW-39	4/17/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**64**	NA
	10/24/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**57**	NA
	4/2/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**52**	NA
	10/17/2013	**0.38 J**	<0.5 U	<0.5 U	<0.5 U	**100**	< 0.5 U
MW-40	4/17/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**8.2**	NA
	4/2/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**21**	NA
	10/17/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**1.8**	< 0.5 U
MW-41	5/4/2011	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA
	10/19/2011	< 1 U	< 1 U	< 1 U	< 1 U	**18**	NA
	4/18/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**47**	NA
	10/24/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**0.47 J**	NA
	4/3/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	NA
	10/16/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**6.8**	< 0.5 U
MW-42	4/12/2011	**0.2 J**	**0.61**	**2.2**	**2.7**	NA	NA
	10/18/2011	< 5 U	< 5 U	< 5 U	< 5 U	**170**	NA
	1/31/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**110**	NA
	4/17/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**53**	NA
	10/23/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**77**	NA
	4/2/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**46**	NA
	10/16/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**120**	< 0.5 U
MW-43	4/13/2011	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	NA	NA
	10/19/2011	< 1 U	< 1 U	< 1 U	< 1 U	**110**	NA
	1/31/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**160**	NA
	4/17/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**150 J**	NA
	10/23/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**130**	NA
	4/2/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**59**	NA
	10/16/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**110**	< 0.5 U
MW-45	10/24/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**12**	NA
MW-46	4/18/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**6.7**	NA
MW-47	4/17/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	NA
	4/2/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**0.89**	NA
MW-48	4/17/2012	**1.6**	< 0.5 U	**0.48 J**	< 0.5 U	**46**	NA
	10/23/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	NA

Notes appear on last page.

Table 3-3
Groundwater Analtical Data - April 2011 through October 2013
SWMU 26, Former 724th Tanker Purging Area
Fort Stewart, Georgia

	VOCs - USEPA Method SW8260 (µg/L)						
	Chemical Name	Benzene	Toluene	Ethylbenzene	Xylenes (total)	MTBE	Naphthalene
	MCL	5	1000	700	10000	14*	0.17*
Location ID	Sample Date						
MW-49	4/12/2011	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	NA	NA
	10/18/2011	< 1 U	< 1 U	< 1 U	< 1 U	**7.6**	NA
	10/23/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**1.3**	NA
	4/2/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**0.43 J**	NA
	10/16/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**3.6**	< 0.5 U
MW-50	4/12/2011	**6.5**	< 0.5 U	< 0.5 U	< 0.5 U	NA	NA
	10/18/2011	**3.8**	< 1 U	< 1 U	< 1 U	**23**	NA
	4/17/2012	**9.7**	< 0.5 U	< 0.5 U	< 0.5 U	**40**	NA
	10/23/2012	**12**	<0.5 U	<0.5 U	<0.5 U	**70**	NA
	4/2/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**67**	NA
	10/16/2013	**0.13 J**	<0.5 U	<0.5 U	<0.5 U	**14**	< 0.5 U
MW-51	4/12/2011	**1.5**	< 0.5 U	< 0.5 U	< 0.5 U	NA	NA
	10/18/2011	**1.1**	< 1 U	**0.55 J**	**0.33 J**	**43**	NA
	4/17/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**150**	NA
	10/23/2012	<0.5 U	**4.0**	<0.5 U	<0.5 U	**15**	NA
	4/2/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**61**	NA
	10/16/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**5.7**	< 0.5 U
MW-52	4/12/2011	**1.3**	< 0.5 U	< 0.5 U	< 0.5 U	NA	NA
	10/18/2011	**37**	< 1 U	< 1 U	< 1 U	**200**	NA
	1/31/2012	**0.61**	< 0.5 U	< 0.5 U	< 0.5 U	**160**	NA
	4/17/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**120**	NA
	10/23/2012	**0.38 J**	<0.5 U	<0.5 U	<0.5 U	**120**	NA
	4/2/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**43**	NA
	10/16/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**35**	< 0.5 U
MW-53	4/12/2011	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	NA	NA
	10/19/2011	< 1 U	< 1 U	< 1 U	< 1 U	**3.6**	NA
	4/17/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**3.8**	NA
	10/23/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**2.7**	NA
	4/3/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**15**	NA
	10/16/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**44**	< 0.5 U
MW-54	4/13/2011	**97**	**0.38 J**	< 1 U	< 1 U	NA	NA
	4/13/2011 (Dup)	**86**	< 2.5 U	< 2.5 U	< 2.5 U	NA	NA
	10/18/2011	**360**	< 2 U	**0.96 J**	< 2 U	**750**	NA
	10/18/2011 (Dup)	**350**	< 10 U	< 10 U	< 10 U	**760**	NA
	1/31/2012	**350**	**0.20 J**	**0.97**	**0.20 J**	**760**	NA
	4/18/2012	**0.12 J**	< 0.5 U	< 0.5 U	< 0.5 U	**430**	NA
	10/23/2012	**80**	<2.5 U	<2.5 U	<2.5 U	**780**	NA
	10/23/2012 (Dup)	**89**	<0.5 U	<0.5 U	<0.5 U	**770**	NA
	4/3/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**200**	NA
	4/3/2013 (Dup)	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**210**	NA
	10/16/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**110**	< 0.5 U
	10/16/2013 (Dup)	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**110**	< 0.5 U
MW-55	4/13/2011	**52**	< 2.5 U	< 2.5 U	< 2.5 U	NA	NA
	10/18/2011	**180**	< 5 U	< 5 U	< 5 U	**610**	NA
	1/31/2012	**270**	< 0.5 U	< 0.5 U	< 0.5 U	**630**	NA
	4/18/2012	**200**	< 0.5 U	< 0.5 U	< 0.5 U	**700**	NA
	4/18/2012 (Dup)	**200**	< 0.5 U	< 0.5 U	< 0.5 U	**700**	NA
	10/24/2012	**140**	**13**	**2.9 J**	**17**	**510**	NA
	10/24/2012 (Dup)	**130**	<0.5 U	<5.0 U	<5.0 U	**470**	NA
	4/3/2013	<0.5 U	<0.5 U	<5.0 U	<5.0 U	**200**	NA
	4/3/2013 (Dup)	<0.5 U	<0.5 U	<5.0 U	<5.0 U	**180**	NA
	10/15/2013	**10**	<0.5 U	<5.0 U	<5.0 U	**240 J**	< 0.5 U
	10/15/2013 (Dup)	**13**	<0.5 U	<5.0 U	<5.0 U	**240**	< 0.5 U

Notes appear on last page.

Table 3-3
Groundwater Analtical Data - April 2011 through October 2013
SWMU 26, Former 724th Tanker Purging Area
Fort Stewart, Georgia

	VOCs - USEPA Method SW8260 (µg/L)						
	Chemical Name	Benzene	Toluene	Ethylbenzene	Xylenes (total)	MTBE	Naphthalene
	MCL	5	1000	700	10000	14*	0.17*
Location ID	Sample Date						
MW-56	4/13/2011	**0.62**	< 0.5 U	< 0.5 U	< 0.5 U	NA	NA
	10/19/2011	**0.51 J**	< 1 U	< 1 U	< 1 U	**130**	NA
	4/17/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**38**	NA
	10/23/2012	**0.13 J**	< 0.5 U	< 0.5 U	< 0.5 U	**52**	NA
	4/3/2013	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**24**	NA
	10/16/2013	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**22**	< 0.5 U
MW-57	4/13/2011	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	NA	NA
	10/18/2011	< 1 U	< 1 U	< 1 U	< 1 U	**1**	NA
	1/31/2012	**0.25 J**	< 0.5 U	< 0.5 U	< 0.5 U	**110**	NA
	4/18/2012	**0.19 J**	< 0.5 U	< 0.5 U	< 0.5 U	**68**	NA
	10/23/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**10**	NA
	4/2/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**72**	NA
	10/16/2013	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**100**	< 0.5 U
MW-58	4/12/2011	**2.2**	< 0.5 U	< 0.5 U	< 0.5 U	NA	NA
	10/18/2011	**1.9**	< 1 U	< 1 U	< 1 U	**9.8**	NA
	4/17/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**13**	NA
	10/23/2012	**2.0**	<0.5 U	<0.5 U	<0.5 U	**12**	NA
	4/2/2013	**1.4**	<0.5 U	<0.5 U	<0.5 U	**11**	NA
	10/16/2013	< 0.5 U	< 0.5 U	< 0.5 U	<0.5 U	**7.9**	< 0.5 U
MW-59	4/12/2011	< 0.5 U	< 0.5 U	< 0.5 U	**0.31 J**	NA	NA
	10/19/2011	< 1 U	< 1 U	< 1 U	< 1 U	**15**	NA
	4/19/2012	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**9.7**	NA
	10/24/2012	<0.5 U	<0.5 U	<0.5 U	<0.5 U	**6.4**	NA
	4/3/2013	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**4**	NA
	10/15/2013	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	**1.1**	<0.5 U

Notes:

- Indicates the sample result exceeds the MCL or Tapwater RSL

* - Tapwater RSL - No MCL available

µg/L - micrograms per liter

BOLD - indicate the analyte was detected.

DUP - Duplicate sample

J - The sample result is estimated.

MCL - USEPA Maximum Contaminant Level - National Primary Drinking Water Regulations

MTBE - Methyl tert-butyl ether

U - The analyte was not detected above the reporting limit

UB - Compound/analyte detected in blank or associated blank, qualified as a non-detect at listed value

VOCs - Volatile Organic Compounds

Table 3-4
2013 Monitoring Events Field Parameters
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

Location ID	*Sample Date*	*pH*	*Cond. (µS/cm)*	*Temperature (°C)*	*ORP (mV)*	*DO (mg/L)*
MW-06R	4/3/2013	4.49	5,494	18.24	229.8	2.46
MW-06R	10/15/2013	6.1	2,896	23.53	-9.5	0.37
MW-07	4/3/2013	6.73	695	18.22	-52.7	0.22
MW-07	10/15/2013	6.27	831	22.10	-89.0	0.08
MW-09	4/3/2013	4.82	80	17.81	77.9	0.46
MW-09	10/15/2013	5.55	70	22.83	37.0	0.76
MW-15R	4/3/2013	2.24	13,056	19.15	361.9	1.15
MW-15R	10/15/2013	3.61	7,114	25.80	276.4	0.17
MW-16	4/3/2013	5.12	488	22.51	59.3	1.40
MW-16	10/15/2013	6.19	525	26.45	-63	0.21
MW-19	4/3/2013	5.56	283	18.39	8.6	3.24
MW-19	10/16/2013	5.16	268	22.95	572.3	5.95
MW-20	4/3/2013	4.56	125	18.18	155.7	2.40
MW-20	10/15/2013	4.99	138	22.46	297.9	3.67
MW-21	4/3/2013	4.17	190	18.86	22.1	2.18
MW-21	10/16/2013	3.61	591	21.78	417.3	2.87
MW-23	4/3/2013	6.55	419	19.01	79.1	0.53
MW-23	10/15/2013	6.20	785	22.03	57.4	4.96
MW-24R	4/3/2013	1.97	14,393	22.75	337.5	1.71
MW-24R	10/15/2013	2.45	12,136	28.19	377.2	0.19
MW-25R	4/3/2013	4.57	328	22.87	57.1	0.97
MW-25R	10/15/2013	5.65	513	28.07	23.1	0.10
MW-28R	4/3/2013	3.48	11,301	19.49	280.4	1.25
MW-28R	10/15/2013	3.48	8,489	25.62	239.4	0.14
MW-31	4/2/2013	5.05	244	18.92	53.3	0.99
MW-31	10/16/2013	5.51	267	22.54	76.2	0.41
MW-32	4/2/2013	5.63	123	21.28	241.4	3.19
MW-32	10/16/2013	5.36	83	23.14	249.2	3.93
MW-33	4/2/2013	4.25	140	18.25	100.1	0.96
MW-33	10/16/2013	5.24	137	21.36	72.3	0.32
MW-35	4/3/2013	5.73	436	23.32	70.6	1.26
MW-35	10/15/2013	6.23	493	25.73	-38.1	0.28
MW-36R	4/3/2013	6.94	1,723	20.67	-98.2	0.21
MW-36R	10/15/2013	6.76	1,304	23.32	135.7	0.35
MW-38	4/3/2013	6.79	2,137	17.72	120.6	3.09
MW-38	10/16/2013	7.33	1,687	22.55	75.5	2.69
MW-39	4/2/2013	6.69	582	19.05	-16.5	0.51
MW-39	10/17/213	6.53	336	20.88	-19.6	0.27
MW-40	4/2/2013	4.35	100	18.12	19.1	1.73
MW-40	10/17/213	4.48	88	21.27	234.3	0.79
MW-41	4/3/2013	4.01	158	16.90	136.6	3.30
MW-41	10/16/2013	3.75	878	23.18	444.8	4.04
MW-42	4/2/2013	5.08	802	20.60	78.8	4.34
MW-42	10/16/2013	6.44	331.00	22.57	194.9	6.26
MW-43	4/2/2013	5.79	497	19.28	90.3	0.67
MW-43	10/16/2013	5.61	204.00	21.33	35.7	0.60
MW-47	4/2/2013	6.25	798	18.37	798	3.01
MW-47	10/16/2013	n/a	611	20.91	178	n/a

Table 3-4
2013 Monitoring Events Field Parameters
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

Location ID	*Sample Date*	*pH*	*Cond. (µS/cm)*	*Temperature (°C)*	*ORP (mV)*	*DO (mg/L)*
MW-49	4/2/2013	5.78	154	20.60	-13.6	2.59
MW-49	10/16/2013	5.46	160	23.21	219.4	2.27
MW-50	4/2/2013	6.64	1,931	20.60	-49.0	0.61
MW-50	10/16/2013	6.89	1,549	22.80	-77.6	0.36
MW-51	4/2/2013	5.72	222	19.16	61.3	0.63
MW-51	10/16/2013	5.74	233.00	22.64	163.6	1.68
MW-52	4/2/2013	6.66	2,108	20.37	-20.5	0.51
MW-52	10/16/2013	6.89	1,196.00	22.39	-62.8	0.29
MW-53	4/3/2013	7.61	737	17.67	41.4	4.43
MW-53	10/16/2013	7.02	744	22.77	-107.4	0.41
MW-54	4/3/2013	7.42	898	18.04	-20.5	1.87
MW-54	10/16/2013	7.09	935	23.03	102.8	0.47
MW-55	4/3/2013	7.33	663	19.29	126.7	3.91
MW-55	10/15/2013	7.06	774.0	21.80	-47.9	0.21
MW-56	4/3/2013	7.73	1,357	19.78	2.6	4.68
MW-56	10/16/2013	7.10	1,837	21.40	31.3	3.26
MW-57	4/2/2013	2.47	739	20.33	323.9	4.47
MW-57	10/16/2013	7.06	811	22.65	30.2	0.84
MW-58	4/2/2013	6.66	2,551	19.88	-70.1	1.01
MW-58	10/16/2013	6.95	1,233.0	22.62	45.9	0.60
MW-59	4/3/2013	5.21	360	20.36	56.8	1.07
MW-59	10/15/2013	5.74	653	28.12	8.2	0.18

Notes:
ORP - Oxidation Reduction Potential
C - Celsius
µS/cm - microsiemens per centimeter

Table 3-5
Performance Monitoring Field Parameters
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

Date	Well ID	Screen Interval (ft blgs	Temp (^{o}C)	DO (mg/L)	*SC (uS/cm)*	*pH (SU)*	*ORP (mV)*	NOTES
6/22/2011	MW-23	13.0 - 23.0	18.58	0.25	106	5.66	3.0	Baseline
6/22/2011	MW-31	4.0 - 14.0	19.12	0.20	104	5.61	29.8	Baseline
6/22/2011	MW-32	3.6 - 13.6	18.96	0.14	174	6.10	17.7	Baseline
6/22/2011	MW-33	3.6 - 13.6	18.85	0.14	74	5.26	79.1	Baseline
6/22/2011	MW-38	24.1 - 29.1	18.79	0.12	489	6.91	-57.9	Baseline
6/22/2011	MW-41	2.0 - 12.0	19.70	0.37	101	5.68	33.8	Baseline
6/22/2011	MW-42	17.0 - 22.0	18.71	0.13	303	6.60	1.5	Baseline
6/22/2011	MW-43	17.7 - 22.7	18.49	0.12	376	7.16	-2.6	Baseline
6/22/2011	MW-49	3.9 - 13.5	19.28	0.13	169	6.20	13.3	Baseline
6/22/2011	MW-50	29.6 - 31.4	18.89	0.13	436	7.07	-49.4	Baseline
6/22/2011	MW-51	3.9 - 13.5	18.97	0.17	167	5.96	24.7	Baseline
6/22/2011	MW-52	25.9 - 30.4	18.86	0.10	435	7.09	-31.6	Baseline
6/22/2011	MW-53	26.7 - 31.1	18.04	0.12	444	7.04	-30.1	Baseline
6/22/2011	MW-54	26.9 - 31.4	18.82	0.08	437	7.13	-30.2	Baseline
6/22/2011	MW-55	26.9 - 31.4	18.68	0.10	441	7.04	-65.8	Baseline
6/22/2011	MW-56	26.9 - 31.4	18.67	0.09	441	7.11	-81.2	Baseline
6/22/2011	MW-57	26.9 - 31.4	18.85	0.54	352	7.01	-3.7	Baseline
6/22/2011	MW-58	26.0 - 31.0	18.69	0.16	433	7.09	-55.1	Baseline
7/13/2011	MW-18	4.9 - 14.9	22.53	0.5	81	5.12	138.3	
7/13/2011	MW-19	6.3 - 16.3	21.36	0.29	139	6.93	45.9	
7/13/2011	MW-20	6.0 - 16.0	26.49	0.62	112	5.97	80.8	
7/13/2011	MW-21	5.1 - 15.1	22.47	0.43	144	5.91	78.2	
7/13/2011	MW-22	4.0 - 14.0	22.23	0.43	75	5.73	62.4	
7/13/2011	MW-23	13.0 - 23.0	23.49	0.44	101	6.03	69.7	
7/13/2011	MW-31	4.0 - 14.0	23.25	0.63	104	6.19	88.9	
7/13/2011	MW-32	3.6 - 13.6	23.71	0.59	209	6.86	15.7	
7/13/2011	MW-38	24.1 - 29.1	22.1	0.36	480	7.84	-60.2	
7/13/2011	MW-41	2.0 - 12.0	23.5	1.43	109	6.34	83.3	
7/13/2011	MW-42	17.0 - 22.0	23.12	0.34	338	7.36	NR	
7/13/2011	MW-49	3.9 - 13.5	22.53	0.57	238	7.1	27.9	
7/13/2011	MW-50	29.6 - 31.4	21.33	0.56	440	7.72	-47.9	
7/13/2011	MW-53	26.7 - 31.1	21.31	0.39	469	7.72	-34.5	
7/13/2011	MW-54	26.9 - 31.4	20.72	0.21	467	8.19	-76.4	
7/13/2011	MW-55	26.9 - 31.4	22.03	0.5	481	7.69	-93.5	
7/13/2011	MW-56	26.9 - 31.4	22.39	0.18	474	7.4	-73.2	
7/13/2011	MW-57	26.9 - 31.4	22.12	0.31	334	7.79	-22.6	
7/13/2011	MW-58	26.0 - 31.0	21.79	0.4	450	7.74	-76.3	
7/13/2011	BT-1A	21.0 - 23.0	21.5	0.28	243	7.51	-26	
7/13/2011	BT-1B	24.0 - 26.0	21.04	0.24	691	8.06	-106.8	
7/13/2011	BT-1C	26.0 - 29.0	20.46	0.16	794	8.01	-136.8	
7/13/2011	BT-2A	21.0 - 23.0	21.94	0.31	122	6.93	23.2	
7/13/2011	BT-2B	24.0 - 26.0	21.17	0.33	539	8.16	-107.2	
7/13/2011	BT-2C	26.0 - 29.0	21.35	0.27	550	7.91	-67.4	
7/13/2011	BT-3A	21.0 - 23.0	22.24	0.53	177	7.2	11.5	
7/13/2011	BT-3B	24.0 - 26.0	21.93	0.31	567	7.97	-90.7	
7/13/2011	BT-4A	20.0 - 22.0	21.88	0.51	114	6.76	18.4	
7/13/2011	BT-4B	22.0 - 24.0	21.84	0.37	219	7.18	-16.2	

Table 3-5
Performance Monitoring Field Parameters
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

Date	Well ID	Screen Interval (ft blgs	Temp (^{o}C)	DO (mg/L)	*SC (uS/cm)*	*pH (SU)*	*ORP (mV)*	NOTES
8/10/2011	MW-18	4.9 - 14.9	NR	0.42	NR	NR	NR	
8/10/2011	MW-19	6.3 - 16.3	NR	0.62	NR	NR	NR	
8/10/2011	MW-20	6.0 - 16.0	NR	0.46	NR	NR	NR	
8/10/2011	MW-21	5.1 - 15.1	NR	0.16	NR	NR	NR	
8/10/2011	MW-32	3.6 - 13.6	NR	0.14	NR	NR	NR	
8/10/2011	MW-38	24.1 - 29.1	NR	0.23	NR	NR	NR	
8/10/2011	MW-41	2.0 - 12.0	NR	1.03	NR	NR	NR	
8/10/2011	MW-42	17.0 - 22.0	NR	0.22	NR	NR	NR	
8/10/2011	MW-49	3.9 - 13.5	NR	0.34	NR	NR	NR	
8/10/2011	MW-50	29.6 - 31.4	NR	0.07	NR	NR	NR	
8/10/2011	MW-53	26.7 - 31.1	NR	-0.2	NR	NR	NR	
8/10/2011	MW-54	26.9 - 31.4	NR	0.08	NR	NR	NR	
8/10/2011	MW-55	26.9 - 31.4	NR	0.42	NR	NR	NR	
8/10/2011	MW-56	26.9 - 31.4	NR	-0.2	NR	NR	NR	
8/10/2011	MW-58	26.0 - 31.0	NR	0.1	NR	NR	NR	
8/10/2011	BT-1A	21.0 - 23.0	NR	0.09	NR	NR	NR	
8/10/2011	BT-1B	24.0 - 26.0	NR	-0.02	NR	NR	NR	
8/10/2011	BT-1C	26.0 - 29.0	NR	-0.03	NR	NR	NR	
8/10/2011	BT-3A	21.0 - 23.0	NR	0.06	NR	NR	NR	
8/10/2011	BT-3B	24.0 - 26.0	NR	0.07	NR	NR	NR	
8/10/2011	BT-4A	20.0 - 22.0	NR	0.53	NR	NR	NR	
8/10/2011	BT-4B	22.0 - 24.0	NR	0.63	NR	NR	NR	
9/7/2011	MW-18	4.9 - 14.9	NR	0.5	NR	NR	NR	
9/7/2011	MW-19	6.3 - 16.3	NR	0.5	NR	NR	NR	
9/7/2011	MW-20	6.0 - 16.0	NR	9.35	NR	NR	NR	
9/7/2011	MW-21	5.1 - 15.1	NR	0.53	NR	NR	NR	
9/7/2011	MW-32	3.6 - 13.6	NR	0.44	NR	NR	NR	
9/7/2011	MW-38	24.1 - 29.1	NR	2.61	NR	NR	NR	
9/7/2011	MW-41	2.0 - 12.0	NR	0.58	NR	NR	NR	
9/7/2011	MW-42	17.0 - 22.0	NR	5.27	NR	NR	NR	
9/7/2011	MW-49	3.9 - 13.5	NR	7.75	NR	NR	NR	
9/7/2011	MW-50	29.6 - 31.4	NR	0.36	NR	NR	NR	
9/7/2011	MW-53	26.7 - 31.1	NR	0.34	NR	NR	NR	
9/7/2011	MW-54	26.9 - 31.4	NR	0.32	NR	NR	NR	
9/7/2011	MW-55	26.9 - 31.4	NR	0.44	NR	NR	NR	
9/7/2011	MW-56	26.9 - 31.4	NR	0.38	NR	NR	NR	
9/7/2011	MW-58	26.0 - 31.0	NR	0.32	NR	NR	NR	
9/7/2011	BT-1A	21.0 - 23.0	NR	0.33	NR	NR	NR	
9/7/2011	BT-1B	24.0 - 26.0	NR	0.29	NR	NR	NR	
9/7/2011	BT-1C	26.0 - 29.0	NR	0.3	NR	NR	NR	
9/7/2011	BT-2A	21.0 - 23.0	NR	0.33	NR	NR	NR	
9/7/2011	BT-2B	24.0 - 26.0	NR	0.32	NR	NR	NR	
9/7/2011	BT-2C	26.0 - 29.0	NR	0.28	NR	NR	NR	
9/7/2011	BT-3A	21.0 - 23.0	NR	0.31	NR	NR	NR	
9/7/2011	BT-3B	24.0 - 26.0	NR	0.3	NR	NR	NR	
9/7/2011	BT-4A	20.0 - 22.0	NR	0.27	NR	NR	NR	
9/7/2011	BT-4B	22.0 - 24.0	NR	0.28	NR	NR	NR	

Table 3-5
Performance Monitoring Field Parameters
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

