SUMMARY REPORT
38 GARDENIA DRIVE (FORMERLY 1066 GARDENIA DRIVE)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC

Revision: 0
Prepared for:

Department of the Navy
Naval Facilities Engineering Command, Mid-Atlantic
9324 Virginia Avenue
Norfolk, Virginia 23511-3095

and

Naval Facilities Engineering Command Atlantic
9324 Virginia Avenue
Norfolk, Virginia 23511-3095

JUNE 2021

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Prepared by:

CDM - AECOM Multimedia Joint Venture
10560 Arrowhead Drive, Suite 500
Fairfax, Virginia 22030

Contract Number: N62470-14-D-9016
CTO WE52
JUNE 2021

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List of Acronyms

bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
CTO	Contract Task Order
COPC	constituents of potential concern
IDIQ	Indefinite Delivery, Indefinite Quantity
IGWA	Initial Groundwater Assessment
JV	Joint Venture
LBMH	Laurel Bay Military Housing
MCAS	Marine Corps Air Station
NAVFAC Mid-Lant	Naval Facilities Engineering Command Mid-Atlantic
NFA	No Further Action
PAH	polynuclear aromatic hydrocarbon
QAPP	Quality Assurance Program Plan
RBSL	risk-based screening level
SCDHEC	South Carolina Department of Health and Environmental Control
Site	LBMH area at MCAS Beaufort, South Carolina
UST	underground storage tank
VISL	vapor intrusion screening level

1.0 INTRODUCTION

The CDM - AECOM Multimedia Joint Venture (JV) was contracted by the Naval Facilities Engineering Command, Mid-Atlantic (NAVFAC Mid-Lant) to provide reporting services for the heating oil underground storage tanks (USTs) located in Laurel Bay Military Housing (LBMH) area at the Marine Corps Air Station (MCAS) Beaufort, South Carolina (Site). This work has been awarded under Contract Task Order (CTO) WE52 of the Indefinite Delivery, Indefinite Quantity (IDIQ) Multimedia Environmental Compliance Contract (Contract No. N62470-14-D-9016).

As of January 2014, the LBMH addresses were re-numbered to comply with the E-911 emergency response addressing system; however, in order to remain consistent with historical sampling and reporting for LBMH area, the residences will continue to be referenced with their original address numbers in sample nomenclature and reporting documents.

This report summarizes the results the environmental investigation activities associated with the storage of home heating oil and the potential release of petroleum constituents at the referenced property. Based on the results of the investigation, a No Further Action (NFA) determination has been made by the South Carolina Department of Health and Environmental Control (SCDHEC) for 38 Gardenia Drive (Formerly 1066 Gardenia Drive). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

- Background information;
- Sampling activities and results; and
- A determination of the property status.

1.1 Background Information

The LBMH area is located approximately 3.5 miles west of MCAS Beaufort. The area is approximately 970 acres in size and serves as an enlisted and officer family housing area. The area is configured with single family and duplex residential structures, and includes recreation, open space, and community facilities. The community includes approximately 1,300 housing units, including legacy Capehart style homes and newer duplex style homes. The housing area

is bordered on the west by salt marshes and the Broad River, and to the north, east and south by uplands. Forested areas lie along the northern and northeastern borders.

Capehart style homes within the LBMH area were formerly heated using heating oil stored in USTs at each residence. There were 1,100 Capehart style housing units in the LBMH area. The newer duplex homes within the LBMH area never utilized heating oil tanks. Heating oil has not been used at Laurel Bay since the mid-1980s. As was the accepted practice at the time, USTs were drained, filled with dirt, capped, and left in place when they were removed from service. Residential USTs are not regulated in the State of South Carolina (i.e., there are no federal or state laws governing installation, management, or removal).

In 2007, MCAS Beaufort began a voluntary program to remove the unregulated, residential USTs and conduct sampling activities to determine if, and to what extent, petroleum constituents may have impacted the surrounding environment. MCAS Beaufort coordinated with SCDHEC to develop removal procedures that were consistent with procedural requirements for regulated USTs. All tank removal activities and follow-on actions are conducted in coordination with SCDHEC. To date, all known USTs have been removed from all residential properties within the LBMH area.

1.2 UST Removal and Assessment Process

During the UST removal process, a soil sample was collected from beneath the UST excavations (approximately 4 to 6 feet [ft] below ground surface [bgs]) and analyzed for a predetermined list of constituents of potential concern (COPCs) associated with the petroleum compounds found in home heating oil. These COPCs, derived from the *Quality Assurance Program Plan (QAPP) for the Underground Storage Tank Management Division, Revision 3.1* (SCDHEC, 2016) and the *Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service,* (SCDHEC, 2018), are as follows:

- benzene, toluene, ethylbenzene, and xylenes (BTEX),
- naphthalene, and
- five select polynuclear aromatic hydrocarbon (PAHs): benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene and dibenz(a,h)anthracene.

Soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form. In accordance with SCDHEC's *QAPP for the UST Management*

Division (SCDHEC, 2016), the soil screening levels consists of SCDHEC risk-based screening levels (RBSLs). It should be noted that the RBSLs for select PAHs were revised in Revision 2.0 of the QAPP (SCDHEC, 2013) and were revised again in Revision 3.0 (SCDHEC, 2015). The screening levels used for evaluation at each site were those levels that were in effect at the time of reporting and review by SCDHEC.

The results of the soil sampling at each former UST location were used to determine if a potential for groundwater contamination exists (i.e., soil results greater than RBSLs) and subsequently to select properties for follow-up initial groundwater assessment (IGWA) sampling. The IGWA sampling process utilizes temporary groundwater sampling points that are typically installed and sampled within the same day. The intent of the sampling point is to determine the presence or absence of the aforementioned COPCs in groundwater and identify whether former UST locations may require additional delineation of COPCs in groundwater. These sampling points are not subjected to the same installation standards as permanent monitoring wells and, as such; the data obtained from the IGWA wells can sometimes be biased high and is considered preliminary data. In order to confirm the presence of any impact to groundwater, a permanent well is installed where IGWA sampling has indicated the presence of COPCs is in excess of the SCDHEC RBSLs for groundwater. If COPCs are found to be present in the permanent well, additional permanent wells are installed to delineate the extent of impact to groundwater and a sampling program is established. Groundwater analytical results are also compared to the site specific groundwater vapor intrusion screening levels (VISLs) to evaluate the potential for vapor intrusion and the necessity for an investigation associated with this media. A multi-media investigation selection process tree, applicable to the LBMH UST investigations, is presented as Appendix A.

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 38 Gardenia Drive (Formerly 1066 Gardenia Drive). The sampling activities at 38 Gardenia Drive (Formerly 1066 Gardenia Drive) comprised a soil investigation and IGWA sampling. Details regarding the soil investigations at this site are provided in the *SCDHEC UST Assessment Report – 1066 Gardenia Drive* (MCAS Beaufort, 2012) and in the *SCDHEC UST Assessment Report – 1066 Gardenia Drive* (MCAS Beaufort, 2019). The UST Assessment Reports are provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Technical Memorandum Groundwater Investigations December 2019* (Resolution Consultants, 2020).

2.1 UST Removal and Soil Sampling

In November 2011 and February 2019, three 280 gallon heating oil USTs were removed from 38 Gardenia Drive (Formerly 1066 Gardenia Drive). Tank 1 was removed on November 10, 2011 from the front landscaped area adjacent to the driveway. Tanks 2 and 3 were removed on February 12, 2019 from the front grassed area. The former UST locations are indicated on the figures of the UST Assessment Reports (Appendix B). The USTs were removed and properly disposed of (i.e., shipped offsite for recycling or transported to a landfill). There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removals. According to the UST Assessment Reports (Appendix B), the depths to the bases of the USTs were 6'0" bgs (Tank 1), 4'5" bgs (Tank 2) and 4'5" bgs (Tank 3) and a single sample was collected for each from those depths. The samples were collected from the fill port side of the former USTs to represent a worst case scenario and shipped to an offsite laboratory for analysis of the petroleum COPCs. Sampling was performed in accordance with applicable South Carolina regulation R.61-92, Part 280 (SCDHEC, 2017) and assessment guidelines.

2.2 Soil Analytical Results

A summary of the laboratory analytical results and SCDHEC RBSLs is presented in Table 1. A copy of the laboratory analytical data reports are included in the UST Assessment Reports presented in Appendix B. The laboratory analytical data reports include the soil results for the additional PAHs that were analyzed, but do not have associated RBSLs.

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST locations (Tanks 1, 2 and 3) were used by MCAS Beaufort, in consultation with SCDHEC, to determine a path forward (i.e., additional sampling or NFA) for the property. The soil results collected from the former UST locations (Tanks 1 and 3) at 38 Gardenia Drive (Formerly 1066 Gardenia Drive) were less than the SCDHEC RBSLs, which indicated the subsurface was not impacted by COPCs associated with the former USTs at concentrations that presented a potential risk to human health and the environment. The soil results collected from the former UST location (Tank 2) at 38 Gardenia Drive (Formerly 1066 Gardenia Drive) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated June 12, 2019, SCDHEC requested an IGWA for 38 Gardenia Drive (Formerly 1066 Gardenia Drive) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

2.3 Initial Groundwater Sampling

On December 9, 2019, a single temporary monitoring well was installed at 38 Gardenia Drive (Formerly 1066 Gardenia Drive), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST (Tank