Date	Well ID	Screen Interval (ft blgs	Temp (^{o}C)	DO (mg/L)	*SC (uS/cm)*	*pH (SU)*	*ORP (mV)*	NOTES
10/11/2011	MW-18	4.9 - 14.9	20.5	0.56	142	5.65	66.0	
10/11/2011	MW-19	6.3 - 16.3	22.37	1.18	135	5.80	40.6	
10/11/2011	MW-20	6.0 - 16.0	21.54	11.14	65.91	4.29	350.7	
10/11/2011	MW-21	5.1 - 15.1	21.48	1.32	127	5.30	72	
10/11/2011	MW-32	3.6 - 13.6	21.53	2.8	94	5.55	213.9	
10/11/2011	MW-38	24.1 - 29.1	20.22	0.36	609	6.82	-92.2	
10/11/2011	MW-41	2.0 - 12.0	22.04	0.59	125	5.56	57.5	
10/11/2011	MW-42	17.0 - 22.0	21.03	6.52	898	6.09	176.1	
10/11/2011	MW-49	3.9 - 13.5	21.94	8.82	144	5.14	251	
10/11/2011	MW-50	29.6 - 31.4	19.98	0.66	NR	6.90	NR	
10/11/2011	MW-53	26.7 - 31.1	19.43	0.50	501	6.95	-113.1	
10/11/2011	MW-53	26.7 - 31.1	19.43	0.5	501	6.95	-113.1	
10/11/2011	MW-54	26.9 - 31.4	20.11	0.37	486	7.01	-127.9	
10/11/2011	MW-55	26.9 - 31.4	20.07	0.86	479	6.98	-110	
10/11/2011	MW-56	26.9 - 31.4	19.51	0.99	492	6.94	-135	
10/11/2011	MW-58	26.0 - 31.0	19.7	0.72	471	7.05	-134.4	
10/11/2011	BT-1A	21.0 - 23.0	21.24	0.59	263	6.37	-48.5	
10/11/2011	BT-1B	24.0 - 26.0	20.62	0.46	750	6.89	-126.5	
10/11/2011	BT-1C	26.0 - 29.0	20.11	0.52	770	6.90	-111.7	
10/11/2011	BT-2A	21.0 - 23.0	21.25	1.10	113	5.70	-15.7	
10/11/2011	BT-2B	24.0 - 26.0	20.48	0.48	567	6.92	-140.8	
10/11/2011	BT-2C	26.0 - 29.0	20.16	0.48	574	6.98	-128.5	
10/11/2011	BT-3A	21.0 - 23.0	21.04	0.34	165	5.98	-36.1	
10/11/2011	BT-3B	24.0 - 26.0	20.55	0.51	559	6.88	-123.1	
10/11/2011	BT-4A	20.0 - 22.0	20.82	0.42	117	5.78	7.2	
10/11/2011	BT-4B	22.0 - 24.0	20.83	0.71	161	5.95	-35.0	
11/15/2011	MW-18	4.9 - 14.9	20.66	5.5	75	3.88	170	
11/15/2011	MW-19	6.3 - 16.3	21.65	4.7	50	3.65	243	
11/15/2011	MW-20	6.0 - 16.0	21.36	9	130	3.23	255	
11/15/2011	MW-21	5.1 - 15.1	21	7	180	3.62	250	
11/15/2011	MW-22	4.0 - 14.0	19.5	3.4	236	3.37	282	
11/15/2011	MW-23	13.0 - 23.0	20.47	6.7	275	5.35	193	
11/15/2011	MW-32	3.6 - 13.6	21	3.7	82	4.95	147	
11/15/2011	MW-38	24.1 - 29.1	21.04	7.2	470	6.08	182	
11/15/2011	MW-41	2.0 - 12.0	21.2	4.2	113	3.80	171	
11/15/2011	MW-42	17.0 - 22.0	21.09	5.9	1200	5.70	161	
11/15/2011	MW-49	3.9 - 13.5	21.29	7	144	4.49	229	
11/15/2011	MW-50	29.6 - 31.4	20.35	<1	559	6.51	-131	
11/15/2011	MW-50	29.6 - 31.4	21.25	<1	499	6.57	-116	
11/15/2011	MW-52	25.9 - 30.4	20.44	<1	457	6.62	-12	
11/15/2011	MW-53	26.7 - 31.1	20.08	<1	462	6.28	-40	
11/15/2011	MW-54	26.9 - 31.4	20.87	<1	509	6.43	131	
11/15/2011	MW-55	26.9 - 31.4	21.09	2.6	432	6.84	9.7	
11/15/2011	MW-56	26.9 - 31.4	20.78	3	459	6.55	45	
11/15/2011	MW-58	26.0 - 31.0	20.66	3	421	6.98	73	

Table 3-5
Performance Monitoring Field Parameters
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

Date	Well ID	Screen Interval (ft blgs	Temp (^{o}C)	DO (mg/L)	*SC (uS/cm)*	*pH (SU)*	*ORP (mV)*	NOTES
12/13/2011	MW-18	4.9 - 14.9	19.75	3.85	69	4.8	330.4	
12/13/2011	MW-19	6.3 - 16.3	20.59	8.03	53	5.26	265.0	
12/13/2011	MW-20	6.0 - 16.0	19.79	9.49	92	5.6	256.4	
12/13/2011	MW-21	5.1 - 15.1	20.22	4.04	117	5.28	275.9	
12/13/2011	MW-22	4.0 - 14.0	19.79	6.13	213	3.93	453.2	
12/13/2011	MW-23	13.0 - 23.0	19.62	4.21	650	7.11	48.0	
12/13/2011	MW-32	3.6 - 13.6	20.47	4.48	101	5.53	208.6	
12/13/2011	MW-38	24.1 - 29.1	20.74	9.74	480	7.23	125.0	
12/13/2011	MW-41	2.0 - 12.0	20.19	3.83	71	5.88	204.8	
12/13/2011	MW-42	17.0 - 22.0	20.60	6.07	1452	5.96	133.7	
12/13/2011	MW-49	3.9 - 13.5	20.25	7.4	121	5.42	231.3	
12/13/2011	MW-50	29.6 - 31.4	20.13	2.56	471	6.97	53.0	
12/13/2011	MW-52	25.9 - 30.4	19.91	1.26	442	6.7	-130.4	
12/13/2011	MW-53	26.7 - 31.1	19.81	3.62	430	6.53	259.0	
12/13/2011	MW-54	26.9 - 31.4	20.70	4.16	489	6.89	171.4	
12/13/2011	MW-55	26.9 - 31.4	20.84	4.69	425	7.12	202.4	
12/13/2011	MW-56	26.9 - 31.4	20.07	5.09	446	6.59	232.4	
12/13/2011	MW-58	26.0 - 31.0	19.84	0.97	536	6.55	-140.4	
1/25/2012	MW-18	4.9 - 14.9	19.53	7.04	350	3.84	40.2	
1/25/2012	MW-19	6.3 - 16.3	19.56	6.73	75	3.91	127.8	
1/25/2012	MW-20	6.0 - 16.0	20.06	6.89	100	3.86	98.34	
1/25/2012	MW-21	5.1 - 15.1	19.51	6.61	59	3.56	277.1	
1/25/2012	MW-22	4.0 - 14.0	18.78	5.40	313	3.38	517.3	
1/25/2012	MW-23	13.0 - 23.0	19.46	3.46	807	6.19	219	
1/25/2012	MW-32	3.6 - 13.6	19.94	6.20	80	5.39	67.6	
1/25/2012	MW-38	24.1 - 29.1	20.64	8.64	1013	6.63	198.4	
1/25/2012	MW-41	2.0 - 12.0	19.16	5.72	63	3.97	34.1	
1/25/2012	MW-42	17.0 - 22.0	20.29	8.24	1677	4.6	317.1	
1/25/2012	MW-49	3.9 - 13.5	19.32	7.11	155	5.08	274.3	
1/25/2012	MW-50	29.6 - 31.4	21.28	4.70	459	6.83	134.1	
1/25/2012	MW-52	25.9 - 30.4	20.55	4.96	415	7.1	107.8	
1/25/2012	MW-53	26.7 - 31.1	19.62	5.25	404	7.3	121.5	
1/25/2012	MW-54	26.9 - 31.4	20.62	4.28	477	6.91	156.1	
1/25/2012	MW-55	26.9 - 31.4	21.42	6.32	399	6.43	161.8	
1/25/2012	MW-56	26.9 - 31.4	20.00	7.02	436	7.57	113.8	
1/25/2012	MW-58	26.0 - 31.0	20.11	5.30	392	7.32	116.9	
3/7/2012	MW-18	4.9 - 14.9	18.21	7.10	64	4.57	262	
3/7/2012	MW-19	6.3 - 16.3	18.00	7.57	150	5.53	247	
3/7/2012	MW-20	6.0 - 16.0	19.02	8.72	73	4.20	198	
3/7/2012	MW-21	5.1 - 15.1	18.28	5.86	460	3.78	383	
3/7/2012	MW-22	4.0 - 14.0	18.26	3.91	1045	6.76	232	
3/7/2012	MW-23	13.0 - 23.0	17.16	7.56	183	3.83	304	
3/7/2012	MW-32	3.6 - 13.6	18.75	7.33	89	5.98	157	
3/7/2012	MW-38	24.1 - 29.1	19.50	10.28	998	7.09	280	
3/7/2012	MW-41	2.0 - 12.0	18.03	7.41	130	4.49	308	
3/7/2012	MW-42	17.0 - 22.0	19.43	10.86	1622	360	373	
3/7/2012	MW-49	3.9 - 13.5	18.07	7.76	205	4.67	267	
3/7/2012	MW-50	29.6 - 31.4	20.70	2.68	789	6.95	-22	
3/7/2012	MW-52	25.9 - 30.4	19.88	3.80	674	7.05	291.6	
3/7/2012	MW-53	26.7 - 31.1	19.51	2.89	477	6.97	264	
3/7/2012	MW-54	26.9 - 31.4	19.75	1.70	588	7.06	250	
3/7/2012	MW-55	26.9 - 31.4	20.49	2.75	452	7.24	215	
3/7/2012	MW-56	26.9 - 31.4	19.75	3.89	712	7.08	301	
3/7/2012	MW-58	26.0 - 31.0	19.37	4.54	545	7.26	97.2	

Table 3-5
Performance Monitoring Field Parameters
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

Date	Well ID	Screen Interval (ft blgs	Temp (^{o}C)	DO (mg/L)	*SC (uS/cm)*	*pH (SU)*	*ORP (mV)*	NOTES
4/11/2012	MW-18	4.9 - 14.9	19.11	5.58	65	5.25	319	
4/11/2012	MW-19	6.3 - 16.3	19.09	8.75	96	5.35	389	
4/11/2012	MW-20	6.0 - 16.0	20.12	7.4	73	4.92	280	
4/11/2012	MW-21	5.1 - 15.1	19.16	6.41	413	4.27	390	
4/11/2012	MW-22	4.0 - 14.0	18.74	7.2	194	4.18	415	
4/11/2012	MW-23	13.0 - 23.0	19.05	6.65	905	6.55	376	
4/11/2012	MW-32	3.6 - 13.6	19.62	7.12	117	6.09	271	
4/11/2012	MW-38	24.1 - 29.1	19.84	9.85	817	7.14	376	
4/11/2012	MW-41	2.0 - 12.0	19.06	5.58	82	4.96	422	
4/11/2012	MW-42	17.0 - 22.0	19.97	9.85	NR	3.65	538	
4/11/2012	MW-49	3.9 - 13.5	19.2	8.3	259	4.53	341	
4/11/2012	MW-50	29.6 - 31.4	20.71	4.58	672	7.15	297	
4/11/2012	MW-53	26.7 - 31.1	19.81	1.64	492	6.92	297	
4/11/2012	MW-54	26.9 - 31.4	19.96	0.48	581	6.82	222	
4/11/2012	MW-55	26.9 - 31.4	21.07	2.87	452	7.11	282	
4/11/2012	MW-56	26.9 - 31.4	20.1	3.77	752	7.00	308	
4/11/2012	MW-58	26.0 - 31.0	19.65	3.58	604	7.25	265	
6/13/2012	MW-18	4.9 - 14.9	NR	0.4	NR	NR	NR	
6/13/2012	MW-19	6.3 - 16.3	NR	0.69	NR	NR	NR	
6/13/2012	MW-20	6.0 - 16.0	NR	1.06	NR	NR	NR	
6/13/2012	MW-21	5.1 - 15.1	NR	0.23	NR	NR	NR	
6/13/2012	MW-22	4.0 - 14.0	NR	5.74	NR	NR	NR	
6/13/2012	MW-23	13.0 - 23.0	NR	0.3	NR	NR	NR	
6/13/2012	MW-32	3.6 - 13.6	NR	2.38	NR	NR	NR	
6/13/2012	MW-38	24.1 - 29.1	NR	0.6	NR	NR	NR	
6/13/2012	MW-41	2.0 - 12.0	NR	0.3	NR	NR	NR	
6/13/2012	MW-42	17.0 - 22.0	NR	1.23	NR	NR	NR	
6/13/2012	MW-49	3.9 - 13.5	NR	2.35	NR	NR	NR	
6/13/2012	MW-50	29.6 - 31.4	NR	0.12	NR	NR	NR	
6/13/2012	MW-53	26.7 - 31.1	NR	0.17	NR	NR	NR	
6/13/2012	MW-54	26.9 - 31.4	NR	0.15	NR	NR	NR	
6/13/2012	MW-55	26.9 - 31.4	NR	0.25	NR	NR	NR	
6/13/2012	MW-56	26.9 - 31.4	NR	0.2	NR	NR	NR	
6/13/2012	MW-58	26.0 - 31.0	NR	0.11	NR	NR	NR	
7/16/2012	MW-18	4.9 - 14.9	20.93	0.29	66	4.99	323	
7/16/2012	MW-19	6.3 - 16.3	21.93	5.39	119	4.95	256	
7/16/2012	MW-20	6.0 - 16.0	21.37	9.94	421	3.74	447	
7/16/2012	MW-21	5.1 - 15.1	21.18	7.64	260	3.90	483	
7/16/2012	MW-22	4.0 - 14.0	21.1	5.33	177	3.68	486	
7/16/2012	MW-23	13.0 - 23.0	20.27	10.5	1229	6.68	335	
7/16/2012	MW-32	3.6 - 13.6	21.38	7.78	241	6.93	18.3	
7/16/2012	MW-38	24.1 - 29.1	20.73	11.03	1225	7.53	74	
7/16/2012	MW-41	2.0 - 12.0	21.84	2.58	54	5.36	468.5	
7/16/2012	MW-42	17.0 - 22.0	21.1	8.8	1328	5.36	151	
7/16/2012	MW-49	3.9 - 13.5	21.87	8.48	173	4.80	229	
7/16/2012	MW-50	29.6 - 31.4	20.97	0.13	977	6.66	88	
7/16/2012	MW-53	26.7 - 31.1	19.88	0.09	542	6.69	-0.09	
7/16/2012	MW-54	26.9 - 31.4	20.49	0.11	637	6.80	-28	
7/16/2012	MW-55	26.9 - 31.4	21.04	2.18	454	6.78	297	
7/16/2012	MW-56	26.9 - 31.4	20.39	2.29	789	6.79	329	
7/16/2012	MW-58	26.0 - 31.0	20.1	0.11	740	6.88	-42	

Table 3-5
Performance Monitoring Field Parameters
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

Date	Well ID	Screen Interval (ft blgs	Temp (^{o}C)	DO (mg/L)	*SC (uS/cm)*	*pH (SU)*	*ORP (mV)*	NOTES
8/15/2012	MW-18	4.9 - 14.9	21.37	0.73	89	4.41	-202	
8/15/2012	MW-19	6.3 - 16.3	22.72	7.26	100	5.49	-215	
8/15/2012	MW-20	6.0 - 16.0	22.51	9.45	379	1.55	479	
8/15/2012	MW-21	5.1 - 15.1	22.05	6.13	654	3.66	444	
8/15/2012	MW-22	4.0 - 14.0	22.90	6.81	216	3.55	445	
8/15/2012	MW-23	13.0 - 23.0	21.32	3.96	1692	5.94	283	
8/15/2012	MW-32	3.6 - 13.6	22.07	7.84	109	6.07	194	
8/15/2012	MW-38	24.1 - 29.1	21.11	10.72	1000	6.93	91.7	
8/15/2012	MW-41	2.0 - 12.0	22.72	5.25	100	4.91	-80	
8/15/2012	MW-42	17.0 - 22.0	21.60	1.07	1245	4.83	332	
8/15/2012	MW-49	3.9 - 13.5	22.68	5.4	301	4.8	294	
8/15/2012	MW-50	29.6 - 31.4	20.86	0.4	1086	6.43	-43	
8/15/2012	MW-53	26.7 - 31.1	19.97	0.34	549	5.81	-28	
8/15/2012	MW-52	25.9 - 30.4	20.36	0.46	1261	6.43	-75	
8/15/2012	MW-54	26.9 - 31.4	20.69	0.5	632	6.52	-131	
8/15/2012	MW-55	26.9 - 31.4	20.90	0.62	454	4.44	160	
8/15/2012	MW-56	26.9 - 31.4	20.28	0.43	896	5.87	-49	
8/15/2012	MW-58	26.0 - 31.0	20.11	0.57	1022	6.68	-82	
9/12/2012	MW-18	4.9 - 14.9	21.95	4.1	250	4.11	97	
9/12/2012	MW-19	6.3 - 16.3	23.49	9.21	261	5.62	266	
9/12/2012	MW-20	6.0 - 16.0	NR	8.86	136	2.32	371	
9/12/2012	MW-21	5.1 - 15.1	22.76	9.52	192	3.66	411	
9/12/2012	MW-22	4.0 - 14.0	23.36	3.96	108	2.69	230	
9/12/2012	MW-23	13.0 - 23.0	21.63	10.2	779	4.74	101.1	
9/12/2012	MW-32	3.6 - 13.6	22.75	7.29	80	5.98	125	
9/12/2012	MW-38	24.1 - 29.1	21.84	12.04	140	NR	180	
9/12/2012	MW-41	2.0 - 12.0	23.90	4.41	150	3.86	309	
9/12/2012	MW-42	17.0 - 22.0	22.36	10.65	1072	4.77	330	
9/12/2012	MW-49	3.9 - 13.5	22.30	9.25	150	5.95	237.7	
9/12/2012	MW-50	29.6 - 31.4	21.19	0.48	1216	6.43	-61.3	
9/12/2012	MW-53	26.7 - 31.1	20.15	0.54	577	6.06	-74	
9/12/2012	MW-52	25.9 - 30.4	20.63	0.71	1191	6.2	-65	
9/12/2012	MW-54	26.9 - 31.4	20.93	0.82	777	6.46	-104	
9/12/2012	MW-55	26.9 - 31.4	21.31	0.57	533	4.9	-11.5	
9/12/2012	MW-56	26.9 - 31.4	20.70	0.65	941	5.89	-84	
9/12/2012	MW-58	26.0 - 31.0	20.30	0.6	1200	6.48	-89	
10/17/2012	MW-18	4.9 - 14.9	21.92	1.47	35-108	4.11	89	
10/17/2012	MW-19	6.3 - 16.3	22.92	2.67	295	5.45	29.5	
10/17/2012	MW-20	6.0 - 16.0	23.04	10.17	25 - 250	2.05	461	
10/17/2012	MW-21	5.1 - 15.1	22.76	5.84	238	3.96	433	
10/17/2012	MW-22	4.0 - 14.0	22.56	6.04	86	3.33	314	
10/17/2012	MW-23	13.0 - 23.0	22.12	8.51	291	6.51	234	
10/17/2012	MW-32	3.6 - 13.6	22.71	8.3	90-400	5.43	259	
10/17/2012	MW-38	24.1 - 29.1	21.98	7.83	1958	7.06	272	
10/17/2012	MW-41	2.0 - 12.0	22.87	6	119	3.83	386	
10/17/2012	MW-42	17.0 - 22.0	22.41	10.55	1184	453	375	
10/17/2012	MW-49	3.9 - 13.5	23.06	8.63	123	5.43	219	
10/17/2012	MW-50	29.6 - 31.4	21.39	0.2	1209	6.39	-29	
10/17/2012	MW-53	26.7 - 31.1	20.44	0.19	587	5.96	-35	
10/17/2012	MW-54	26.9 - 31.4	21.22	0.2	776	6.33	-75.8	
10/17/2012	MW-55	26.9 - 31.4	21.71	0.37	500	5.23	43	
10/17/2012	MW-56	26.9 - 31.4	20.90	0.28	1161	6.17	-38	
10/17/2012	MW-58	26.0 - 31.0	20.69	0.16	1181	6.37	-77	

Table 3-5
Performance Monitoring Field Parameters
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

Date	Well ID	Screen Interval (ft blgs	Temp (^{o}C)	DO (mg/L)	*SC (uS/cm)*	*pH (SU)*	*ORP (mV)*	NOTES
12/11/2012	MW-18	4.9 - 14.9	20.85	7.09	66	4.7	319	
12/11/2012	MW-19	6.3 - 16.3	4.13	6.42	295	5.04	343	
12/11/2012	MW-20	6.0 - 16.0	21.70	9.34	104	4.27	287	
12/11/2012	MW-21	5.1 - 15.1	21.27	7.02	260	4.04	437.2	
12/11/2012	MW-22	4.0 - 14.0	20.25	7.72	119	408	372	
12/11/2012	MW-23	13.0 - 23.0	20.87	857	1627	6.78	272	
12/11/2012	MW-32	3.6 - 13.6	21.38	7.61	77	5.32	257	
12/11/2012	MW-38	24.1 - 29.1	21.44	10.61	1284	7.47	296	
12/11/2012	MW-41	2.0 - 12.0	20.94	5.52	122	447	396	
12/11/2012	MW-42	17.0 - 22.0	21.61	9.25	1519	4.33	456	
12/11/2012	MW-49	3.9 - 13.5	21.21	7.75	172	5.52	244	
12/11/2012	MW-50	29.6 - 31.4	21.66	0.27	1170	6.79	-29	
12/11/2012	MW-53	26.7 - 31.1	20.79	0.26	641	6.91	--	
12/11/2012	MW-54	26.9 - 31.4	21.40	0.81	675	7.00	-97	
12/11/2012	MW-55	26.9 - 31.4	21.87	1.58	542	7.15	-53	
12/11/2012	MW-56	26.9 - 31.4	21.32	0.31	891	6.88	-31	
12/11/2012	MW-58	26.0 - 31.0	20.99	0.27	1267	6.93	-115	
1/30/2013	MW-18	4.9 - 14.9	20.11	5.97	69	4.71	-31.5	
1/30/2013	MW-19	6.3 - 16.3	19.61	7.41	150	5.19	51	
1/30/2013	MW-20	6.0 - 16.0	20.70	9.48	118	4.11	45.9	
1/30/2013	MW-21	5.1 - 15.1	20.06	7.03	1145	3.35	294	
1/30/2013	MW-22	4.0 - 14.0	19.25	1.42	112	4.39	-50	
1/30/2013	MW-23	13.0 - 23.0	20.07	7.01	1442	6.36	26	
1/30/2013	MW-32	3.6 - 13.6	20.24	8.14	155	6.17	36	
1/30/2013	MW-38	24.1 - 29.1	20.70	10.6	1148	7.07	31	
1/30/2013	MW-41	2.0 - 12.0	19.63	7.65	96	4.01	6.2	
1/30/2013	MW-42	17.0 - 22.0	20.58	9.66	1179	4.42	143	
1/30/2013	MW-49	3.9 - 13.5	19.86	8.26	181	5.74	91	
1/30/2013	MW-50	29.6 - 31.4	21.35	4.8	992	6.92	16.5	
1/30/2013	MW-53	26.7 - 31.1	20.57	1.1	644	6.77	-21	
1/30/2013	MW-54	26.9 - 31.4	21.04	5.38	664	7.06	26.5	
1/30/2013	MW-55	26.9 - 31.4	21.54	5.6	484	6.73	24.7	
1/30/2013	MW-56	26.9 - 31.4	21.01	4.89	927	6.69	2.7	
1/30/2013	MW-58	26.0 - 31.0	20.69	1.14	1334	6.74	-26	
3/27/2013	MW-18	4.9 - 14.9	18.56	6.6	103	5.2	37.1	
3/27/2013	MW-19	6.3 - 16.3	18.37	1.7	175	5.09	93	
3/27/2013	MW-20	6.0 - 16.0	NR	9.09	82	4.14	136	
3/27/2013	MW-21	5.1 - 15.1	18.25	4.03	148	3.54	235	
3/27/2013	MW-22	4.0 - 14.0	17.11	1.17	49	3.87	-176	
3/27/2013	MW-23	13.0 - 23.0	18.20	4.96	322	6.83	98	
3/27/2013	MW-32	3.6 - 13.6	18.77	3.04	121	5.47	40	
3/27/2013	MW-38	24.1 - 29.1	20.05	5.85	1473	7.13	64	
3/27/2013	MW-41	2.0 - 12.0	17.65	4.86	60	3.49	-3	
3/27/2013	MW-42	17.0 - 22.0	18.84	7.8	515	6.08	570	
3/27/2013	MW-49	3.9 - 13.5	17.63	9.31	90	5.45	-1	
3/27/2013	MW-50	29.6 - 31.4	20.65	1.12	1703	7.29	-56	
3/27/2013	MW-53	26.7 - 31.1	20.09	1.32	757	7.36	6.1	
3/27/2013	MW-54	26.9 - 31.4	20.18	2.17	688	7.35	52	
3/27/2013	MW-55	26.9 - 31.4	20.94	5.55	488	7.5	162	
3/27/2013	MW-56	26.9 - 31.4	20.38	0.98	2091	6.97	-36	
3/27/2013	MW-58	26.0 - 31.0	19.97	3.34	1159	7.44	-5.1	

Table 3-5
Performance Monitoring Field Parameters
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

Date	Well ID	Screen Interval (ft blgs	Temp (^{o}C)	DO (mg/L)	*SC (uS/cm)*	*pH (SU)*	*ORP (mV)*	NOTES
4/24/2013	MW-18	4.9 - 14.9	18.57	5.62	66	5.54	310	
4/24/2013	MW-19	6.3 - 16.3	18.20	0.33	275	6.03	137	
4/24/2013	MW-20	6.0 - 16.0	18.84	10.89	14	4.65	288	
4/24/2013	MW-21	5.1 - 15.1	18.21	2.75	125	3.98	398	
4/24/2013	MW-22	4.0 - 14.0	17.90	4.6	89	3.71	378	
4/24/2013	MW-23	13.0 - 23.0	18.41	8.09	345	6.15	297	
4/24/2013	MW-32	3.6 - 13.6	18.61	8.1	116	6.14	238	
4/24/2013	MW-38	24.1 - 29.1	18.81	0.69	1539	6.41	347	
4/24/2013	MW-41	2.0 - 12.0	18.23	3.03	100	4.31	400	
4/24/2013	MW-42	17.0 - 22.0	18.98	8.71	946	4.85	367	
4/24/2013	MW-49	3.9 - 13.5	18.19	9.25	122	6.8	254	
4/24/2013	MW-50	29.6 - 31.4	20.20	2.42	1391	6.71	254	
4/24/2013	MW-53	26.7 - 31.1	19.88	1.53	713	6.6	278	
4/24/2013	MW-54	26.9 - 31.4	19.91	0.38	831	6.50	44	
4/24/2013	MW-55	26.9 - 31.4	20.57	2.51	7.14	6.47	242	
4/24/2013	MW-56	26.9 - 31.4	20.02	2.5	1724	6.26	330	
4/24/2013	MW-58	26.0 - 31.0	19.36	3.2	1117	6.89	247	
6/6/2013	MW-18	4.9 - 14.9	19.25	3.94	68	5.29	311	
6/6/2013	MW-19	6.3 - 16.3	19.55	8.21	286	5.85	315	
6/6/2013	MW-20	6.0 - 16.0	19.71	9.76	142	4.25	332	
6/6/2013	MW-21	5.1 - 15.1	19.29	9.31	222	3.84	483	
6/6/2013	MW-22	4.0 - 14.0	19.33	7.39	110	3.87	414	
6/6/2013	MW-23	13.0 - 23.0	19.21	8.53	320	5.87	350	
6/6/2013	MW-32	3.6 - 13.6	19.44	8.17	150	594	261	
6/6/2013	MW-38	24.1 - 29.1	19.65	10.85	2197	6.74	303	
6/6/2013	MW-41	2.0 - 12.0	19.50	3.34	107	4.28	352	
6/6/2013	MW-42	17.0 - 22.0	19.46	8.79	987	4.5	399	
6/6/2013	MW-49	3.9 - 13.5	19.35	6.73	125	5.75	253	
6/6/2013	MW-50	29.6 - 31.4	20.08	1.14	1437	6.56	171	
6/6/2013	MW-53	26.7 - 31.1	19.37	0.36	733	6.48	20	
6/6/2013	MW-54	26.9 - 31.4	19.84	0.39	1042	6.6	-67	
6/6/2013	MW-55	26.9 - 31.4	20.37	0.63	750	6.43	70	
6/6/2013	MW-56	26.9 - 31.4	19.85	0.52	1694	6.27	-42	
6/6/2013	MW-58	26.0 - 31.0	19.53	2.02	1147	6.8	187	
7/25/2013	MW-18	4.9 - 14.9	21.20	3.37	78	4.89	149	
7/25/2013	MW-19	6.3 - 16.3	22.32	7.8	311	6.22	134	
7/25/2013	MW-20	6.0 - 16.0	22.05	8.58	136	3.9	156	
7/25/2013	MW-21	5.1 - 15.1	21.47	8.05	311	3.73	244	
7/25/2013	MW-22	4.0 - 14.0	23.08	6.18	143	3.7	178	
7/25/2013	MW-23	13.0 - 23.0	20.59	9.46	1000	4.92	235	
7/25/2013	MW-32	3.6 - 13.6	22.41	9.05	108	6.48	50.3	
7/25/2013	MW-38	24.1 - 29.1	20.39	12.42	1286	7.38	151	
7/25/2013	MW-41	2.0 - 12.0	22.89	2.65	1183	4.07	193	
7/25/2013	MW-42	17.0 - 22.0	21.11	9.62	549	5.51	147	
7/25/2013	MW-49	3.9 - 13.5	21.86	10.05	200	6.92	82	
7/25/2013	MW-50	29.6 - 31.4	20.32	1.54	1548	6.7	-49	
7/25/2013	MW-53	26.7 - 31.1	19.92	2.07	741	6.78	25.9	
7/25/2013	MW-54	26.9 - 31.4	20.38	1.87	1023	6.71	-101	
7/25/2013	MW-55	26.9 - 31.4	20.59	1.75	819	6.81	-40	
7/25/2013	MW-56	26.9 - 31.4	20.19	1.69	1647	6.52	-52	
7/25/2013	MW-58	26.0 - 31.0	19.89	1.91	1631	6.83	-71	

Table 3-5
Performance Monitoring Field Parameters
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

Date	Well ID	Screen Interval (ft blgs	Temp (^{o}C)	DO (mg/L)	*SC (uS/cm)*	*pH (SU)*	*ORP (mV)*	NOTES
8/28/2013	MW-18	4.9 - 14.9	21.48	8.03	122f	5.16	152	
8/28/2013	MW-19	6.3 - 16.3	22.51	10.47	333	5.48	191	
8/28/2013	MW-20	6.0 - 16.0	22.68	11.37	239	3.68	145	
8/28/2013	MW-21	5.1 - 15.1	22.05	9.51	447	3.39	270	
8/28/2013	MW-22	4.0 - 14.0	22.91	8.61	196	3.47	205	
8/28/2013	MW-23	13.0 - 23.0	24.28	8.85	7	4.62	395	
8/28/2013	MW-32	3.6 - 13.6	22.23	7.16	118	6.73	63	
8/28/2013	MW-38	24.1 - 29.1	20.39	10.42	1100f	6.3	237	
8/28/2013	MW-41	2.0 - 12.0	22.86	2.86	1083	3.75	286	
8/28/2013	MW-42	17.0 - 22.0	22.21	9.36	434	6.26	113	
8/28/2013	MW-49	3.9 - 13.5	22.54	10.33	73-237	6.64	55	
8/28/2013	MW-50	29.6 - 31.4	20.67	0.5	1582	6.51	-28	
8/28/2013	MW-53	26.7 - 31.1	20.08	0.47	774	6.62	-6	
8/28/2013	MW-54	26.9 - 31.4	20.69	0.45	953	6.4	-53.7	
8/28/2013	MW-55	26.9 - 31.4	20.84	0.62	828	5.51	65	
8/28/2013	MW-56	26.9 - 31.4	20.46	0.6	1677	6.13	20	
8/28/2013	MW-58	26.0 - 31.0	20.04	0.47	1619	6.71	-58	
10/9/2013	MW-18	4.9 - 14.9	21.14	6	63	4.57	168	
10/9/2013	MW-19	6.3 - 16.3	22.12	9.42	296	4.77	159	
10/9/2013	MW-20	6.0 - 16.0	21.79	9.5	307	4.28	174	
10/9/2013	MW-21	5.1 - 15.1	21.69	8.67	623	3.5	226	
10/9/2013	MW-22	4.0 - 14.0	21.75	6.8	188	3.36	195	
10/9/2013	MW-23	13.0 - 23.0	20.96	9.77	1500	4.19	183	
10/9/2013	MW-32	3.6 - 13.6	21.52	6.67	174	5.22	134	
10/9/2013	MW-38	24.1 - 29.1	20.66	11.21	2026	7.27	144	
10/9/2013	MW-41	2.0 - 12.0	21.95	2.87	959	3.67	186	
10/9/2013	MW-42	17.0 - 22.0	21.39	8.97	422	6.12	135	
10/9/2013	MW-49	3.9 - 13.5	20.87	8.42	135	4.92	144	
10/9/2013	MW-50	29.6 - 31.4	20.21	0.2	1523	6.6	110	
10/9/2013	MW-53	26.7 - 31.1	19.71	0.22	742	6.78	129	
10/9/2013	MW-54	26.9 - 31.4	20.60	0.21	878	6.82	78	
10/9/2013	MW-55	26.9 - 31.4	20.26	0.3	810	6.78	125	
10/9/2013	MW-56	26.9 - 31.4	20.14	0.2	1635	6.59	144	
10/9/2013	MW-58	26.0 - 31.0	19.79	0.3	1500	6.64	116	
12/4/2013	MW-18	4.9 - 14.9	20.04	8.05	62	4.28	107	
12/4/2013	MW-19	6.3 - 16.3	20.37	9.83	263	4.23	143	
12/4/2013	MW-20	6.0 - 16.0	20.43	9.84	268	3.85	122	
12/4/2013	MW-21	5.1 - 15.1	20.38	6.44	736	3.3	152	
12/4/2013	MW-22	4.0 - 14.0	19.45	8.57	164	3.25	139	
12/4/2013	MW-23	13.0 - 23.0	20.16	9.74	940	5.09	116	
12/4/2013	MW-32	3.6 - 13.6	20.02	7.7	139	4.56	92	
12/4/2013	MW-38	24.1 - 29.1	20.31	11.96	133	7.21	120	
12/4/2013	MW-41	2.0 - 12.0	19.80	3.2	711	3.28	166	
12/4/2013	MW-42	17.0 - 22.0	20.35	9.98	428	6.15	87	
12/4/2013	MW-49	3.9 - 13.5	20.23	7.95	195	5.11	-86.6	
12/4/2013	MW-50	29.6 - 31.4	20.46	0.22	1554	6.6	-54.5	
12/4/2013	MW-53	26.7 - 31.1	19.95	0.2	641	6.68	72	
12/4/2013	MW-54	26.9 - 31.4	20.51	0.23	836	6.71	76	
12/4/2013	MW-55	26.9 - 31.4	20.60	0.32	1040	6.65	71	
12/4/2013	MW-56	26.9 - 31.4	20.15	10.83	1840	7.04	87	
12/4/2013	MW-58	26.0 - 31.0	19.95	0.23	1595	6.73	41	

Notes:
ORP - Oxidation Reduction Potential
C - Celsius
mg/L - milligrams per liter
mV - millivolts
µS/cm - microsiemens per centimeter

Table 3-6
Biosparge Flow Measurements
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

DATE	Well ID	TIME	Pressure (PSI)	Flow (SCFH)
10/11/2011	BSP-01	NR	18.00	80
10/11/2011	BSP-02	NR	14.00	110
10/11/2011	BSP-03	NR	16.00	100
10/11/2011	BSP-04	NR	12.00	200
10/11/2011	BSP-05	NR	10.50	60
10/11/2011	BSP-06	NR	21.50	160
10/11/2011	BSP-07	NR	0.50	160-170
10/11/2011	BSP-08	NR	1.00	<60
10/11/2011	BSP-09	NR	15.20	200-300
10/11/2011	BSP-10	NR	20.50	100-110
10/11/2011	BSP-11	NR	17.20	200-300
10/11/2011	BSP-12	NR	19.00	160-200
10/11/2011	BSP-13	NR	18.50	<60-120
10/11/2011	BSP-14	NR	18.50	<60
10/11/2011	BSP-15	NR	12.75	300-400
10/11/2011	BSP-16	NR	12.15	200->600
10/11/2011	BSP-17	NR	10.50	100-120
11/1/2011	BSP-01	NR	11.50	90
11/1/2011	BSP-02	NR	12.50	140
11/1/2011	BSP-03	NR	13.00	140-150
11/1/2011	BSP-04	NR	13.00	140-150
11/1/2011	BSP-05	NR	12.50	80
11/1/2011	BSP-06	NR	0.75	<60
11/1/2011	BSP-07	NR	12.50	140
11/1/2011	BSP-08	NR	12.50	60-17
11/1/2011	BSP-09	NR	11.50	150-140
11/1/2011	BSP-10	NR	12.50	<60
11/1/2011	BSP-11	NR	12.00	80-90
11/1/2011	BSP-12	NR	12.50	55-60
11/1/2011	BSP-13	NR	12.50	0
11/1/2011	BSP-14	NR	12.50	100
11/1/2011	BSP-15	NR	12.50	110
11/1/2011	BSP-16	NR	11.50	140
11/1/2011	BSP-17	NR	11.50	60
11/14/2011	BSP-01	1704	9.75	75
11/14/2011	BSP-02	1706	9.00	120
11/14/2011	BSP-03	1703	10.00	210
11/14/2011	BSP-04	1700	10.00	210
11/14/2011	BSP-05	1658	10.00	120
11/14/2011	BSP-06	1656	10.25	120
11/14/2011	BSP-07	1653	0.75	200
11/14/2011	BSP-08	1651	9.75	120
11/14/2011	BSP-09	1649	9.75	110
11/14/2011	BSP-10	1647	10.50	60
11/14/2011	BSP-11	1645	10.30	120
11/14/2011	BSP-12	1644	10.00	110
11/14/2011	BSP-13	1641	10.50	100
11/14/2011	BSP-14	1639	10.00	110
11/14/2011	BSP-15	1637	10.25	70
11/14/2011	BSP-16	1634	9.75	120
11/14/2011	BSP-17	1632	9.50	<50

Table 3-6
Biosparge Flow Measurements
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

DATE	Well ID	TIME	Pressure (PSI)	Flow (SCFH)
12/12/2011	BSP-01	1448	8.00	60
12/12/2011	BSP-02	1445	7.5	220
12/12/2011	BSP-03	1450	8.50	160-180
12/12/2011	BSP-04	1453	8.00	50-100
12/12/2011	BSP-05	1458	8.00	160
12/12/2011	BSP-06	1456	8.50	100
12/12/2011	BSP-07	1500	0.00	540
12/12/2011	BSP-08	1505	7.50	180
12/12/2011	BSP-09	1508	7.50	200
12/12/2011	BSP-10	1512	8.50	--
12/12/2011	BSP-11	1520	8.00	100
12/12/2011	BSP-12	1515	7.50	60
12/12/2011	BSP-13	1519	8	60
12/12/2011	BSP-14	1524	7.50	80-100
12/12/2011	BSP-15	1527	7.50	100
12/12/2011	BSP-16	1530	8.50	0
12/12/2011	BSP-17	1535	7.5	60
1/25/2012	BSP-01	1023	9.25	<50
1/25/2012	BSP-02	1025	9.25	170
1/25/2012	BSP-03	1031	9.75	90
1/25/2012	BSP-04	1035	9.75	110
1/25/2012	BSP-05	1037	9.75	90
1/25/2012	BSP-06	1033	9.75	80
1/25/2012	BSP-07	1040	0.80	500
1/25/2012	BSP-08	1035	9.50	150
1/25/2012	BSP-09	1055	8.90	220
1/25/2012	BSP-10	1057	8.75	-50
1/25/2012	BSP-11	1100	9.40	100
1/25/2012	BSP-12	1059	9.40	120
1/25/2012	BSP-13	1101	9.25	100
1/25/2012	BSP-14	1103	9.00	60
1/25/2012	BSP-15	1104	9.25	100
1/25/2012	BSP-16	1005	9.75	-
1/25/2012	BSP-17	1007	8.75	<50
3/7/2012	BSP-01	1046	10.25	60
3/7/2012	BSP-02	NR	9.75	180
3/7/2012	BSP-03	1043	10.00	90
3/7/2012	BSP-04	1048	10.00	120
3/7/2012	BSP-05	1052	10.25	100
3/7/2012	BSP-06	1050	10.00	90
3/7/2012	BSP-07	1055	1.70	480
3/7/2012	BSP-08	1053	10.00	140
3/7/2012	BSP-09	1059	9.70	100
3/7/2012	BSP-10	1101	9.60	<50
3/7/2012	BSP-11	1103	10.00	<50
3/7/2012	BSP-12	1105	9.80	80
3/7/2012	BSP-13	1107	10.00	60
3/7/2012	BSP-14	1108	10.00	100
3/7/2012	BSP-15	1109	10.00	170
3/7/2012	BSP-16	1110	9.40	110
3/7/2012	BSP-17	1112	9.50	<50

Table 3-6
Biosparge Flow Measurements
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

DATE	Well ID	TIME	Pressure (PSI)	Flow (SCFH)
4/11/2012	BSP-01	1042	9.80	190
4/11/2012	BSP-02	1052	10.30	< 60
4/11/2012	BSP-03	1054	9.80	130
4/11/2012	BSP-04	1050	10.00	120
4/11/2012	BSP-05	1100	10.00	100
4/11/2012	BSP-06	1056	10.10	80
4/11/2012	BSP-07	1102	1.00	420
4/11/2012	BSP-08	1101	9.80	160
4/11/2012	BSP-09	1058	9.90	140
4/11/2012	BSP-10	1105	10.10	< 50
4/11/2012	BSP-11	1107	9.70	< 60
4/11/2012	BSP-12	1109	9.20	< 50
4/11/2012	BSP-13	1112	9.60	< 60
4/11/2012	BSP-14	1114	9.70	90
4/11/2012	BSP-15	1115	9.70	150
4/11/2012	BSP-16	1117	10.00	< 50
4/11/2012	BSP-17	1118	9.30	220
6/15/2012	BSP-01	1032	9.75	60
6/15/2012	BSP-02	1036	9.50	120
6/15/2012	BSP-03	1039	9.75	70
6/15/2012	BSP-04	1040	10.25	< 60
6/15/2012	BSP-05	1041	10.20	< 60
6/15/2012	BSP-07	1107	1.50	460
6/15/2012	BSP-08	1108	10.20	80
6/15/2012	BSP-09	1009	10.20	130
6/15/2012	BSP-10	1114	10.50	< 60
6/15/2012	BSP-11	1117	10.50	< 50
6/15/2012	BSP-12	1119	10.50	< 50
6/15/2012	BSP-13	1139	10.50	50
6/15/2012	BSP-14	1143	10.50	80
6/15/2012	BSP-15	1144	10.50	< 60
6/15/2012	BSP-16	1145	10.75	50
6/15/2012	BSP-17	1150	10.20	130
7/16/2012	BSP-01	1606	9.4	110
7/16/2012	BSP-02	1604	9.2	160
7/16/2012	BSP-03	1608	9.2	100
7/16/2012	BSP-04	1613	9.4	140
7/16/2012	BSP-05	1615	9.4	50
7/16/2012	BSP-06	1611	9.7	50
7/16/2012	BSP-07	1619	0.5	370
7/16/2012	BSP-08	1617	9.2	200
7/16/2012	BSP-09	1620	8.7	50
7/16/2012	BSP-10	1622	8.6	0
7/16/2012	BSP-11	1624	8.2	50
7/16/2012	BSP-12	1627	9.2	0
7/16/2012	BSP-13	1628	9.2	0
7/16/2012	BSP-14	1631	9.4	120
7/16/2012	BSP-15	1633	9.3 - 9.5	100
7/16/2012	BSP-16	1635	8.7	120
7/16/2012	BSP-17	1636	8.7	210

Table 3-6
Biosparge Flow Measurements
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

DATE	Well ID	TIME	Pressure (PSI)	Flow (SCFH)
8/14/2012	BSP-01	1736	9.8	130
8/14/2012	BSP-02	1730	9.5	190
8/14/2012	BSP-03	1740	9.6	100
8/14/2012	BSP-04	1745	9.8	150
8/14/2012	BSP-05	1748	9.8	100
8/14/2012	BSP-06	1743	9.9	50
8/14/2012	BSP-07	1754	1.0	160
8/14/2012	BSP-08	1757	8.9	300
8/14/2012	BSP-09	1752	9.5	150
8/14/2012	BSP-10	1826	8.8	-
8/14/2012	BSP-11	1800	9.5	< 50
8/14/2012	BSP-12	1802	9.5	< 50
8/14/2012	BSP-13	1804	9.6	50
8/14/2012	BSP-14	1807	9.8	130
8/14/2012	BSP-15	1821	10.0	-
8/14/2012	BSP-16	1816	9.0	-
8/14/2012	BSP-17	1810	9.2	240
9/12/2012	BSP-01	1209	11.7	140
9/12/2012	BSP-02	1206	11.3	180
9/12/2012	BSP-03	1213	11.6	100
9/12/2012	BSP-04	1223	11.8	100
9/12/2012	BSP-05	1225	11.8	< 50
9/12/2012	BSP-06	1215	11.7	< 50
9/12/2012	BSP-07	1232	1.2	400
9/12/2012	BSP-08	1234	11.5	120-140
9/12/2012	BSP-09	1220	11.6	160
9/12/2012	BSP-10	1237	11.7	< 50
9/12/2012	BSP-11	1244	11.8	70
9/12/2012	BSP-12	1250	11.6	< 50
9/12/2012	BSP-13	1253	11.5	< 50/60
9/12/2012	BSP-14	1300	11.5	100
9/12/2012	BSP-15	1303	11.6	60
9/12/2012	BSP-16	1307	11.8	50-60
9/12/2012	BSP-17	1311	11.5	140-150
10/17/2012	BSP-01	1325	10.7	80
10/17/2012	BSP-02	1331	10.7	180
10/17/2012	BSP-03	1335	10.7	<50
10/17/2012	BSP-04	1346	10.7	60
10/17/2012	BSP-05	1350	11.0	<50
10/17/2012	BSP-06	1341	11.0	50
10/17/2012	BSP-07	1401	<1.0	300
10/17/2012	BSP-08	1350	10.5	60
10/17/2012	BSP-09	1410	9.5	<50
10/17/2012	BSP-10	1415	10.2	<50
10/17/2012	BSP-11	1421	10.7	60
10/17/2012	BSP-12	1426	10.5	50-60
10/17/2012	BSP-13	1429	10.5	<50-50
10/17/2012	BSP-14	1432	10.5	80
10/17/2012	BSP-15	1435	10.5	50
10/17/2012	BSP-16	1439	10.5	80-90
10/17/2012	BSP-17	1444	10.2	130

Table 3-6
Biosparge Flow Measurements
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

DATE	Well ID	TIME	Pressure (PSI)	Flow (SCFH)
12/11/2012	BSP-01	1154	9.7	90
12/11/2012	BSP-02	1149	9.7	180
12/11/2012	BSP-03	1159	10.1	100
12/11/2012	BSP-04	1207	9.7	100
12/11/2012	BSP-05	1210	9.6	70
12/11/2012	BSP-06	1203	10.0	50
12/11/2012	BSP-07	OFF		
12/11/2012	BSP-08	1214	9.5	80-90
12/11/2012	BSP-09	1221	9.5	160
12/11/2012	BSP-10	1226	9.7	>50
12/11/2012	BSP-11	1239	9.8	0
12/11/2012	BSP-12	1244	9.7	60
12/11/2012	BSP-13	1249	9.5	>50
12/11/2012	BSP-14	1250	9.5	120
12/11/2012	BSP-15	1253	9.5	100
12/11/2012	BSP-16	1256	9.7	90
12/11/2012	BSP-17	1258	9.2	180
1/30/2013	BSP-01	1119	10.3	110
1/30/2013	BSP-02	1110	10.0	180
1/30/2013	BSP-03	1122	10.2	75
1/30/2013	BSP-04	1125	10.3	55
1/30/2013	BSP-05	1127	10.2	55
1/30/2013	BSP-06	1123	10.5	50
1/30/2013	BSP-07	OFF		
1/30/2013	BSP-08	1128	10.2	110
1/30/2013	BSP-09	1130	10.2	120
1/30/2013	BSP-10	1133	10.2	<50
1/30/2013	BSP-11	1208	10.4	55
1/30/2013	BSP-12	1210	10.4	55
1/30/2013	BSP-13	1238	10.5	50
1/30/2013	BSP-14	1241	10.5	130
1/30/2013	BSP-15	1243	10.5	<50
1/30/2013	BSP-16	1245	10.9	<50
1/30/2013	BSP-17	1247	10.1	200
3/28/2013	BSP-01	1150	12.2	50
3/28/2013	BSP-02	1153	12.0	110
3/28/2013	BSP-03	1200	12.0	50
3/28/2013	BSP-04	1208	12.5	<50
3/28/2013	BSP-05	1212	12.1	<50
3/28/2013	BSP-06	1205	12.0	<50
3/28/2013	BSP-07	OFF		
3/28/2013	BSP-08	1215	12.2	60
3/28/2013	BSP-09	1217	12.2	50
3/28/2013	BSP-10	1230	12.2	<50
3/28/2013	BSP-11	1235	12.4	50
3/28/2013	BSP-12	1241	11.7	50
3/28/2013	BSP-13	1238	11.8	50
3/28/2013	BSP-14	1242	12.1	<50
3/28/2013	BSP-15	1245	12.1	<50
3/28/2013	BSP-16	1253	12.0	60
3/28/2013	BSP-17	1257	12.1	60

Table 3-6
Biosparge Flow Measurements
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

DATE	Well ID	TIME	Pressure (PSI)	Flow (SCFH)
4/25/2013	BSP-01	NR	11.5	60
4/25/2013	BSP-02	NR	11.2	120
4/25/2013	BSP-03	NR	11.4	50
4/25/2013	BSP-04	NR	11.7	65-70
4/25/2013	BSP-05	NR	11.3	>50
4/25/2013	BSP-06	NR	11.5	<50
4/25/2013	BSP-07	OFF		
4/25/2013	BSP-08	NR	11.3	55
4/25/2013	BSP-09	NR	11.3	50-55
4/25/2013	BSP-10	NR	11.2	<50
4/25/2013	BSP-11	NR	11.6	<50
4/25/2013	BSP-12	NR	11.5	<50
4/25/2013	BSP-13	NR	11.4	<50
4/25/2013	BSP-14	NR	11.5	<50
4/25/2013	BSP-15	NR	11.5	<50
4/25/2013	BSP-16	NR	11.5	55
4/25/2013	BSP-17	NR	11.2	100
6/5/2013	BSP-01	NR	10.2	50
6/5/2013	BSP-02	NR	10.2	120
6/5/2013	BSP-03	NR	10.2	<50
6/5/2013	BSP-04	NR	10.5	100
6/5/2013	BSP-05	NR	8.5	50
6/5/2013	BSP-06	NR	10.5	<50
6/5/2013	BSP-07	OFF		
6/5/2013	BSP-08	NR	10.5	55
6/5/2013	BSP-09	NR	10.1	80
6/5/2013	BSP-10	NR	10.7	<50
6/5/2013	BSP-11	NR	10.1	<50
6/5/2013	BSP-12	NR	10.3	<50
6/5/2013	BSP-13	NR	10.3	<50
6/5/2013	BSP-14	NR	10.3	51
6/5/2013	BSP-15	NR	10.3	<50
6/5/2013	BSP-16	NR	10.1	100
6/5/2013	BSP-17	NR	9.9	140
7/24/2013	BSP-01	NR	12.7	140
7/24/2013	BSP-02	NR	12.3	240
7/24/2013	BSP-03	NR	12.5	140
7/24/2013	BSP-04	NR	12.8	55
7/24/2013	BSP-05	NR	12.2	140
7/24/2013	BSP-06	NR	12.8	60
7/24/2013	BSP-07	OFF		
7/24/2013	BSP-08	NR	12.2	150
7/24/2013	BSP-09	NR	12.3	180
7/24/2013	BSP-10	NR	12.0	<55
7/24/2013	BSP-11	NR	12.5	55
7/24/2013	BSP-12	NR	12.5	<55
7/24/2013	BSP-13	NR	12.9	<55
7/24/2013	BSP-14	NR	12.5	55
7/24/2013	BSP-15	NR	12.7	<55
7/24/2013	BSP-16	NR	12.8	60
7/24/2013	BSP-17	NR	12.2	150

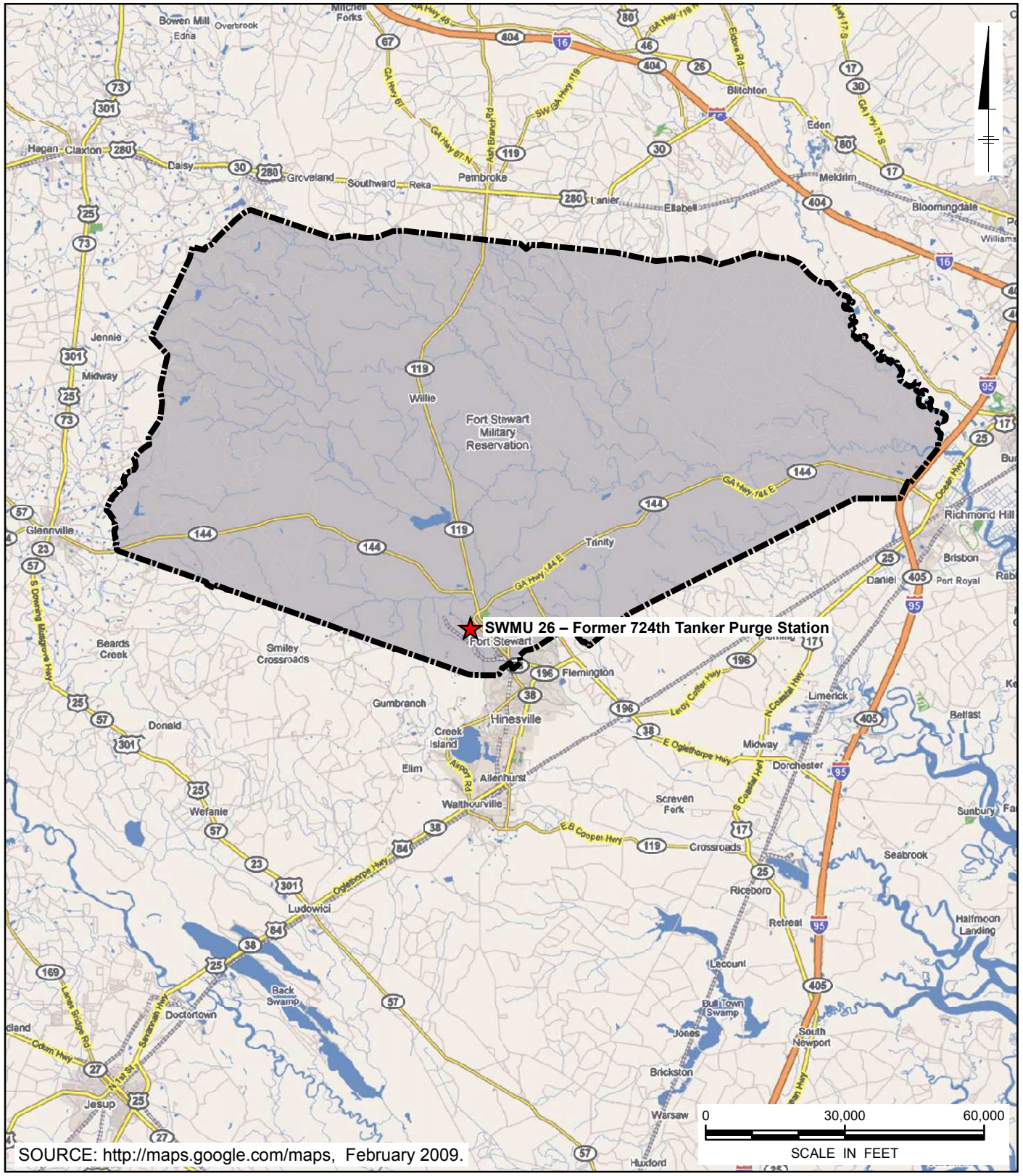
Table 3-6
Biosparge Flow Measurements
SWMU 26, Former 724th Tanker Purging Station
Fort Stewart, Georgia

DATE	Well ID	TIME	Pressure (PSI)	Flow (SCFH)
8/28/2013	BSP-01	NR	12.5	120
8/28/2013	BSP-02	NR	12.2	200
8/28/2013	BSP-03	NR	12.5	100
8/28/2013	BSP-04	NR	12.5	140
8/28/2013	BSP-05	NR	12.1	50
8/28/2013	BSP-06	NR	12.2	<50
8/28/2013	BSP-07	OFF		
8/28/2013	BSP-08	NR	12.1	50
8/28/2013	BSP-09	NR	12.1	180
8/28/2013	BSP-10	NR	12.9	50-100
8/28/2013	BSP-11	NR	12.5	80
8/28/2013	BSP-12	NR	12.5	<50
8/28/2013	BSP-13	NR	12.5	<50
8/28/2013	BSP-14	NR	12.5	100
8/28/2013	BSP-15	NR	13.0	<50
8/28/2013	BSP-16	NR	12.7	50
8/28/2013	BSP-17	NR	12.5	150
10/9/2013	BSP-01	NR	12.5	140
10/9/2013	BSP-02	NR	12.2	150
10/9/2013	BSP-03	NR	12.5	110
10/9/2013	BSP-04	NR	12.3	120
10/9/2013	BSP-05	NR	11.8	<50
10/9/2013	BSP-06	NR	12.4	<50
10/9/2013	BSP-07	OFF		
10/9/2013	BSP-08	NR	12.0	80
10/9/2013	BSP-09	NR	12.1	170
10/9/2013	BSP-10	NR	12.0	50
10/9/2013	BSP-11	NR	12.3	90
10/9/2013	BSP-12	NR	12.2	60
10/9/2013	BSP-13	NR	12.4	50
10/9/2013	BSP-14	NR	12.2	110
10/9/2013	BSP-15	NR	12.3	<50
10/9/2013	BSP-16	NR	12.5	110
10/9/2013	BSP-17	NR	11.5	200
12/4/2013	BSP-01	1030	12.0	140
12/4/2013	BSP-02	1025	11.7	190
12/4/2013	BSP-03	1033	12.0	110
12/4/2013	BSP-04	1040	12.0	150
12/4/2013	BSP-05	1048	11.5	100
12/4/2013	BSP-06	1052	11.5	50
12/4/2013	BSP-07	OFF		
12/4/2013	BSP-08	1058	11.8	90
12/4/2013	BSP-09	1105	11.0	200
12/4/2013	BSP-10	1120	11.5	<50
12/4/2013	BSP-11	1128	12.0	50
12/4/2013	BSP-12	1200	11.5	90
12/4/2013	BSP-13	1204	11.5	50
12/4/2013	BSP-14	1209	11.7	12
12/4/2013	BSP-15	1229	11.7	<50
12/4/2013	BSP-16	1234	12.0	80
12/4/2013	BSP-17	1238	NR	180

Notes:
NR - Not Recorded
PSI - Pounds per Square Inch
SCFH - Syandard Cubic Feet per Hour

ARCADIS

Figures



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

FORT STEWART MILITARY RESERVATION, GEORGIA

SWMU 26 – FORMER 724TH TANKER PURGE STATION
NINETEENTH CORRECTIVE ACTION PLAN
PROGRESS REPORT

Site Location Map

ARCADIS

FIGURE
1-1

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) DB:(LD:(B.ALTOM) PIC:(T.TALELE) PM:(S.GIBBONS) TM:(H.NELSON) BY: BALTOM
PROJECT: GP08HAFS.2013.N26RP PATH: G:\GIS\FTSTEWART\MAPDOCS\F26\2014\19TH CAPPR FINAL\F1-1 S26_19TH REG.MXD SAVED: 8/24/2015

PROJECTION: NAD83 State Plane Georgia East Feet
AERIAL SOURCE: U.S. ARMY (2011).

LEGEND

- Monitor Well (shallow)
- Monitor Well (deep)
- Biosparge Injection Well (deep)
- 2" Underground Electrical Conduit
- 1" Biosparge System Piping
- 3" Biosparge System Piping

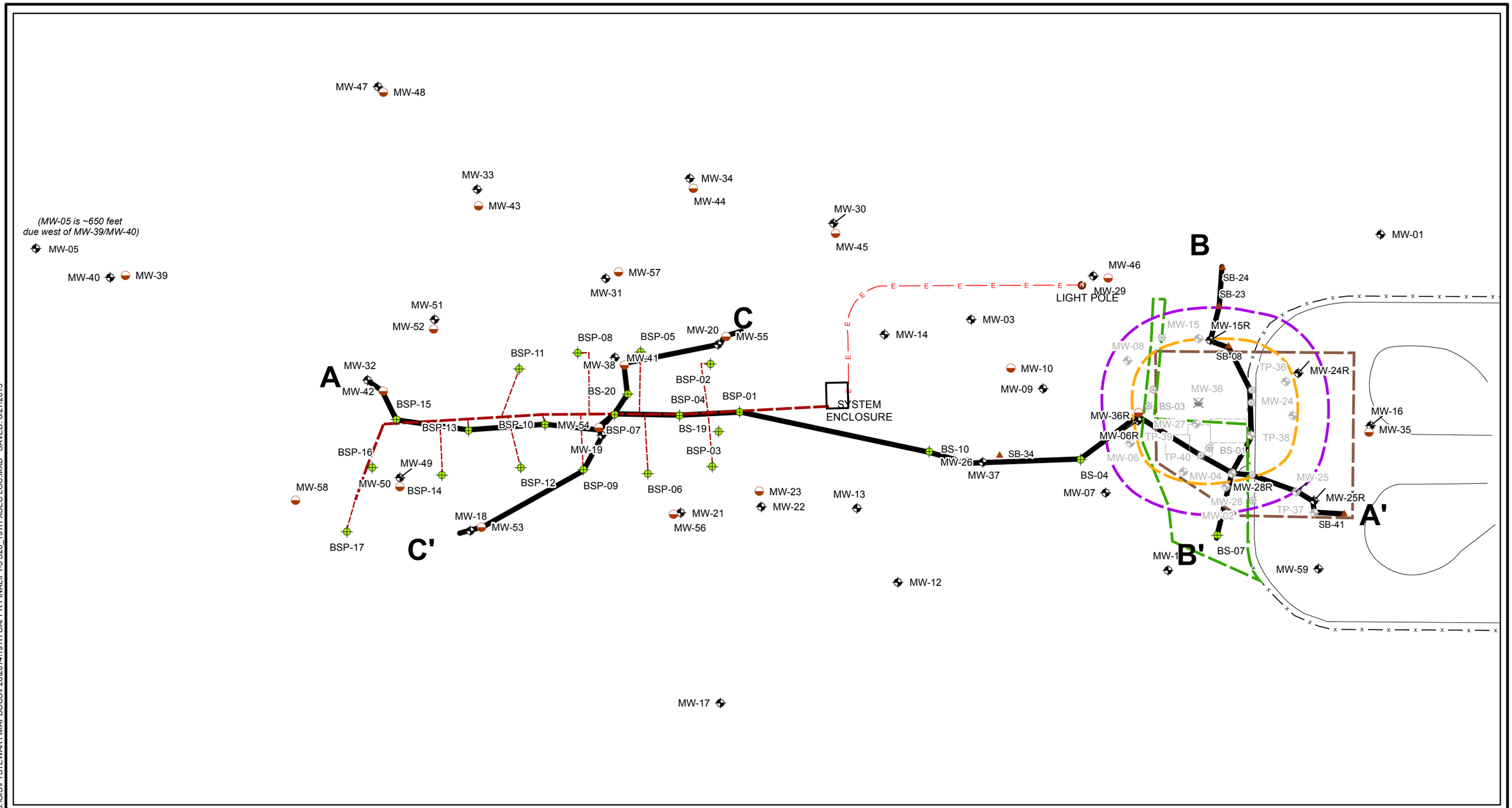
FORT STEWART MILITARY RESERVATION, GEORGIA

SWMU 26 – FORMER 724TH TANKER PURGE STATION
NINETEENTH CORRECTIVE ACTION PLAN
PROGRESS REPORT

Site Map

ARCADIS

FIGURE 1-2



PROJECTION: NAD83 State Plane Georgia East Feet

LEGEND

- Monitor Well (shallow)
- Monitor Well (deep)
- Monitor Well (shallow - abandoned)
- Monitor Well (deep - abandoned)
- Soil Boring
- Biosparge Injection Well (deep)
- Pilot Test Observation Well
- Injection Well (abandoned)
- 2" Underground Electrical Conduit
- 1" Biosparge System Piping
- 3" Biosparge System Piping
- Excavation Area (1996)
- Excavation Area (2001)
- Excavation Area (2010)
- Excavation Area -12' depth (2010)

FORT STEWART MILITARY RESERVATION, GEORGIA

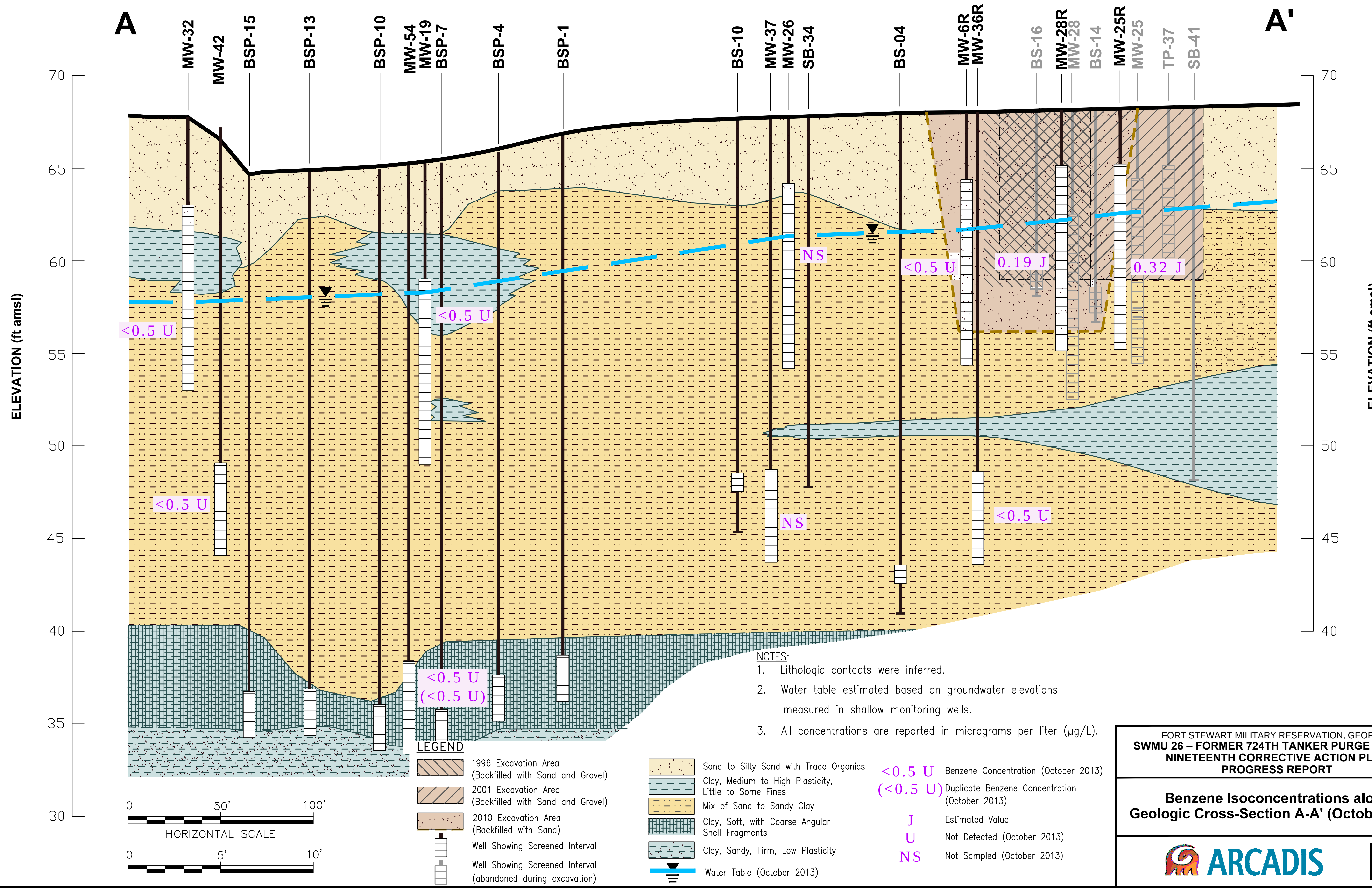
SWMU 26 – FORMER 724TH TANKER PURGE STATION
NINETEENTH CORRECTIVE ACTION PLAN
PROGRESS REPORT

Location of Geologic Cross-Sections

ARCADIS

FIGURE 1-3

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) DB:/LD:(B.ALTOM) PIC:(T.TALELE) PM:(S.GIBBONS) TM:(H.NELSON) BY:
PROJECT: GP08HAFS.2013.N26RP PATH: G:\GIS\FTSTEWART\MAPDOCS\F26\2014\19TH CAPPR FINAL\F1-3 S26_19TH XSEC LOC.MXD SAVED: 8/27/2015 BY: BALTOM

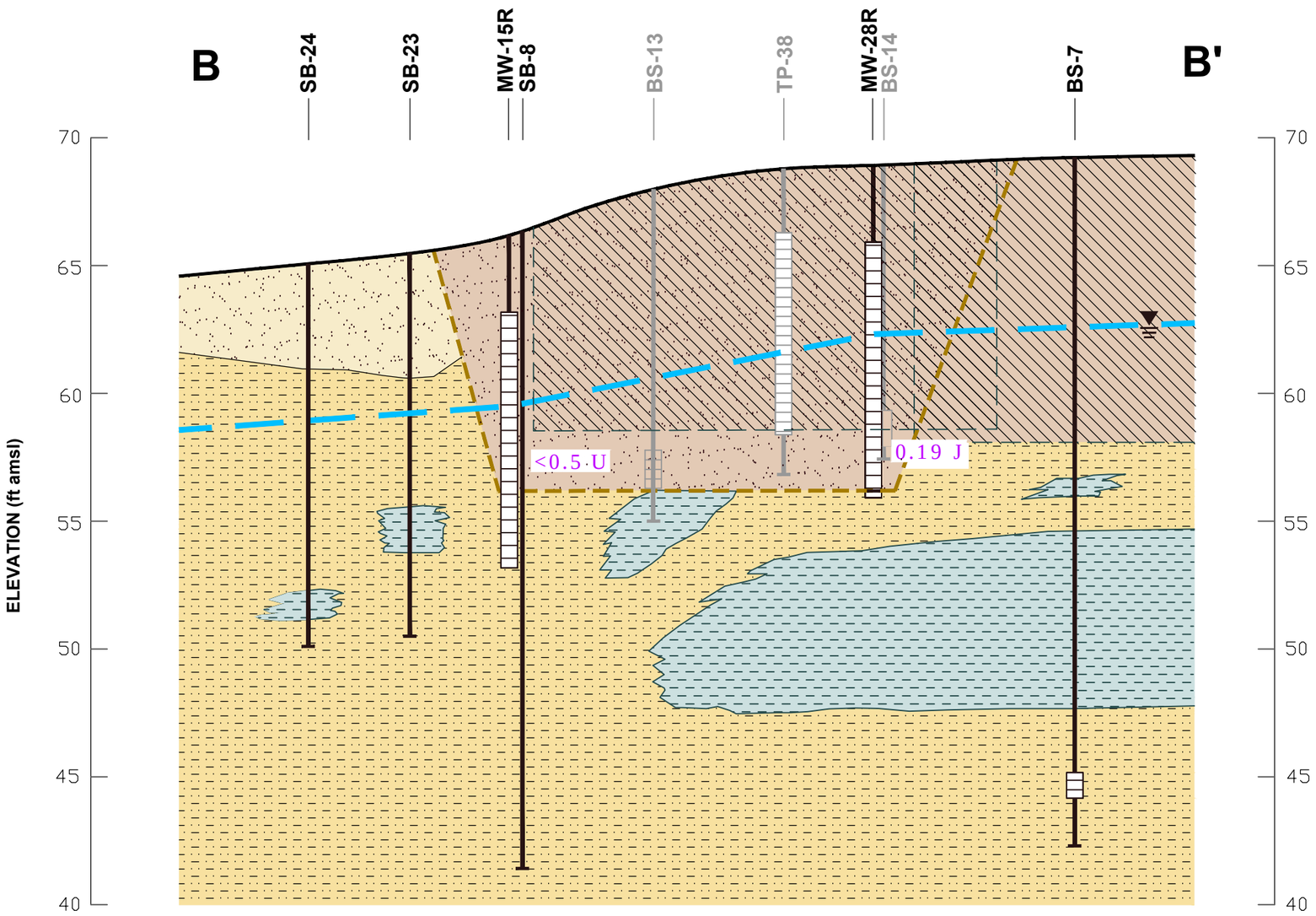


FORT STEWART MILITARY RESERVATION, GEORGIA
SWMU 26 – FORMER 724TH TANKER PURGE STATION
NINETEENTH CORRECTIVE ACTION PLAN
PROGRESS REPORT

Benzene Isoconcentrations along Geologic Cross-Section A-A' (October 2013)

ARCADIS

FIGURE
1-4



LEGEND:

- Water Table (October 2013)
- Well Showing Screened Interval
- Well Showing Screened Interval (abandoned during excavation)
- 1996 Excavation Area (Backfilled with Sand and Gravel)
- 2001 Excavation Area (Backfilled with Sand and Gravel)
- Sand to Silty Sand w/Trace Organics
- Clay, Medium to High Plasticity, Little to Some Fines
- Mix of Sand to Sandy Clay
- 2010 Excavation Area (Backfilled with Sand)

<0.5 U Benzene Concentration Not Detected (October 2013)

J Estimated Value

U Not Detected (October 2013)

0 25' 50'
HORIZONTAL SCALE

0 5' 10'
VERTICAL SCALE

VERTICAL EXAGGERATION = 10X

NOTES:

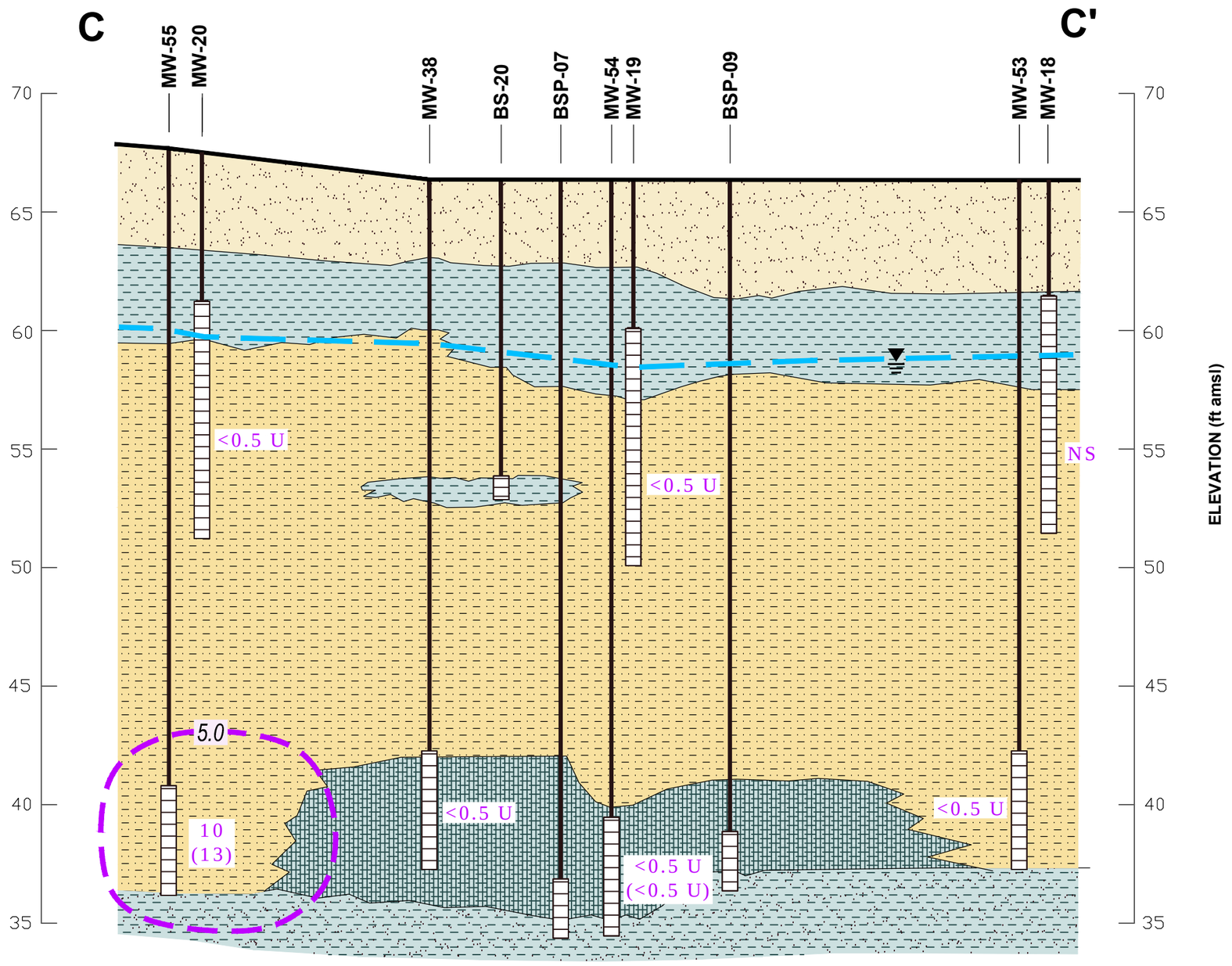
1. Lithologic contacts were inferred.
2. Water table estimated based on groundwater elevations measured in shallow monitoring wells.
3. All concentrations are reported in micrograms per liter (µg/L).

FORT STEWART MILITARY RESERVATION, GEORGIA
SWMU 26 – FORMER 724TH TANKER PURGE STATION
NINETEENTH CORRECTIVE ACTION PLAN
PROGRESS REPORT

Benzene Isoconcentrations along Geologic Cross-Section B-B' (October 2013)

ARCADIS

FIGURE
1-5



LEGEND:

- Water Table (October 2013)
- Well Showing Screened Interval
- Sand to Silty Sand w/Trace Organics
- Clay, Medium to High Plasticity, Little to Some Fines
- Mix of Sand to Sandy Clay
- Clay, Soft, with Coarse Angular Shell Fragments
- Clay, Sandy, Firm, Low Plasticity
- <0.5 U — Benzene Concentration (October 2013)
- (<0.5 U) — Duplicate Benzene Concentration (October 2013)
- 5 — Benzene Isoconcentration Contour
- U — Not Detected (October 2013)
- NS — Not Sampled (October 2013)

NOTES:

1. Lithologic contacts were inferred.
2. Water table estimated based on groundwater elevations measured in shallow monitoring wells.
3. All concentrations are reported in micrograms per liter (µg/L).

0 25' 50'
HORIZONTAL SCALE

0 5' 10'
VERTICAL SCALE

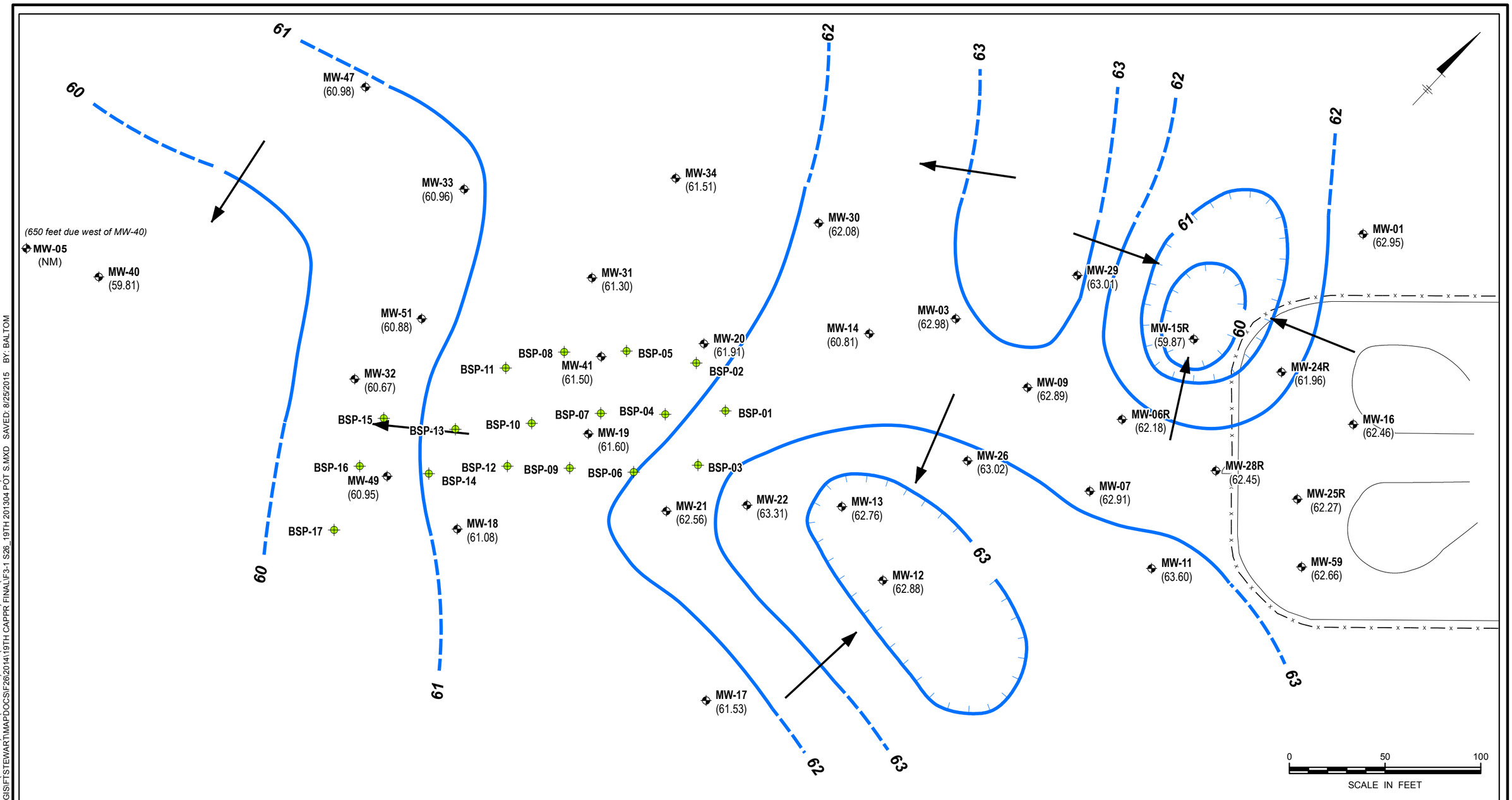
VERTICAL EXAGGERATION = 10X

FORT STEWART MILITARY RESERVATION, GEORGIA
SWMU 26 – FORMER 724TH TANKER PURGE STATION
NINETEENTH CORRECTIVE ACTION PLAN
PROGRESS REPORT

Benzene Isoconcentrations along Geologic Cross-Section C-C' (October 2013)

ARCADIS

FIGURE
1-6



PROJECTION: NAD83 State Plane Georgia East Feet

LEGEND

- Monitor Well (shallow)
- Biosparge Injection Well (deep)
- (NM) Not Measured
- (61.53) Groundwater Elevation (ft amsl) Measured April 2-3, 2013
- Groundwater Contour (ft amsl)
- (inferred where dashed)
- Downgradient
- General Direction of Groundwater Flow

FORT STEWART MILITARY RESERVATION, GEORGIA

SWMU 26 – FORMER 724TH TANKER PURGE STATION
NINETEENTH CORRECTIVE ACTION PLAN
PROGRESS REPORT

Potentiometric Map – Shallow Zone
(April 2013)

ARCADIS

FIGURE
3-1

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) DB:/LD:(B.ALTOM) PIC:(T.TALELE) PM:(S.GIBBONS) TM:(S.BOSTIAN/C.ANDERSON)
PROJECT: GP08HAFS.2013.N26RP PATH: G:\GIS\FTSTEWART\MAPDOCS\F26\2014\19TH CAPPR FINAL\F3-1 S26_19TH 201304 POT S.MXD SAVED: 8/25/2015 BY: BALTOM

MW-48 (60.78)
MW-43 (60.78)
MW-44 (61.37)
MW-45 (61.34)
MW-39 (59.73)
MW-57 (61.24)
MW-52 (60.64)
MW-55 (61.27)
BSP-08
BSP-05
BSP-02
BSP-11
MW-38 (60.12)
MW-42 (60.73)
BSP-07
BSP-15
BSP-04
BSP-01
BSP-13
BSP-10
MW-54 (61.24)
BSP-16
BSP-14
BSP-12
BSP-09
BSP-06
BSP-03
MW-23 (61.35)
MW-50 (60.64)
MW-58 (59.29)
MW-56 (61.18)
MW-53 (60.73)
BSP-17
60.0
61.0
MW-46 (60.51)
MW-10 (61.27)
MW-36R (60.18)
MW-37 (61.30)
MW-35 (61.34)
61.0
61.0

0 50 100
SCALE IN FEET

PROJECTION: NAD83 State Plane Georgia East Feet

LEGEND

- Monitor Well (deep)
- Biosparge Injection Well (deep)
- (60.73) Groundwater Elevation (ft amsl) Measured April 2-3, 2013
- Groundwater Contour (ft amsl)
- (inferred where dashed)
- Downgradient
- General Direction of Groundwater Flow

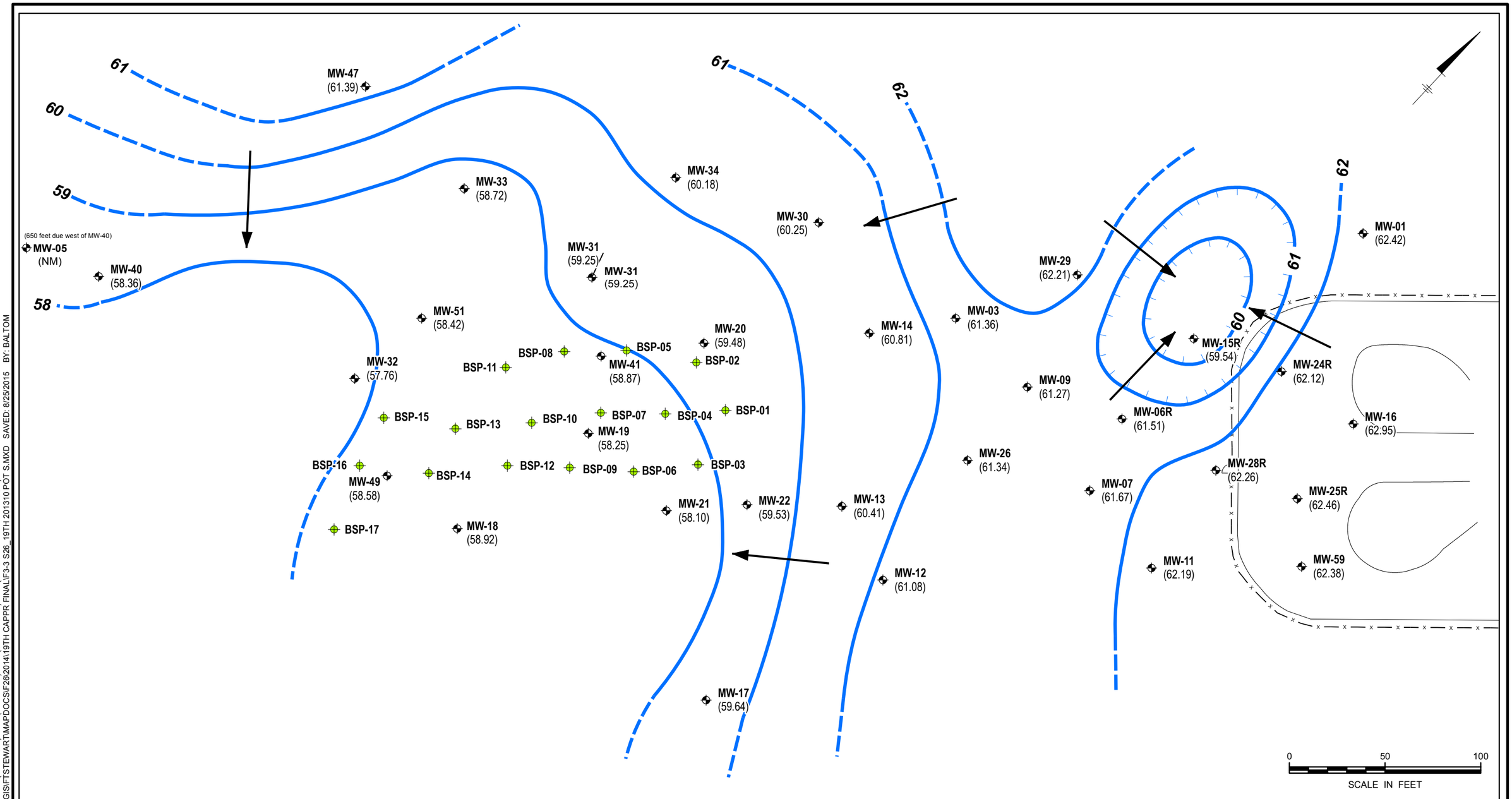
FORT STEWART MILITARY RESERVATION, GEORGIA

SWMU 26 – FORMER 724TH TANKER PURGE STATION
NINETEENTH CORRECTIVE ACTION PLAN
PROGRESS REPORT

Potentiometric Map – Deep Zone
(April 2013)

ARCADIS

FIGURE
3-2



PROJECTION: NAD83 State Plane Georgia East Feet

LEGEND

- Monitor Well (shallow)
- Biosparge Injection Well (deep)
- (NM) Not Measured
- (59.64) Groundwater Elevation (ft amsl) Measured October 15, 2013
- Groundwater Contour (ft amsl)
- (inferred where dashed)
- Downgradient
- General Direction of Groundwater Flow

FORT STEWART MILITARY RESERVATION, GEORGIA

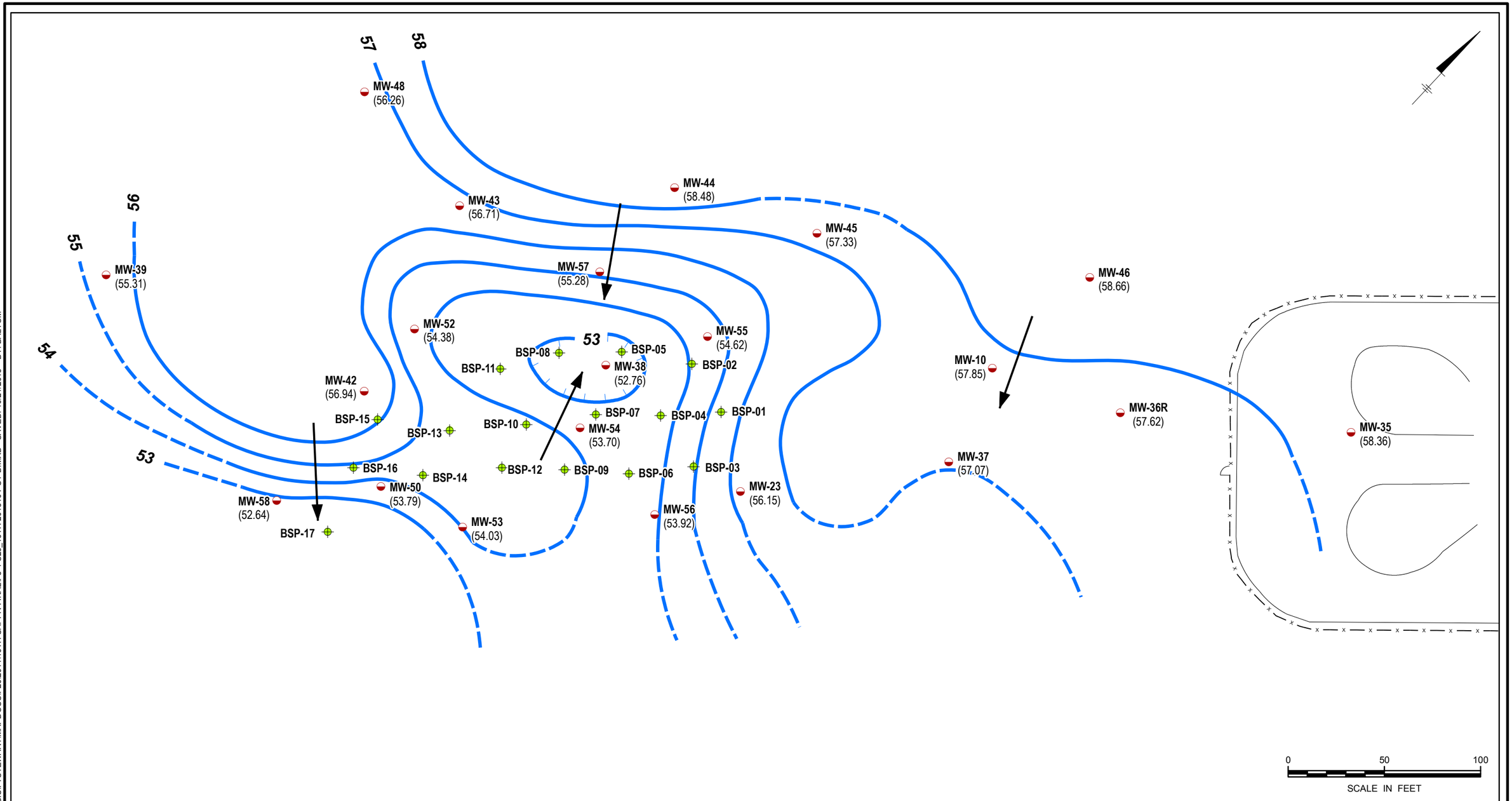
SWMU 26 – FORMER 724TH TANKER PURGE STATION
NINETEENTH CORRECTIVE ACTION PLAN
PROGRESS REPORT

Potentiometric Map – Shallow Zone
(October 2013)

ARCADIS

FIGURE
3-3

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) DB:/LD:(B.ALTOM) PIC:(T.TALELE) PM:(S.GIBBONS) TM:(S.BOSTIAN/C.ANDERSON)
PROJECT: GP08HAFS.2013.N26RP PATH: G:\GIS\FTSTEWART\MAPDOCS\F26\2014\19TH CAPPR FINAL\F3-3 S26_19TH 201310 POT S.MXD SAVED: 8/25/2015 BY: BALTOM



PROJECTION: NAD83 State Plane Georgia East Feet

LEGEND

- Monitor Well (deep)
- Biosparge Injection Well (deep)
- (52.64) Groundwater Elevation (ft amsl) Measured October 15, 2013
- Groundwater Contour (ft amsl)
- (inferred where dashed)
- Downgradient
- General Direction of Groundwater Flow

FORT STEWART MILITARY RESERVATION, GEORGIA

SWMU 26 – FORMER 724TH TANKER PURGE STATION
NINETEENTH CORRECTIVE ACTION PLAN
PROGRESS REPORT

Potentiometric Map – Deep Zone
(October 2013)

ARCADIS

FIGURE
3-4

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) DB:\LD:(B.ALTOM) PIC:(T.TALELE) PM:(S.GIBBONS) TM:(S.BOSTIAN/C.ANDERSON)
PROJECT: GP08HAFS.2013.N26RP PATH: G:\GIS\FTSTEWART\MAPDOCS\F26\2014\19TH CAPPR FINAL\F3-4 S26_19TH 201310 POT D.MXD SAVED: 10/21/2015 BY: BALTOM

MW-47	04/17/12	04/02/13
BTEX	< 0.5 U	< 0.5 U
MTBE	< 0.5 U	0.89

MW-33	10/23/12	04/03/13	10/16/13
T	17	< 0.5 U	0.67
MTBE	**31**	**31**	**46**
NP	NA	NA	< 0.5 U

MW-31	04/18/12	10/23/12	04/02/13	10/16/13
T	< 0.5 U	8.0	< 0.5 U	0.34 J
MTBE	**44**	**15**	1.9	6.5
NP	NA	NA	NA	< 0.5 U

MW-34

MW-30	10/24/12
T	2.9
MTBE	2.9

MW-20	04/18/12	10/24/12	04/03/13	10/15/13
BTEX	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	2.4	2.0	0.24 J	0.28 J
NP	NA	NA	NA	< 0.5 U

MW-29

MW-15R	04/18/12	10/24/12	04/03/13	10/15/2013
B	0.22 J	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	2.6	0.88	0.71	< 0.5 U
NP	NA	NA	NA	< 0.5 U

MW-51	04/17/12	10/23/12	04/02/13	10/16/13
B	< 0.5 U	< 0.5 U	0.11 J	< 0.5 U
T	< 0.5 U	4.0	< 0.5 U	< 0.5 U
MTBE	**149**	**14**	**61**	5.7
NP	NA	NA	NA	< 0.5 U

MW-41	04/18/12	10/24/12	04/03/13	10/16/13
BTEX	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	**47**	0.47 J	< 0.5 U	6.8
NP	NA	NA	NA	< 0.5 U

MW-05
(650 feet due west of MW-40)

MW-40	04/17/12	04/02/13	10/17/13
BTEX	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	8.2	**21**	1.8
NP	NA	NA	< 0.5 U

MW-32	04/17/12	10/23/12	04/03/13	10/16/13
BTEX	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	**33**	**22**	**17**	9.9
NP	NA	NA	NA	< 0.5 U

MW-14

MW-06R	04/18/12	10/24/12	04/03/13	10/15/2013
B	0.66	< 0.5 U	< 0.5 U	< 0.5 U
E	1.8	< 0.5 U	< 0.5 U	< 0.5 U
X	1.6	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	4.6	< 0.5 U	0.18 J	< 0.5 U
NP	NA	NA	NA	< 0.5 U

MW-24R	10/24/12	04/03/13	10/15/13
B	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	4.3	5.3	1.6
NP	NA	NA	< 0.5 U

LIGHT POLE

BSP-08
BSP-05
BSP-11
BSP-02
BSP-07
BSP-15
BSP-13
BSP-10
BSP-04
BSP-01
BSP-16
BSP-14
BSP-12
BSP-09
BSP-06
BSP-03
BSP-17

SYSTEM ENCLOSU

MW-26	04/18/12	10/24/12
BTEX	< 0.5 U	< 0.5 U
MTBE	9.4	< 0.5 U

MW-09	04/18/12	04/03/13	10/15/2013
BTEX	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	< 0.5 U	< 0.5 U	< 0.5 U
NP	NA	NA	< 0.5 U

MW-16	04/19/12	10/24/12	04/03/13	10/15/2013
BTEX	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	**18**	5.2	8.3	1.4
NP	NA	NA	NA	< 0.5 U

MW-13

MW-07	04/18/12	10/24/12	04/03/13	10/15/2013
T	< 0.5 U	< 0.5 U	< 0.5 U	7.7
MTBE	0.46 J	0.95	0.31 J	1.6
NP	NA	NA	NA	< 0.5 U

MW-12

MW-11

MW-28R	04/18/12	10/24/12	04/03/13	10/15/13
B	0.27 J	< 0.5 U	< 0.5 U	0.19 J
T	< 0.5 U	< 0.5 U	< 0.5 U	0.25 J
MTBE	**30**	3.8	0.37 J	1.5
NP	NA	NA	NA	**0.25 J**

MW-59	04/19/12	10/24/12	04/03/13	10/15/13
BTEX	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	**9.7**	6.4	4.0	1.1
NP	NA	NA	NA	< 0.5 U

MW-25R	04/19/12	10/24/12	04/03/13	10/15/13
B	**5.2**	< 0.5 U	0.5	0.32 J
E	11	60	2.6	1.6
X	1.7	1.1	< 0.5 U	< 0.5 U
MTBE	**28**	9.1	5.2	0.8
NP	NA	NA	NA	**1.1**

MW-18

MW-19	10/23/12	04/03/13	10/16/13
BTEX	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	**39**	**14**	6.2
NP	NA	NA	< 0.5 U

MW-49	10/23/12	04/02/13	10/16/13
BTEX	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	1.3	0.43 J	3.6
NP	NA	NA	< 0.5 U

MW-21	04/17/12	10/23/12	04/03/13	10/16/13
T	<0.5 U	2.1	< 0.5 U	< 0.5 U
MTBE	**19**	**17**	< 0.5 U	**21.0**
NP	NA	NA	NA	< 0.5 U

MW-22	04/17/12	10/23/12
B	0.15 J	< 0.5 U
T	< 0.5 U	0.24 J
MTBE	**76**	1.4

MW-17	04/17/12	10/24/12
T	< 0.5 U	7.1
MTBE	**48**	< 0.5 U

Well ID	
Date Sampled	
B	Benzene Concentration (µg/L)
T	Toluene Concentration (µg/L)
E	Ethylbenzene Concentration (µg/L)
X	Xylenes (total) Concentration (µg/L)
MTBE	Methyl tert-butyl ether Concentration (µg/L)
NP	Napthalene Concentration (µg/L)

Detected Constituent	Regulatory Standard
Benzene	5 µg/L (MCL)
Toluene	1,000 µg/L (MCL)
Ethylbenzene	700 µg/L (MCL)
Xylenes (total)	10,000 µg/L (MCL)
Methyl tert-butyl ether	14 µg/L (Tapwater RSL)
Naphthalene	0.17 µg/L (Tapwater RSL)

0 50 100
SCALE IN FEET

PROJECTION: NAD83 State Plane Georgia East Feet

LEGEND

- Monitor Well (shallow)
- Biosparge Injection Well (deep)
- MCL Maximum Contaminant Level
- RSL Regional Screening Level
- 2" Underground Electrical Conduit
- 1" Biosparge System Piping
- 3" Biosparge System Piping
- J Estimated Value
- U Not Detected

NOTES:
1) All concentrations reported in micrograms per liter (µg/L).
2) Wells without data were not sampled.
3) Only those analytes detected are shown.
4) **BOLD** indicates concentration above MCL or Tapwater RSL.

FORT STEWART MILITARY RESERVATION, GEORGIA

SWMU 26 – FORMER 724TH TANKER PURGE STATION
NINETEENTH CORRECTIVE ACTION PLAN
PROGRESS REPORT

Shallow Zone Groundwater Analytical Results and Extent of BTEX and MTBE (2012-2013)

ARCADIS

FIGURE
3-5

MW-48	4/17/12	10/23/12
B	1.6	< 0.5 U
E	0.48 J	< 0.5 U
MTBE	**46**	< 0.5 U

MW-43	04/17/12	10/23/12	04/02/13	10/16/13
BTEX	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	**150 J**	**130**	**59**	**110**
NP	NA	NA	NA	< 0.5 U

MW-57	04/18/12	10/23/12	04/02/13	10/16/13
B	0.19 J	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	**68**	10	**72**	**100**
NP	NA	NA	NA	< 0.5 U

MW-39	04/17/12	10/24/12	04/02/13	10/17/13
B	< 0.5 U	< 0.5 U	< 0.5 U	0.38 J
MTBE	**64**	**57**	**52**	**100**
NP	NA	NA	NA	< 0.5 U

MW-38	04/18/12		10/24/12	04/03/13	10/16/13
B	< 0.5 U	0.31 J	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	7.4 J	**35 J**	8.7	4.8	4.9
NP	NA	NA	NA	NA	< 0.5 U

MW-45	10/24/12
BTEX	< 0.5 U
MTBE	12

MW-55	04/18/12		10/24/12		04/03/13		10/15/13	
B	**200**	**200**	**140**	**130**	< 0.5 U	< 0.5 U	**10**	**13**
T	< 0.5 U	< 0.5 U	13	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
E	< 0.5 U	< 0.5 U	2.9 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
X	< 0.5 U	< 0.5 U	17	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	**700**	**700**	**510**	**470**	**200**	**180**	**240**	**240**
NP	NA	NA	NA	NA	NA	NA	< 0.5 U	< 0.5 U

MW-52	04/17/12	10/23/12	04/02/13	10/16/13
B	< 0.5 U	0.38 J	< 0.5 U	< 0.5 U
MTBE	**120**	**120**	**43**	**35**
NP	NA	NA	NA	< 0.5 U

MW-42	04/17/12	10/23/12	04/02/13	10/16/13
BTEX	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	**53**	**77**	**46**	**120**
NP	NA	NA	NA	< 0.5 U

MW-36R	04/18/12	10/24/12	04/03/13	10/18/13
BTEX	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	11	5.3	11	11
NP	NA	NA	NA	< 0.5 U

MW-50	04/17/12	10/23/12	04/02/13	10/16/13
B	**9.7**	**12**	< 0.5 U	0.13 J
MTBE	**40**	**70**	**67**	**14**
NP	NA	NA	NA	< 0.5 U

MW-37	04/18/12
BTEX	< 0.5 U
MTBE	**50**

MW-35	04/19/12	10/24/12	04/03/13	10/15/13
BTEX	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	1.0	0.17 J	0.83	1
NP	NA	NA	NA	< 0.5 U

MW-58	04/17/12	10/23/12	04/02/13	10/16/13
B	< 0.5 U	2.0	1.4	< 0.5 U
MTBE	**13**	**12**	11	7.9
NP	NA	NA	NA	< 0.5 U

MW-23	04/17/12	10/23/12	04/03/13	10/15/13
B	**6.6**	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	2.8	**27**	**22**	5.6
NP	NA	NA	NA	< 0.5 U

MW-53	04/17/12	10/23/12	04/03/13	10/16/13
BTEX	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	3.8	2.7	**15**	**44**
NP	NA	NA	NA	< 0.5 U

MW-56	04/17/12	10/23/12	04/03/13	10/15/13
B	< 0.5 U	0.13 J	< 0.5 U	< 0.5 U
MTBE	**38**	**52**	**24**	**22**
NP	NA	NA	NA	< 0.5 U

MW-54	04/18/12	10/23/12		04/03/13		10/16/13	
B	0.12 J	**80**	**89**	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MTBE	**430**	**780**	**770**	**200**	**210**	**110**	**110**
NP	NA	NA	NA	NA	NA	< 0.5 U	< 0.5 U

MW-44
MW-46
MW-10
LIGHT POLE
SYSTEM ENCLOSURE
BSP-01
BSP-02
BSP-03
BSP-04
BSP-05
BSP-06
BSP-07
BSP-08
BSP-09
BSP-10
BSP-11
BSP-12
BSP-13
BSP-14
BSP-15
BSP-16
BSP-17

Well ID	
Date Sampled	
B	Benzene Concentration (µg/L)
T	Toluene Concentration (µg/L)
E	Ethylbenzene Concentration (µg/L)
X	Xylenes (total) Concentration (µg/L)
MTBE	Methyl tert-butyl ether Concentration (µg/L)
NP	Napthalene Concentration (µg/L)

Detected Constituent	Regulatory Standard
Benzene	5 µg/L (MCL)
Toluene	1,000 µg/L (MCL)
Ethylbenzene	700 µg/L (MCL)
Xylenes (total)	10,000 µg/L (MCL)
Methyl tert-butyl ether	14 µg/L (Tapwater RSL)
Naphthalene	0.17 µg/L (Tapwater RSL)

0 50 100
SCALE IN FEET

PROJECTION: NAD83 State Plane Georgia East Feet

LEGEND

- Monitor Well (deep)
- Biosparge Injection Well (deep)
- MCL Maximum Contaminant Level
- RSL Regional Screening Level
- 2" Underground Electrical Conduit
- 1" Biosparge System Piping
- 3" Biosparge System Piping
- J Estimated Value
- U Not Detected

NOTES:
1) All concentrations reported in micrograms per liter (µg/L).
2) Wells without data were not sampled.
3) Only those analytes detected are shown.
4) **BOLD** indicates concentration at or above MCL or Tapwater RSL.

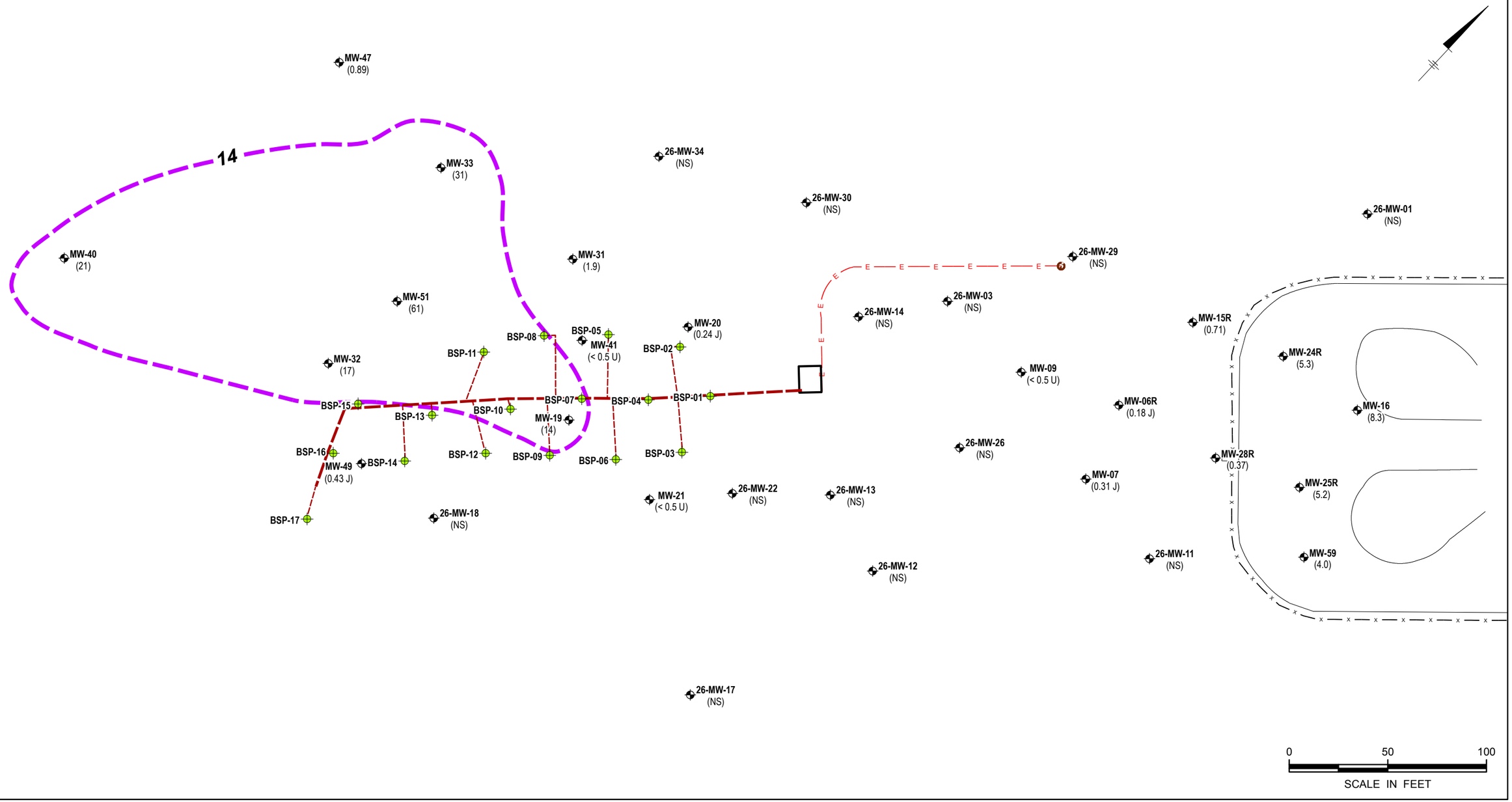
FORT STEWART MILITARY RESERVATION, GEORGIA

SWMU 26 – FORMER 724TH TANKER PURGE STATION
NINETEENTH CORRECTIVE ACTION PLAN
PROGRESS REPORT

Deep Zone Groundwater Analytical Results and Extent of BTEX and MTBE (2012-2013)

ARCADIS

FIGURE 3-6



PROJECTION: NAD83 State Plane Georgia East Feet

LEGEND

- Monitor Well (shallow)
- Biosparge Injection Well (deep)
- (NS) Not Sampled
- J Estimated Value
- U Not Detected
- 2" Underground Electrical Conduit
- 1" Biosparge System Piping
- 3" Biosparge System Piping
- MTBE Isopleth

NOTES:
1) All concentrations reported in micrograms per liter (µg/L).
2) Wells without data were not sampled.

FORT STEWART MILITARY RESERVATION, GEORGIA

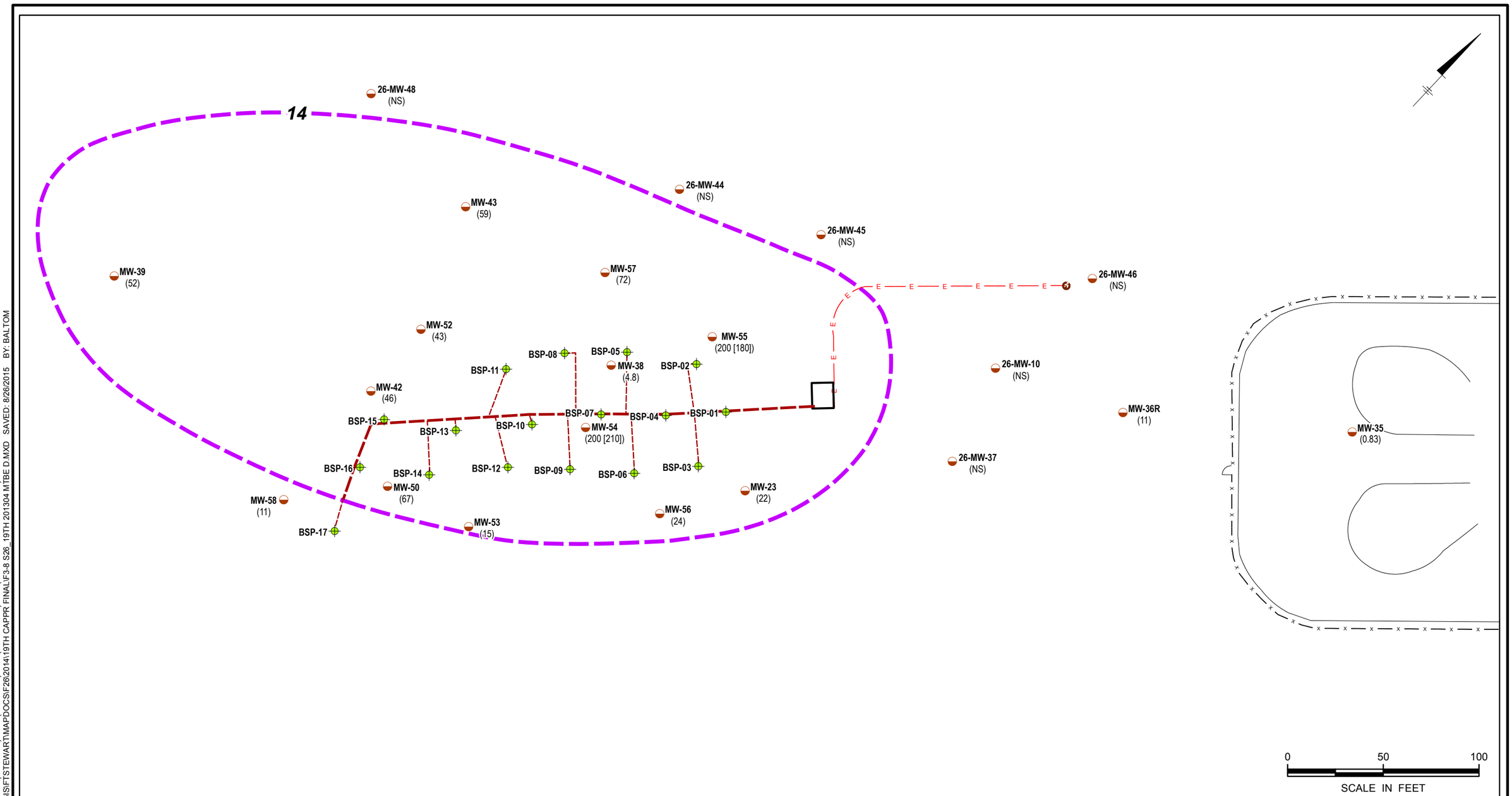
SWMU 26 – FORMER 724TH TANKER PURGE STATION
NINETEENTH CORRECTIVE ACTION PLAN
PROGRESS REPORT

Shallow Zone Groundwater Analytical Results and Extent of MTBE (April 2013)

ARCADIS

FIGURE
3-7

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) DB:/LD:(B.ALTOM) PIC:(T.TALELE) PM:(S.GIBBONS) TM:(S.BOSTIAN/C.ANDERSON)
PROJECT: GP08HAFS.2013.N26RP PATH: G:\GIS\FTSTEWART\MAPDOCS\F26\2014\19TH CAPPR FINAL\F3-7 S26_19TH 201304 MTBE S.MXD SAVED: 8/25/2015 BY: BALTOM



PROJECTION: NAD83 State Plane Georgia East Feet

LEGEND

- Monitor Well (deep)
- Biosparge Injection Well (deep)
- (NS) Not Sampled
- J Estimated Value
- U Not Detected
- 2" Underground Electrical Conduit
- 1" Biosparge System Piping
- 3" Biosparge System Piping
- MTBE Isopleth

NOTES:
1) All concentrations reported in micrograms per liter (µg/L).
2) [ ] - Indicate the result is from a duplicate sample
3) Wells without data were not sampled.

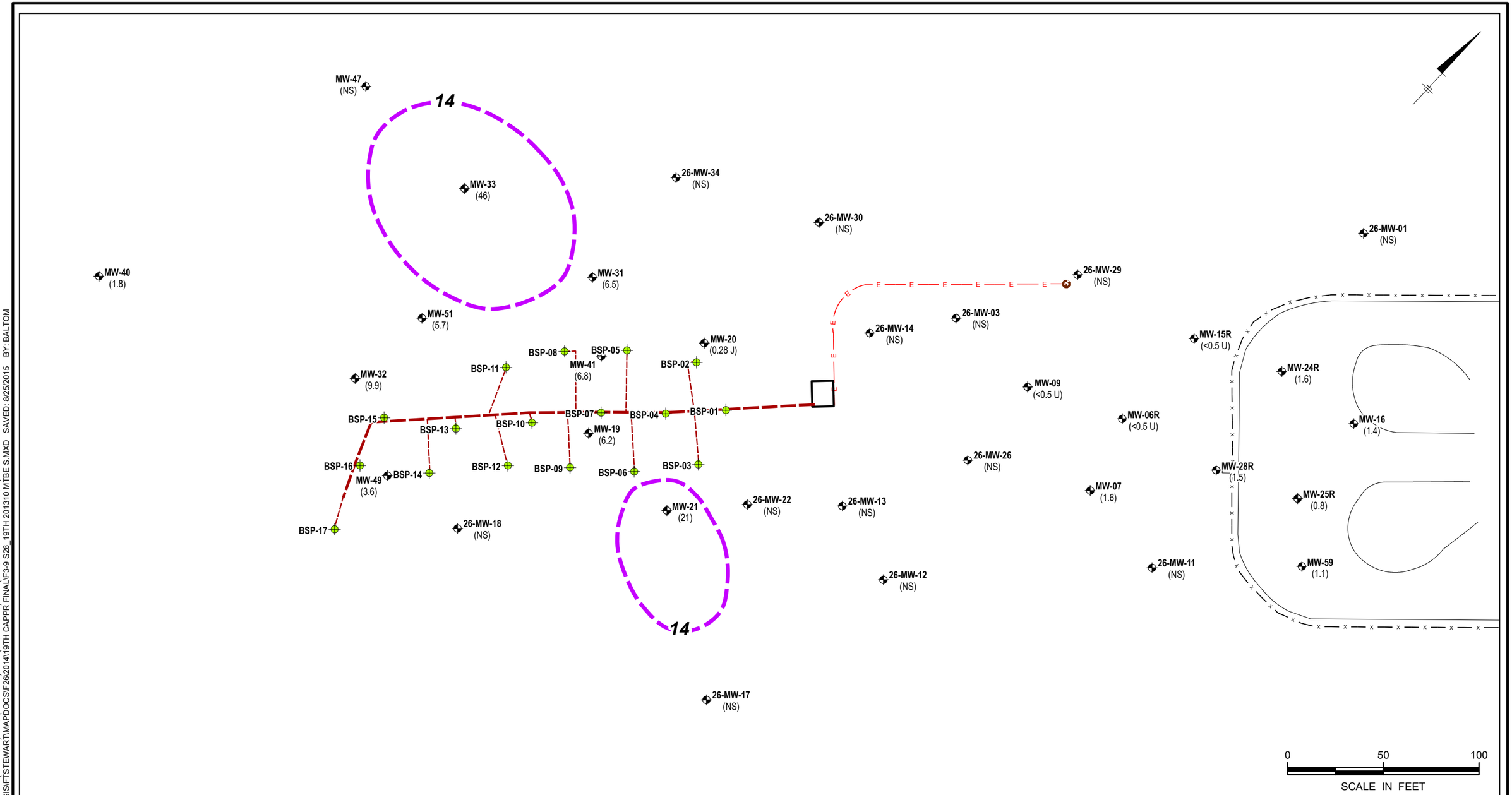
FORT STEWART MILITARY RESERVATION, GEORGIA

SWMU 26 – FORMER 724TH TANKER PURGE STATION
NINETEENTH CORRECTIVE ACTION PLAN
PROGRESS REPORT

Deep Zone Groundwater Analytical Results and Extent of MTBE (April 2013)

ARCADIS

FIGURE 3-8



PROJECTION: NAD83 State Plane Georgia East Feet

LEGEND

- Monitor Well (shallow)
- Biosparge Injection Well (deep)
- (NS) Not Sampled
- J Estimated Value
- U Not Detected
- 2" Underground Electrical Conduit
- 1" Biosparge System Piping
- 3" Biosparge System Piping
- MTBE Isopleth

NOTES:
1) All concentrations reported in micrograms per liter (µg/L).
2) Wells without data were not sampled.

FORT STEWART MILITARY RESERVATION, GEORGIA

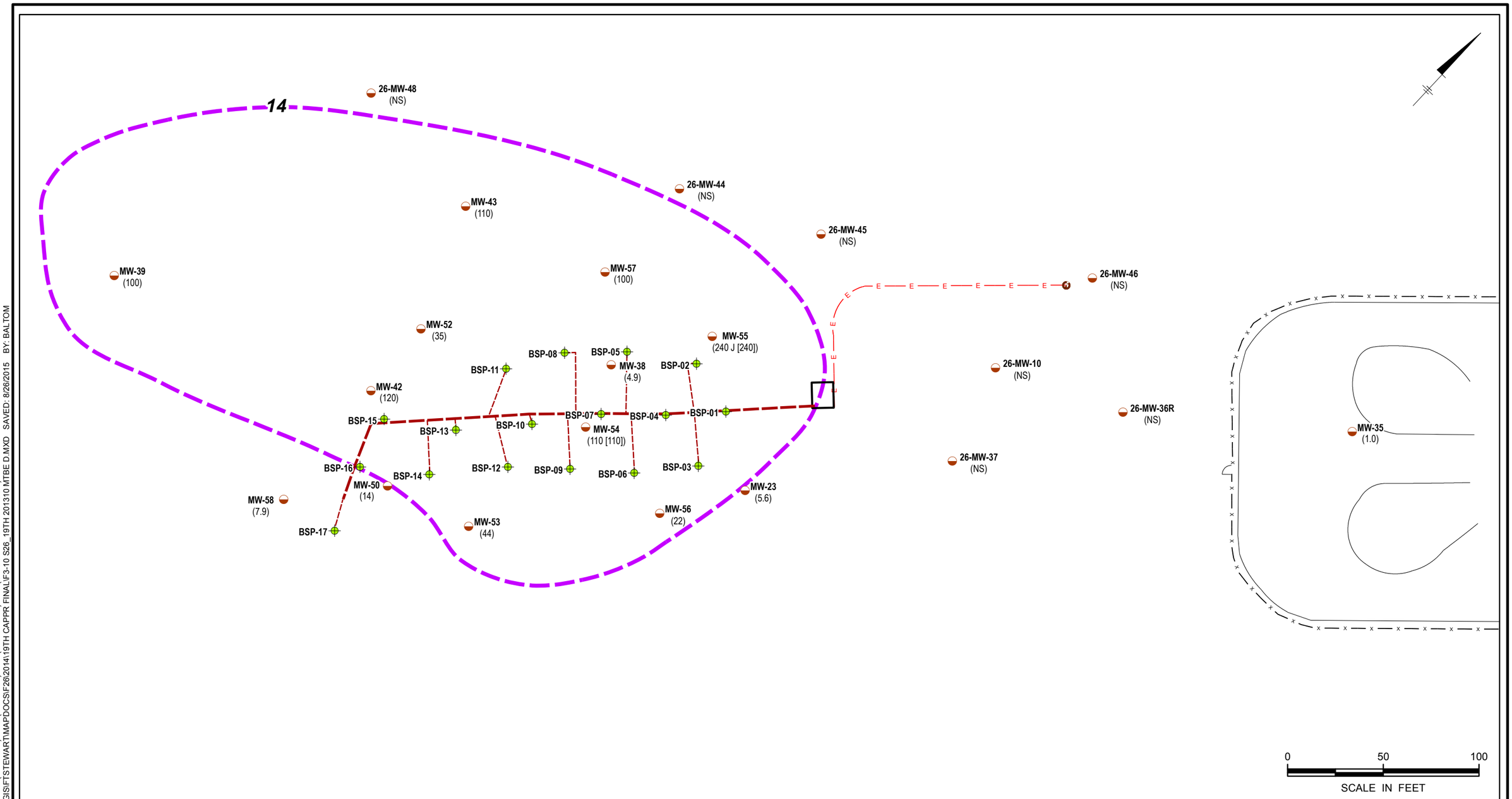
SWMU 26 – FORMER 724TH TANKER PURGE STATION
NINETEENTH CORRECTIVE ACTION PLAN
PROGRESS REPORT

Shallow Zone Groundwater Analytical Results and Extent of MTBE (October 2013)

ARCADIS

FIGURE
3-9

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) DB:(LD:(B.ALTOM) PIC:(T.TALELE) PM:(S.GIBBONS) TM:(S.BOSTIAN/C.ANDERSON)
PROJECT: GP08HAFS.2013.N26RP PATH: G:\GIS\FTSTEWART\MAPDOCS\F26\2014\19TH CAPPR FINAL\F3-9 S26_19TH 201310 MTBE S.MXD SAVED: 8/25/2015 BY: BALTOM



PROJECTION: NAD83 State Plane Georgia East Feet

LEGEND

- Monitor Well (deep)
- Biosparge Injection Well (deep)
- (NS) Not Sampled
- J Estimated Value
- U Not Detected
- E 2" Underground Electrical Conduit
- 1" Biosparge System Piping
- 3" Biosparge System Piping
- MTBE Isopleth

NOTES:
1) All concentrations reported in micrograms per liter (µg/L).
2) [ ] - Indicate the result is from a duplicate sample
3) Wells without data were not sampled.

FORT STEWART MILITARY RESERVATION, GEORGIA

SWMU 26 – FORMER 724TH TANKER PURGE STATION
NINETEENTH CORRECTIVE ACTION PLAN
PROGRESS REPORT

Deep Zone Groundwater Analytical Results and Extent of MTBE (October 2013)

ARCADIS

FIGURE
3-10

Appendix A

Laboratory Analytical Reports

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

ARCADIS U.S., Inc.
30 Patewood Drive
Suite 155
Greenville, SC 29615
Attention: Rachelle Borne

Project Name: **Hunter Stewart FST-26**

Project Number: **GP08HAFS.2012.N26GM**

Lot Number: **OD05014**

Date Completed: **04/12/2013**

Nisreen Saikaly
Project Manager

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

OD05014

Case Narrative
ARCADIS U.S., Inc.
Lot Number: OD05014

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Sample Summary
ARCADIS U.S., Inc.
Lot Number: OD05014

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	26-MW-47(040213)	Aqueous	04/02/2013 1226	04/05/2013
002	26-MW-33(040213)	Aqueous	04/02/2013 1315	04/05/2013
003	26-MW-43(040213)	Aqueous	04/02/2013 1410	04/05/2013
004	26-MW-51(040213)	Aqueous	04/02/2013 1445	04/05/2013
005	26-MW-52(040213)	Aqueous	04/02/2013 1520	04/05/2013
006	26-MW-31(040213)	Aqueous	04/02/2013 1550	04/05/2013
007	26-MW-57(040213)	Aqueous	04/02/2013 1626	04/05/2013
008	26-MW-58(040213)	Aqueous	04/02/2013 1710	04/05/2013
009	26-MW-49(040213)	Aqueous	04/02/2013 1615	04/05/2013
010	26-MW-50(040213)	Aqueous	04/02/2013 1655	04/05/2013
011	26-MW-40(040213)	Aqueous	04/02/2013 1215	04/05/2013
012	26-MW-39(040213)	Aqueous	04/02/2013 1300	04/05/2013
013	26-MW-42(040213)	Aqueous	04/02/2013 1420	04/05/2013
014	26-MW-32(040213)	Aqueous	04/02/2013 1510	04/05/2013
015	26-MW-55(040313)	Aqueous	04/03/2013 1035	04/05/2013
016	26-DUP-02(040313)	Aqueous	04/03/2013	04/05/2013
017	26-MW-23(040313)	Aqueous	04/03/2013 1125	04/05/2013
018	26-MW-09(040313)	Aqueous	04/03/2013 1215	04/05/2013
019	26-MW-38(040313)	Aqueous	04/03/2013 0850	04/05/2013
020	26-MW-41(040313)	Aqueous	04/03/2013 0925	04/05/2013
021	26-MW-20(040313)	Aqueous	04/03/2013 1000	04/05/2013
022	26-MW-24R(040313)	Aqueous	04/03/2013 1400	04/05/2013
023	26-MW-16(040313)	Aqueous	04/03/2013 1450	04/05/2013
024	26-MW-35(040313)	Aqueous	04/03/2013 1525	04/05/2013
025	26-MW-25R(040313)	Aqueous	04/03/2013 1600	04/05/2013
026	26-MW-59(040313)	Aqueous	04/03/2013 1635	04/05/2013
027	26-MW-15R(040313)	Aqueous	04/03/2013 1720	04/05/2013
028	26-MW-53(040313)	Aqueous	04/03/2013 0855	04/05/2013
029	26-MW-54(040313)	Aqueous	04/03/2013 0955	04/05/2013
030	26-MW-19(040313)	Aqueous	04/03/2013 1040	04/05/2013
031	26-DUP-01(040313)	Aqueous	04/03/2013	04/05/2013
032	26-MW-56(040313)	Aqueous	04/03/2013 1145	04/05/2013
033	26-MW-21(040313)	Aqueous	04/03/2013 1325	04/05/2013
034	26-MW-06R(040313)	Aqueous	04/03/2013 1445	04/05/2013
035	26-MW-36R(040313)	Aqueous	04/03/2013 1525	04/05/2013
036	26-MW-07(040313)	Aqueous	04/03/2013 1605	04/05/2013
037	26-MW-28R(040313)	Aqueous	04/03/2013 1650	04/05/2013
038	Trip Blank	Aqueous	04/03/2013	04/05/2013
039	Trip Blank	Aqueous	04/03/2013	04/05/2013

(39 samples)

Executive Summary
ARCADIS U.S., Inc.
Lot Number: OD05014

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	26-MW-47(040213)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	0.89		ug/L	5
002	26-MW-33(040213)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	31		ug/L	6
003	26-MW-43(040213)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	59		ug/L	7
004	26-MW-51(040213)	Aqueous	Benzene	8260B	0.11	J	ug/L	8
004	26-MW-51(040213)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	61		ug/L	8
005	26-MW-52(040213)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	43		ug/L	9
006	26-MW-31(040213)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	1.9		ug/L	10
007	26-MW-57(040213)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	72		ug/L	11
008	26-MW-58(040213)	Aqueous	Benzene	8260B	1.4		ug/L	12
008	26-MW-58(040213)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	11		ug/L	12
009	26-MW-49(040213)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	0.43	J	ug/L	13
010	26-MW-50(040213)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	67		ug/L	14
011	26-MW-40(040213)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	21		ug/L	15
012	26-MW-39(040213)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	52		ug/L	16
013	26-MW-42(040213)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	46		ug/L	17
014	26-MW-32(040213)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	17		ug/L	18
015	26-MW-55(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	200		ug/L	19
016	26-DUP-02(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	180		ug/L	20
017	26-MW-23(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	22		ug/L	21
019	26-MW-38(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	4.8		ug/L	23
021	26-MW-20(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	0.24	J	ug/L	25
022	26-MW-24R(040313)	Aqueous	Benzene	8260B	0.18	J	ug/L	26
022	26-MW-24R(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	5.3		ug/L	26
023	26-MW-16(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	8.3		ug/L	27
024	26-MW-35(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	0.83		ug/L	28
025	26-MW-25R(040313)	Aqueous	Benzene	8260B	0.50		ug/L	29
025	26-MW-25R(040313)	Aqueous	Ethylbenzene	8260B	2.6		ug/L	29
025	26-MW-25R(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	5.2		ug/L	29
026	26-MW-59(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	4.0		ug/L	30
027	26-MW-15R(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	0.71		ug/L	31
028	26-MW-53(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	15		ug/L	32
029	26-MW-54(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	200		ug/L	33
030	26-MW-19(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	14		ug/L	34
031	26-DUP-01(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	210		ug/L	35
032	26-MW-56(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	24		ug/L	36
034	26-MW-06R(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	0.18	J	ug/L	38
035	26-MW-36R(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	11		ug/L	39
036	26-MW-07(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	0.31	J	ug/L	40
037	26-MW-28R(040313)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	0.37	J	ug/L	41

(39 detections)

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-001**
Description: **26-MW-47(040213)**
Matrix: **Aqueous**
Date Sampled: **04/02/2013 1226**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 0301	JJG		17976

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**0.89**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-002**
Description: **26-MW-33(040213)**
Matrix: **Aqueous**
Date Sampled: **04/02/2013 1315**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 0322	JJG		17976

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**31**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-003**
Description: **26-MW-43(040213)**
Matrix: **Aqueous**
Date Sampled: **04/02/2013 1410**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 0343	JJG		17976

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**59**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-004**
Description: **26-MW-51(040213)**
Matrix: **Aqueous**
Date Sampled: **04/02/2013 1445**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 0404	JJG		17976

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**0.11**	**J**	**0.50**	**0.027**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**61**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-005**
Description: **26-MW-52(040213)**
Matrix: **Aqueous**
Date Sampled: **04/02/2013 1520**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 0425	JJG		17976

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**43**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-006**
Description: **26-MW-31(040213)**
Matrix: **Aqueous**
Date Sampled: **04/02/2013 1550**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 0446	JJG		17976

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**1.9**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-007**
Description: **26-MW-57(040213)**
Matrix: **Aqueous**
Date Sampled: **04/02/2013 1626**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 0507	JJG		17976

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**72**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-008**
Description: **26-MW-58(040213)**
Matrix: **Aqueous**
Date Sampled: **04/02/2013 1710**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 0528	JJG		17976

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**1.4**		**0.50**	**0.027**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**11**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-009**
Description: **26-MW-49(040213)**
Matrix: **Aqueous**
Date Sampled: **04/02/2013 1615**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 0550	JJG		17976

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**0.43**	**J**	**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-010**
Description: **26-MW-50(040213)**
Matrix: **Aqueous**
Date Sampled: **04/02/2013 1655**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 0613	JJG		17976

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**67**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		96	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-011**
Description: **26-MW-40(040213)**
Matrix: **Aqueous**
Date Sampled: **04/02/2013 1215**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 0637	JJG		17976

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**21**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-012**
Description: **26-MW-39(040213)**
Matrix: **Aqueous**
Date Sampled: **04/02/2013 1300**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 0659	JJG		17976

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**52**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-013**
Description: **26-MW-42(040213)**
Matrix: **Aqueous**
Date Sampled: **04/02/2013 1420**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 0720	JJG		17976

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**46**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-014**
Description: **26-MW-32(040213)**
Matrix: **Aqueous**
Date Sampled: **04/02/2013 1510**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 0741	JJG		17976

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**17**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		96	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-015**
Description: **26-MW-55(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 1035**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	04/09/2013 1904	AAC		18035

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	2
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	2
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**200**		**0.50**	**0.019**	**ug/L**	**2**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	2
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		101	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-016**
Description: **26-DUP-02(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	04/09/2013 2124	AAC		18035

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		2.5	0.14	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		2.5	0.85	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**180**		**2.5**	**0.095**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		2.5	0.85	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		2.5	0.85	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		102	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-017**
Description: **26-MW-23(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 1125**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 1817	AAC		18035

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**22**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		104	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-018**
Description: **26-MW-09(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 1215**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 1642	JAC		18031

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.019	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		109	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-019**
Description: **26-MW-38(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 0850**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 1703	JAC		18031

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**4.8**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		109	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-020**
Description: **26-MW-41(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 0925**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 1725	JAC		18031

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.019	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		109	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-021**
Description: **26-MW-20(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 1000**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 1746	JAC		18031

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**0.24**	**J**	**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		108	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-022**
Description: **26-MW-24R(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 1400**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 1807	JAC		18031

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**0.18**	**J**	**0.50**	**0.027**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**5.3**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		113	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		110	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-023**
Description: **26-MW-16(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 1450**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 1828	JAC		18031

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**8.3**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		108	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-024**
Description: **26-MW-35(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 1525**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 1849	JAC		18031

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**0.83**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		108	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-025**
Description: **26-MW-25R(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 1600**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 1910	JAC		18031

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**0.50**		**0.50**	**0.027**	**ug/L**	**1**
Ethylbenzene	**100-41-4**	**8260B**	**2.6**		**0.50**	**0.17**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**5.2**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		110	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-026**
Description: **26-MW-59(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 1635**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 1931	JAC		18031

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**4.0**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		109	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-027**
Description: **26-MW-15R(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 1720**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 1952	JAC		18031

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**0.71**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		113	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		109	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-028**
Description: **26-MW-53(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 0855**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 2013	JAC		18031

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**15**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		108	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-029**
Description: **26-MW-54(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 0955**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 2035	JAC		18031

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**200**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		110	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-030**
Description: **26-MW-19(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 1040**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	04/11/2013 2138	JAC		18204

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	2
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	2
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**14**		**0.50**	**0.019**	**ug/L**	**2**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	2
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-031**
Description: **26-DUP-01(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/10/2013 0305	JJG		18051
2	5030B	8260B	5	04/11/2013 1556	JAC		18204

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**210**		**2.5**	**0.095**	**ug/L**	**2**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130		93	70-130
Bromofluorobenzene		96	70-130		98	70-130
Toluene-d8		102	70-130		99	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-032**
Description: **26-MW-56(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 1145**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/10/2013 0328	JJG		18051

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**24**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		107	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-033**
Description: **26-MW-21(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 1325**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/10/2013 0351	JJG		18051

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.019	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		105	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-034**
Description: **26-MW-06R(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 1445**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/10/2013 0414	JJG		18051

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**0.18**	**J**	**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		107	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-035**
Description: **26-MW-36R(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 1525**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/10/2013 0437	JJG		18051

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**11**		**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		103	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-036**
Description: **26-MW-07(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 1605**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/10/2013 0500	JJG		18051

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**0.31**	**J**	**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		104	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-037**
Description: **26-MW-28R(040313)**
Matrix: **Aqueous**
Date Sampled: **04/03/2013 1650**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/10/2013 0523	JJG		18051

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**0.37**	**J**	**0.50**	**0.019**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		110	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-038**
Description: **Trip Blank**
Matrix: **Aqueous**
Date Sampled: **04/03/2013**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/11/2013 1507	JAC		18204

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.019	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Volatile Organic Compounds by GC/MS

Client: **ARCADIS U.S., Inc.**
Laboratory ID: **OD05014-039**
Description: **Trip Blank**
Matrix: **Aqueous**
Date Sampled: **04/03/2013**
Date Received: **04/05/2013**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/09/2013 0240	JJG		17976

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.019	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: OQ17976-001
Batch: 17976
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	0.50	0.027	ug/L	04/09/2013 0033
Ethylbenzene	ND		1	0.50	0.17	ug/L	04/09/2013 0033
Methyl tertiary butyl ether (MTBE)	ND		1	0.50	0.019	ug/L	04/09/2013 0033
Toluene	ND		1	0.50	0.17	ug/L	04/09/2013 0033
Xylenes (total)	ND		1	0.50	0.17	ug/L	04/09/2013 0033

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: OQ17976-002
Batch: 17976
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	40		1	81	70-130	04/08/2013 2309
Ethylbenzene	50	46		1	92	70-130	04/08/2013 2309
Methyl tertiary butyl ether (MTBE)	50	44		1	88	70-130	04/08/2013 2309
Toluene	50	44		1	87	70-130	04/08/2013 2309
Xylenes (total)	100	94		1	94	70-130	04/08/2013 2309

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: OQ17976-003
Batch: 17976
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	45		1	90	10	70-130	20	04/08/2013 2330
Ethylbenzene	50	52		1	103	12	70-130	20	04/08/2013 2330
Methyl tertiary butyl ether (MTBE)	50	44		1	89	1.4	70-130	20	04/08/2013 2330
Toluene	50	49		1	98	11	70-130	20	04/08/2013 2330
Xylenes (total)	100	100		1	104	9.9	70-130	20	04/08/2013 2330

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		92	70-130
Toluene-d8		100	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MS

Sample ID: OD05014-008MS
Batch: 17976
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	1.4	50	49		1	96	70-130	04/09/2013 0844
Ethylbenzene	ND	50	52		1	104	70-130	04/09/2013 0844
Methyl tertiary butyl ether (MTBE)	11	50	60		1	96	70-130	04/09/2013 0844
Toluene	ND	50	51		1	103	70-130	04/09/2013 0844
Xylenes (total)	ND	100	100		1	102	70-130	04/09/2013 0844

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		107	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: OQ18031-001
Batch: 18031
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	0.50	0.027	ug/L	04/09/2013 1354
Ethylbenzene	ND		1	0.50	0.17	ug/L	04/09/2013 1354
Methyl tertiary butyl ether (MTBE)	ND		1	0.50	0.019	ug/L	04/09/2013 1354
Toluene	ND		1	0.50	0.17	ug/L	04/09/2013 1354
Xylenes (total)	ND		1	0.50	0.17	ug/L	04/09/2013 1354

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: OQ18031-002
Batch: 18031
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	42		1	83	70-130	04/09/2013 1230
Ethylbenzene	50	46		1	92	70-130	04/09/2013 1230
Methyl tertiary butyl ether (MTBE)	50	44		1	89	70-130	04/09/2013 1230
Toluene	50	45		1	90	70-130	04/09/2013 1230
Xylenes (total)	100	93		1	93	70-130	04/09/2013 1230

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		107	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: OQ18031-003
Batch: 18031
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	45		1	89	7.1	70-130	20	04/09/2013 1250
Ethylbenzene	50	50		1	101	8.7	70-130	20	04/09/2013 1250
Methyl tertiary butyl ether (MTBE)	50	46		1	93	4.6	70-130	20	04/09/2013 1250
Toluene	50	49		1	97	8.1	70-130	20	04/09/2013 1250
Xylenes (total)	100	100		1	101	8.2	70-130	20	04/09/2013 1250

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		107	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MS

Sample ID: OD05014-022MS
Batch: 18031
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	0.18	50	47		1	94	70-130	04/09/2013 2117
Ethylbenzene	ND	50	50		1	100	70-130	04/09/2013 2117
Methyl tertiary butyl ether (MTBE)	5.3	50	51		1	92	70-130	04/09/2013 2117
Toluene	ND	50	52		1	104	70-130	04/09/2013 2117
Xylenes (total)	ND	100	100		1	100	70-130	04/09/2013 2117

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		113	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		115	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MSD

Sample ID: OD05014-022MD
Batch: 18031
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	0.18	50	46		1	92	1.9	70-130	20	04/09/2013 2139
Ethylbenzene	ND	50	50		1	101	1.1	70-130	20	04/09/2013 2139
Methyl tertiary butyl ether (MTBE)	5.3	50	52		1	94	1.9	70-130	20	04/09/2013 2139
Toluene	ND	50	51		1	102	2.5	70-130	20	04/09/2013 2139
Xylenes (total)	ND	100	100		1	101	1.5	70-130	20	04/09/2013 2139

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		109	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		111	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: OQ18035-001
Batch: 18035
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	0.50	0.027	ug/L	04/09/2013 1306
Ethylbenzene	ND		1	0.50	0.17	ug/L	04/09/2013 1306
Methyl tertiary butyl ether (MTBE)	ND		1	0.50	0.019	ug/L	04/09/2013 1306
Toluene	ND		1	0.50	0.17	ug/L	04/09/2013 1306
Xylenes (total)	ND		1	0.50	0.17	ug/L	04/09/2013 1306

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		108	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: OQ18035-002
Batch: 18035
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	44		1	88	70-130	04/09/2013 1133
Ethylbenzene	50	49		1	98	70-130	04/09/2013 1133
Methyl tertiary butyl ether (MTBE)	50	45		1	91	70-130	04/09/2013 1133
Toluene	50	49		1	99	70-130	04/09/2013 1133
Xylenes (total)	100	100		1	100	70-130	04/09/2013 1133

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		108	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: OQ18035-003
Batch: 18035
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	42		1	84	4.7	70-130	20	04/09/2013 1156
Ethylbenzene	50	49		1	98	0.61	70-130	20	04/09/2013 1156
Methyl tertiary butyl ether (MTBE)	50	44		1	88	2.4	70-130	20	04/09/2013 1156
Toluene	50	47		1	93	5.9	70-130	20	04/09/2013 1156
Xylenes (total)	100	97		1	97	3.2	70-130	20	04/09/2013 1156

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MS

Sample ID: OD05014-016MS
Batch: 18035
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	ND	250	240		5	95	70-130	04/09/2013 2147
Ethylbenzene	ND	250	270		5	107	70-130	04/09/2013 2147
Methyl tertiary butyl ether (MTBE)	180	250	420		5	94	70-130	04/09/2013 2147
Toluene	ND	250	260		5	105	70-130	04/09/2013 2147
Xylenes (total)	ND	500	530		5	106	70-130	04/09/2013 2147

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		97	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		109	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MSD

Sample ID: OD05014-016MD
Batch: 18035
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	ND	250	230		5	91	4.1	70-130	20	04/09/2013 2211
Ethylbenzene	ND	250	260		5	104	2.5	70-130	20	04/09/2013 2211
Methyl tertiary butyl ether (MTBE)	180	250	390		5	81	7.8	70-130	20	04/09/2013 2211
Toluene	ND	250	250		5	101	4.0	70-130	20	04/09/2013 2211
Xylenes (total)	ND	500	510		5	102	3.7	70-130	20	04/09/2013 2211

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		105	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: OQ18051-001
Batch: 18051
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	0.50	0.027	ug/L	04/10/2013 0230
Ethylbenzene	ND		1	0.50	0.17	ug/L	04/10/2013 0230
Methyl tertiary butyl ether (MTBE)	ND		1	0.50	0.019	ug/L	04/10/2013 0230
Toluene	ND		1	0.50	0.17	ug/L	04/10/2013 0230
Xylenes (total)	ND		1	0.50	0.17	ug/L	04/10/2013 0230

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		103	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: OQ18051-002
Batch: 18051
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	50		1	100	70-130	04/10/2013 0058
Ethylbenzene	50	53		1	106	70-130	04/10/2013 0058
Methyl tertiary butyl ether (MTBE)	50	54		1	108	70-130	04/10/2013 0058
Toluene	50	53		1	107	70-130	04/10/2013 0058
Xylenes (total)	100	110		1	107	70-130	04/10/2013 0058

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		107	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: OQ18051-003
Batch: 18051
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	49		1	98	2.5	70-130	20	04/10/2013 0121
Ethylbenzene	50	49		1	98	7.5	70-130	20	04/10/2013 0121
Methyl tertiary butyl ether (MTBE)	50	52		1	103	4.3	70-130	20	04/10/2013 0121
Toluene	50	51		1	101	5.4	70-130	20	04/10/2013 0121
Xylenes (total)	100	99		1	99	7.3	70-130	20	04/10/2013 0121

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: OD05014-032DU
Batch: 18051
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Benzene	ND	ND		1	0.00	20	04/10/2013 0717
Ethylbenzene	ND	ND		1	0.00	20	04/10/2013 0717
Methyl tertiary butyl ether (MTBE)	24	18	+	1	28	20	04/10/2013 0717
Toluene	ND	ND		1	0.00	20	04/10/2013 0717
Xylenes (total)	ND	ND		1	0.00	20	04/10/2013 0717

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		87	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		100	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MS

Sample ID: OD05014-033MS
Batch: 18051
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	ND	50	50		1	101	70-130	04/10/2013 0741
Ethylbenzene	ND	50	51		1	102	70-130	04/10/2013 0741
Methyl tertiary butyl ether (MTBE)	ND	50	45		1	90	70-130	04/10/2013 0741
Toluene	ND	50	52		1	103	70-130	04/10/2013 0741
Xylenes (total)	ND	100	100		1	101	70-130	04/10/2013 0741

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		89	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		102	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: OQ18204-001
Batch: 18204
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	0.50	0.027	ug/L	04/11/2013 1354
Ethylbenzene	ND		1	0.50	0.17	ug/L	04/11/2013 1354
Methyl tertiary butyl ether (MTBE)	ND		1	0.50	0.019	ug/L	04/11/2013 1354
Toluene	ND		1	0.50	0.17	ug/L	04/11/2013 1354
Xylenes (total)	ND		1	0.50	0.17	ug/L	04/11/2013 1354

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: OQ18204-002
Batch: 18204
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	50		1	100	70-130	04/11/2013 1215
Ethylbenzene	50	50		1	100	70-130	04/11/2013 1215
Methyl tertiary butyl ether (MTBE)	50	62		1	125	70-130	04/11/2013 1215
Toluene	50	50		1	100	70-130	04/11/2013 1215
Xylenes (total)	100	100		1	102	70-130	04/11/2013 1215

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		92	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: OQ18204-003
Batch: 18204
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	51		1	103	2.8	70-130	20	04/11/2013 1239
Ethylbenzene	50	53		1	105	5.0	70-130	20	04/11/2013 1239
Methyl tertiary butyl ether (MTBE)	50	55		1	111	12	70-130	20	04/11/2013 1239
Toluene	50	52		1	104	3.6	70-130	20	04/11/2013 1239
Xylenes (total)	100	100		1	105	2.4	70-130	20	04/11/2013 1239

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		92	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

SHEALY

Chain of Custody Record

Number 16368

Client: ARCADIS	Report to Contact: Shelley Gibbons	Sampler (Printed Name): Valyn Rowncic	Quote No.
Address: 801 Corporate Center Drive	Telephone No. / Fax No. / Email: 919-854-1282 shelley.gibbons@arcadis-us.com	Waybill No.	Page: 1 of 5
City: Raleigh State: NC Zip Code: 27607	Preservative: 1. Unpres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCL 6. Na Thio. 7. NaOH		Number of Containers
Project Name: FST - 26			Bottle (See Instructions on back)
Project Number: GTCOHAFS.2012.0026M	P.O Number		Preservative
			Lot No.: OD05514

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis: BTEX, MTBE, 8260	Remarks / Cooler ID
26-MW-47-(040213)	4-2-13	1226	G	X					X	
26-MW-33(040213)	4-2-13	1315	G	X					X	
26-MW-43(040213)	4-2-13	1410	G	X					X	
26-MW-51(040213)	4-2-13	1445	G	X					X	
26-MW-57(040213)	4-2-13	1520	G	X					X	
26-MW-31(040213)	4-2-13	1550	G	X					X	
26-MW-57(040213)	4-2-13	1626	G	X					X	
26-MW-58(040213)	4-2-13	1710	G	X					X	
26-MW-58(040213)MS	4-2-13	1712	G	X					X	
26-MW-58(040213)MSD	4-2-13	1715	G	X					X	

Turn Around Time Required (Prior lab approval required for expedited TAT): Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler: Valyn Rowncic	4-4-13	1030	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by: FedEx	4/5/13	0900	4. Laboratory Received by	4/5/13	09W

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Check): ☑ Yes ☐ No ☐ Ice Pack; Receipt Temp. 1.2 °C; Temp. Blank ☐ Y / ☐ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Chain of Custody Record

Number 16363

Client	Report to Contact	Sampler (Printed Name)	Quote No.
ARCADIS	Shelley Gibbons	Calvin Pannell	
Address: 801 Corporate Center Drive	Telephone No. / Fax No. / (Email): 919-854-1282 shelley.gibbons@arcadis-us.com	Waybill No.	Page: 2 of 5
City: Raleigh; State: NC; Zip Code: 27607	Preservative: 1. Unpres. 4. HNO3 7. NaOH; 2. NaOH/ZnA 5. HCL; 3. H2SO4 6. Na Thio.		Number of Containers / Bottle (See Instructions on back) / Preservative
Project Name: FST-26			
Project Number: GP09HAFS.2012.N2694	P.O Number		Lot No.: OP0514

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis: BTEX, MTBE 8260	Remarks / Cooler ID
26-MW-49(040713)	4-2-13	1615	G	X					X	
26-MW-50(040213)	4-2-13	1655	G	X					X	
26-MW-40(040213)	4-2-13	1215	G	X					X	
26-MW-39(040213)	4-2-13	1300	G	X					X	
26-MW-42(040213)	4-2-13	1420	G	X					X	
26-MW-32(040213)	4-2-13	1510	G	X					X	
26-MW-55(040313)	4-3-13	1035	G	X					X	
26-DUP-02(040313)	4-3-13	00:02	G	X					X	
26-MW-23(040313)	4-3-13	1125	G	X					X	
26-MW-09(040313)	4-3-13	1215	G	X					X	

Turn Around Time Required (Prior lab approval required for expedited TAT): ☒ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler: Calvin Pannell	4-4-13	1030	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by: FedEx	4/5/13	0900	4. Laboratory Received by	4/8/13	0900

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Check) ☒ Yes ☐ No ☐ Ice Pack
Receipt Temp. 1.0 1.0 °C
Temp. Blank ☐ Y / ☐ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

SHEALY

Chain of Custody Record

Number 16362

Client	Report to Contact	Sampler (Printed Name)	Quote No.
ARCADIS	Shelley Gibbons	Valyn Paounov	

Address	Telephone No. / Fax No. / Email	Waybill No.	Page
801 Corporate Center Drive	919-854-1282 shelley.gibbons@arcadis-us.com		3 of 5

City	State	Zip Code
Raleigh	NC	27607

Project Name: FST - 26

Project Number: GPCBHAFS.2012.N26GW

P.O Number:

Preservative: 1. Unpres. 4. HNO3 7. NaOH; 2. NaOH/ZnA 5. HCl; 3. H2SO4 6. Na Thio.

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis: BTEX MBE 8260	Number of Containers	Bottle (See Instructions on back)	Preservative	Lot No.	Remarks / Cooler ID
										3	3		0D05014	
26-MW-38(040313)	4-3-13	0850	G	X					X	5	A			
26-MW-41(040313)	4-3-13	0925	G	X					X					
26-MW-20(040313)	4-3-13	1000	G	X					X					
26-MW-24R(040313)	4-3-13	1400	G	X					X					
26-MW-24R(040313)MS	4-3-13	1402	G	X					X					
26-MW-24R(040313)MSD	4-3-13	1405	G	X					X					
26-MW-16(040313)	4-3-13	1450	G	X					X					
26-MW-35(040313)	4-3-13	1525	G	X					X					
26-MW-25R(040313)	4-3-13	1600	G	X					X					
26-MW-59(040313)	4-3-13	1635	G	X					X					

Turn Around Time Required (Prior lab approval required for expedited TAT): ☑ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify):

Possible Hazard Identification: ☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler: Valyn Paounov	4-4-13	1630	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by: Fedex	4/5/13	0800	4. Laboratory Received by	4/6/13	0900

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Check) ☑ Yes ☐ No ☐ Ice Pack — Receipt Temp 1.2 / 1.0 °C — Temp. Blank ☐ Y / ☐ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

SHEALY **Chain of Custody Record**

Number 16364

Client: ARCADIS	Report to Contact: Shelley Gibbons	Sampler (Printed Name): Valyn Paounack	Quote No.
Address: 801 Corporate Center Drive	Telephone No. / Fax No. / Email: 919-854-1282 shelley.gibbons@arcadis-us.com	Waybill No.	Page: 4 of 5
City: Raleigh / State: NC / Zip Code: 27607	Preservative: 1. Unpres. 4. HNO3 7. NaOH; 2. NaOH/ZnA 5. HCL; 3. H2SO4 6. Na Thio.		Number of Containers
Project Name: FST-26			Bottle (See Instructions on back)
			Preservative
Project Number: GPOBHAFS.2012.N26GM	P.O Number		Lot No.: 0D05014

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis: MTBE, BTEX 8260	Remarks / Cooler ID
26-MW-15R(040313)	4-3-13	1720	G	X					X	
26-MW-53 (040313)	4-3-13	0855	G	X					X	
26-MW-54 (040313)	4-3-13	0955	G	X					X	
26-MW-A(040313)	4-3-13	1040	G	X					X	
26-DUP-01(040313)	4-3-13		G	X					X	
26-MW-56(040313)	4-3-13	1145	G	X					X	
26-MW-21(040313)	4-3-13	1325	G	X					X	
26-MW-06R(040313)	4-3-13	1445	G	X					X	
26-MW-30R(040313)	4-3-13	1525	G	X					X	
26-MW-07(040313)	4-3-13	1605	G	X					X	

Turn Around Time Required (Prior lab approval required for expedited TAT): ☑ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler: Valyn Paounack	4-4-13	1030	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by: Fedex	4/5/13	0900	4. Laboratory Received by	4/5/13	0900

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Check) ☑ Yes ☐ No ☐ Ice Pack — Receipt Temp. 1.0 / 1.0 °C — Temp. Blank ☐ Y / ☐ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

SHEALY **Chain of Custody Record** **Number** 16365

Client: ARCADIS	Report to Contact: Shelly Gibbons	Sampler (Printed Name): Dalyn Pawnee	Quote No.
Address: 801 Corporate Center Dr.	Telephone No. / Fax No. / Email: 919-854-1282 Shelly.Gibbons@arcadis-us.com	Waybill No.	Page 5 of 5
City: Raleigh State: NC Zip Code: 27607	Preservative: 1. Unpres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCL 6. Na Thio. 7. NaOH		
Project Name: FST-26			
Project Number: GPOSHAFS 2012.N2604	P.O Number		

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	C=Grab, C=Composite	Matrix: GW	DW	WW	S	Other	Analysis: BTEX HVOC	Number of Containers	Bottle (See Instructions on back)	Preservative	Lot No.	Remarks / Cooler ID
26-MW-28R (040813)	4-3-13	1650	G	X					X	3	A	3	0D05Y14	
Trip blank														
Trip blank														

Turn Around Time Required (Prior lab approval required for expedited TAT): ☑ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify):

Possible Hazard Identification: ☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

	Date	Time
1. Relinquished by / Sampler: Dalyn Pawnee	4-4-13	1030
2. Relinquished by		
3. Relinquished by		
4. Relinquished by: Fedex	4/5/13	0900

	Date	Time
1. Received by		
2. Received by		
3. Received by		
4. Laboratory Received by	4/5/13	0900

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Check) ☑ Yes ☐ No ☐ Ice Pack
Receipt Temp. 1.0 1.0 °C
Temp. Blank ☐ Y / ☐ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Shealy Environmental Services, Inc.
Document Number: F-AD-016
Revision Number: 10

Replaces Date: 10/11/11
Effective Date: 01/28/13

Sample Receipt Checklist (SRC)

Client: Arcadis Cooler Inspected by/date: MRC 4/15/13 Lot #: OD05014

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☑ FedEx ☐ Airborne Exp ☐ Other			
Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☑		2. If custody seals were present, were they intact and unbroken?
Cooler ID/temperature upon receipt 1158/1.0 °C 1175/1.0 °C ___/___ °C ___/___ °C Method: ☐ Temperature Blank ☑ Against Bottles Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None			
If response is No (or Yes for 14, 15, 16), an explanation/resolution must be provided.			
Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other:_____. (For coolers received via commercial courier, PMs are to be notified immediately.
Yes ☑	No ☐	NA ☐	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☐	No ☐	NA ☑	5a Were samples relinquished by client to commercial courier?
Yes ☑	No ☐		6. Were sample IDs listed?
Yes ☑	No ☐		7. Was collection date & time listed?
Yes ☑	No ☐		8. Were tests to be performed listed on the COC?
Yes ☑	No ☐		9. Did all samples arrive in the proper containers for each test?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with COC?
Yes ☑	No ☐		11. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		12. Was adequate sample volume available?
Yes ☑	No ☐	MR 4/15/13	13. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		14. Were any samples containers missing?
Yes ☐	No ☑		15. Were there any excess samples not listed on COC?
Yes ☐	No ☑	NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol/BNA/pest/PCB/herb (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s)_____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4,HNO_3,HCl,NaOH) with the SR # (number) _____.

Sample(s)_____ were received with bubbles >6 mm in diameter.

Sample(s)_____ were received with TRC >0.2 mg/L for NH3/TKN/cyanide/BNA/pest/PCB/herb.

Sample labels verified by: _____ Date: 4/15/13

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐ Did client respond: Yes ☐ No ☐

SESI employee: _____ Date of response: _____

Comments: _____

Report of Analysis

ARCADIS U.S., Inc.
30 Patewood Drive
Suite 155
Greenville, SC 29615
Attention: Rachelle Borne

Project Name: FST-26

Project Number: GP08HAFS.N26GM

Lot Number: OJ18025

Date Completed: 12/04/2013

Date Revised: 12/03/2013

Nisreen Saikaly
Project Manager

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

OJ18025

Case Narrative
ARCADIS U.S., Inc.
Lot Number: OJ18025

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Volatile Organic Compounds

The MS/MSD recoveries in batch 32585 were outside acceptance criteria. All other QA/QC criteria for the batch were within acceptance criteria and method control limits. The MS/MSD recovery results are attributed to matrix interference. The associated sample results were reported and no corrective action was required.

Report Revision (12/05/2013)

This report is revised to add naphthalene to the VOC list.

Sample Summary
ARCADIS U.S., Inc.
Lot Number: OJ18025

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	26-MW-16 (101513)	Aqueous	10/15/2013 1131	10/18/2013
002	26-MW-24R (101513)	Aqueous	10/15/2013 1215	10/18/2013
003	26-MW-35 (101513)	Aqueous	10/15/2013 1138	10/18/2013
004	26-MW-25R (101513)	Aqueous	10/15/2013 1218	10/18/2013
005	26-MW-59 (101513)	Aqueous	10/15/2013 1304	10/18/2013
006	26-MW-15R (101513)	Aqueous	10/15/2013 1259	10/18/2013
007	26-MW-36R (101513)	Aqueous	10/15/2013 1455	10/18/2013
008	26-MW-06R (101513)	Aqueous	10/15/2013 1533	10/18/2013
009	26-MW-09R (101513)	Aqueous	10/15/2013 1627	10/18/2013
010	26-MW-23 (101513)	Aqueous	10/15/2013 1729	10/18/2013
011	26-MW-55 (101513)	Aqueous	10/15/2013 1644	10/18/2013
012	26-MW-20 (101513)	Aqueous	10/15/2013 1734	10/18/2013
013	DUP-1 (101513)	Aqueous	10/15/2013	10/18/2013
014	26-MW-07 (101513)	Aqueous	10/15/2013 1546	10/18/2013
015	26-MW-28R (101513)	Aqueous	10/15/2013 1458	10/18/2013
016	26-MW-56 (101613)	Aqueous	10/16/2013 1017	10/18/2013
017	26-MW-21 (101613)	Aqueous	10/16/2013 0937	10/18/2013
018	26-MW-33 (101613)	Aqueous	10/16/2013 1014	10/18/2013
019	26-MW-43 (101613)	Aqueous	10/16/2013 1104	10/18/2013
020	26-MW-19 (101613)	Aqueous	10/16/2013 1111	10/18/2013
021	DUP-2 (101613)	Aqueous	10/16/2013 0001	10/18/2013
022	26-MW-54 (101613)	Aqueous	10/16/2013 1155	10/18/2013
023	26-MW-31 (101613)	Aqueous	10/16/2013 1154	10/18/2013
024	26-MW-41 (101613)	Aqueous	10/16/2013 1239	10/18/2013
025	26-MW-57 (101613)	Aqueous	10/16/2013 1244	10/18/2013
026	26-MW-38 (101613)	Aqueous	10/16/2013 1433	10/18/2013
027	26-MW-51 (101613)	Aqueous	10/16/2013 1446	10/18/2013
028	26-MW-53 (101613)	Aqueous	10/16/2013 1537	10/18/2013
029	26-MW-52 (101613)	Aqueous	10/16/2013 1530	10/18/2013
030	26-MW-58 (101613)	Aqueous	10/16/2013 1625	10/18/2013
031	26-MW-32 (101613)	Aqueous	10/16/2013 1632	10/18/2013
032	26-MW-50 (101613)	Aqueous	10/16/2013 1723	10/18/2013
033	26-MW-42 (101613)	Aqueous	10/16/2013 1730	10/18/2013
034	26-MW-49 (101613)	Aqueous	10/16/2013 1809	10/18/2013
035	26-MW-40 (101713)	Aqueous	10/17/2013 0915	10/18/2013
036	26-MW-39 (101713)	Aqueous	10/17/2013 0928	10/18/2013
037	TRIP BLANK	Aqueous	10/18/2013	10/18/2013

(37 samples)

Executive Summary

ARCADIS U.S., Inc.

Lot Number: OJ18025

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	26-MW-16 (101513)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	1.4		ug/L	6
002	26-MW-24R (101513)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	1.6		ug/L	7
003	26-MW-35 (101513)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	1.0		ug/L	8
004	26-MW-25R (101513)	Aqueous	Benzene	8260B	0.32	J	ug/L	9
004	26-MW-25R (101513)	Aqueous	Ethylbenzene	8260B	1.6		ug/L	9
004	26-MW-25R (101513)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	0.80		ug/L	9
004	26-MW-25R (101513)	Aqueous	Naphthalene	8260B	1.1		ug/L	9
005	26-MW-59 (101513)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	1.1		ug/L	10
007	26-MW-36R (101513)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	11		ug/L	12
010	26-MW-23 (101513)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	5.6		ug/L	15
011	26-MW-55 (101513)	Aqueous	Benzene	8260B	10		ug/L	16
011	26-MW-55 (101513)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	240		ug/L	16
012	26-MW-20 (101513)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	0.28	J	ug/L	17
013	DUP-1 (101513)	Aqueous	Benzene	8260B	13		ug/L	18
013	DUP-1 (101513)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	240		ug/L	18
014	26-MW-07 (101513)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	1.6		ug/L	19
014	26-MW-07 (101513)	Aqueous	Toluene	8260B	7.7		ug/L	19
015	26-MW-28R (101513)	Aqueous	Benzene	8260B	0.19	J	ug/L	20
015	26-MW-28R (101513)	Aqueous	Ethylbenzene	8260B	0.25	J	ug/L	20
015	26-MW-28R (101513)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	1.5		ug/L	20
015	26-MW-28R (101513)	Aqueous	Naphthalene	8260B	0.25	J	ug/L	20
016	26-MW-56 (101613)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	22		ug/L	21
017	26-MW-21 (101613)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	21		ug/L	22
018	26-MW-33 (101613)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	46		ug/L	23
018	26-MW-33 (101613)	Aqueous	Toluene	8260B	0.67		ug/L	23
019	26-MW-43 (101613)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	110		ug/L	24
020	26-MW-19 (101613)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	6.2		ug/L	25
021	DUP-2 (101613)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	110		ug/L	26
022	26-MW-54 (101613)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	110		ug/L	27
023	26-MW-31 (101613)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	6.5		ug/L	28
023	26-MW-31 (101613)	Aqueous	Toluene	8260B	0.34	J	ug/L	28
024	26-MW-41 (101613)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	6.8		ug/L	29
025	26-MW-57 (101613)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	100		ug/L	30
026	26-MW-38 (101613)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	4.9		ug/L	31
027	26-MW-51 (101613)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	5.7		ug/L	32
028	26-MW-53 (101613)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	44		ug/L	33
029	26-MW-52 (101613)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	35		ug/L	34
030	26-MW-58 (101613)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	7.9		ug/L	35
031	26-MW-32 (101613)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	9.9		ug/L	36
032	26-MW-50 (101613)	Aqueous	Benzene	8260B	0.13	J	ug/L	37
032	26-MW-50 (101613)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	14		ug/L	37
033	26-MW-42 (101613)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	120		ug/L	38
034	26-MW-49 (101613)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	3.6		ug/L	39
035	26-MW-40 (101713)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	1.8		ug/L	40
036	26-MW-39 (101713)	Aqueous	Benzene	8260B	0.38	J	ug/L	41

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
036	26-MW-39 (101713)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	100		ug/L	41

(46 detections)

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-001
Description: 26-MW-16 (101513)
Matrix: Aqueous
Date Sampled: 10/15/2013 1131
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 0046	TAF		32583

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	1.4		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		116	70-130
Bromofluorobenzene		110	70-130
Toluene-d8		112	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-002
Description: 26-MW-24R (101513)
Matrix: Aqueous
Date Sampled: 10/15/2013 1215
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 0109	TAF		32583

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	1.6		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		116	70-130
Bromofluorobenzene		110	70-130
Toluene-d8		114	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-003
Description: 26-MW-35 (101513)
Matrix: Aqueous
Date Sampled: 10/15/2013 1138
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 0132	TAF		32583

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	1.0		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		115	70-130
Bromofluorobenzene		109	70-130
Toluene-d8		112	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-004
Description: 26-MW-25R (101513)
Matrix: Aqueous
Date Sampled: 10/15/2013 1218
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 0155	TAF		32583

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	0.32	J	0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	1.6		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	0.80		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	1.1		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		114	70-130
Bromofluorobenzene		111	70-130
Toluene-d8		113	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-005
Description: 26-MW-59 (101513)
Matrix: Aqueous
Date Sampled: 10/15/2013 1304
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 0219	TAF		32583

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	1.1		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		115	70-130
Bromofluorobenzene		108	70-130
Toluene-d8		112	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-006
Description: 26-MW-15R (101513)
Matrix: Aqueous
Date Sampled: 10/15/2013 1259
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 0242	TAF		32583

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		117	70-130
Bromofluorobenzene		109	70-130
Toluene-d8		116	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-007
Description: 26-MW-36R (101513)
Matrix: Aqueous
Date Sampled: 10/15/2013 1455
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 0306	TAF		32583

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	11		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		115	70-130
Bromofluorobenzene		109	70-130
Toluene-d8		113	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-008
Description: 26-MW-06R (101513)
Matrix: Aqueous
Date Sampled: 10/15/2013 1533
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 0329	TAF		32583

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		115	70-130
Bromofluorobenzene		109	70-130
Toluene-d8		113	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-009
Description: 26-MW-09R (101513)
Matrix: Aqueous
Date Sampled: 10/15/2013 1627
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 0352	TAF		32583

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		111	70-130
Toluene-d8		115	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-010
Description: 26-MW-23 (101513)
Matrix: Aqueous
Date Sampled: 10/15/2013 1729
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 1620	ALL		35729

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	5.6		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		85	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-011
Description: 26-MW-55 (101513)
Matrix: Aqueous
Date Sampled: 10/15/2013 1644
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	10/23/2013 0639	TAF		35723

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	10		10	0.54	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		10	3.4	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	240		10	0.38	ug/L	1
Naphthalene	91-20-3	8260B	ND		10	3.4	ug/L	1
Toluene	108-88-3	8260B	ND		10	3.4	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		10	3.4	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		90	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		87	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-012
Description: 26-MW-20 (101513)
Matrix: Aqueous
Date Sampled: 10/15/2013 1734
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 1643	ALL		35729

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	0.28	J	0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		87	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-013
Description: DUP-1 (101513)
Matrix: Aqueous
Date Sampled: 10/15/2013
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/24/2013 1035	ALL		35721
2	5030B	8260B	5	10/24/2013 1458	ALL		35733

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	13		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	240		2.5	0.095	ug/L	2
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	70-130		98	70-130
Bromofluorobenzene		89	70-130		83	70-130
Toluene-d8		87	70-130		103	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-014
Description: 26-MW-07 (101513)
Matrix: Aqueous
Date Sampled: 10/15/2013 1546
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 1747	TAF		35730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	1.6		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	7.7		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		121	70-130
Bromofluorobenzene		113	70-130
Toluene-d8		115	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-015
Description: 26-MW-28R (101513)
Matrix: Aqueous
Date Sampled: 10/15/2013 1458
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 1706	ALL		35729

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	0.19	J	0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	0.25	J	0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	1.5		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	0.25	J	0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		91	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-016
Description: 26-MW-56 (101613)
Matrix: Aqueous
Date Sampled: 10/16/2013 1017
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 1729	ALL		35729

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	22		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		85	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-017
Description: 26-MW-21 (101613)
Matrix: Aqueous
Date Sampled: 10/16/2013 0937
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 1753	ALL		35729

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	21		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		88	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-018
Description: 26-MW-33 (101613)
Matrix: Aqueous
Date Sampled: 10/16/2013 1014
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 1815	ALL		35729

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	46		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	0.67		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		88	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-019
Description: 26-MW-43 (101613)
Matrix: Aqueous
Date Sampled: 10/16/2013 1104
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 1839	ALL		35729

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	110		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		89	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-020
Description: 26-MW-19 (101613)
Matrix: Aqueous
Date Sampled: 10/16/2013 1111
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 1629	ALL		32647

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	6.2		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		84	70-130
Toluene-d8		105	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-021
Description: DUP-2 (101613)
Matrix: Aqueous
Date Sampled: 10/16/2013 0001
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 1652	ALL		32647

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	110		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		83	70-130
Toluene-d8		103	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-022
Description: 26-MW-54 (101613)
Matrix: Aqueous
Date Sampled: 10/16/2013 1155
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 1716	ALL		32647

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	110		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		109	70-130
Bromofluorobenzene		83	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-023
Description: 26-MW-31 (101613)
Matrix: Aqueous
Date Sampled: 10/16/2013 1154
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 1739	ALL		32647

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	6.5		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	0.34	J	0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		109	70-130
Bromofluorobenzene		83	70-130
Toluene-d8		104	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-024
Description: 26-MW-41 (101613)
Matrix: Aqueous
Date Sampled: 10/16/2013 1239
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 1802	ALL		32647

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	6.8		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		83	70-130
Toluene-d8		107	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-025
Description: 26-MW-57 (101613)
Matrix: Aqueous
Date Sampled: 10/16/2013 1244
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 1826	ALL		32647

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	100		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130
Bromofluorobenzene		82	70-130
Toluene-d8		102	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-026
Description: 26-MW-38 (101613)
Matrix: Aqueous
Date Sampled: 10/16/2013 1433
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 1849	ALL		32647

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	4.9		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		113	70-130
Bromofluorobenzene		83	70-130
Toluene-d8		105	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-027
Description: 26-MW-51 (101613)
Matrix: Aqueous
Date Sampled: 10/16/2013 1446
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/24/2013 1058	ALL		35721
2	5030B	8260B	1	10/24/2013 1434	ALL		35733

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	5.7		0.50	0.019	ug/L	2
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130		100	70-130
Bromofluorobenzene		91	70-130		86	70-130
Toluene-d8		89	70-130		106	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-028
Description: 26-MW-53 (101613)
Matrix: Aqueous
Date Sampled: 10/16/2013 1537
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 1913	ALL		32647

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	44		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130
Bromofluorobenzene		84	70-130
Toluene-d8		105	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-029
Description: 26-MW-52 (101613)
Matrix: Aqueous
Date Sampled: 10/16/2013 1530
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 1937	ALL		32647

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	35		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		82	70-130
Toluene-d8		103	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-030
Description: 26-MW-58 (101613)
Matrix: Aqueous
Date Sampled: 10/16/2013 1625
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 2000	ALL		32647

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	7.9		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		109	70-130
Bromofluorobenzene		83	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-031
Description: 26-MW-32 (101613)
Matrix: Aqueous
Date Sampled: 10/16/2013 1632
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 2028	TAF		35730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	9.9		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		112	70-130
Toluene-d8		117	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-032
Description: 26-MW-50 (101613)
Matrix: Aqueous
Date Sampled: 10/16/2013 1723
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/24/2013 0236	TAF		35732

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	0.13	J	0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	14		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		84	70-130
Toluene-d8		105	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-033
Description: 26-MW-42 (101613)
Matrix: Aqueous
Date Sampled: 10/16/2013 1730
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 2052	TAF		35730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	120		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		111	70-130
Toluene-d8		116	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-034
Description: 26-MW-49 (101613)
Matrix: Aqueous
Date Sampled: 10/16/2013 1809
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 2115	TAF		35730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	3.6		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		110	70-130
Toluene-d8		116	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-035
Description: 26-MW-40 (101713)
Matrix: Aqueous
Date Sampled: 10/17/2013 0915
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 2138	TAF		35730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	1.8		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		112	70-130
Toluene-d8		117	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-036
Description: 26-MW-39 (101713)
Matrix: Aqueous
Date Sampled: 10/17/2013 0928
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 2201	TAF		35730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	0.38	J	0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	100		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		112	70-130
Toluene-d8		116	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.
Laboratory ID: OJ18025-037
Description: TRIP BLANK
Matrix: Aqueous
Date Sampled: 10/18/2013
Date Received: 10/18/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/23/2013 1919	TAF		35730

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.019	ug/L	1
Naphthalene	91-20-3	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		113	70-130
Toluene-d8		116	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"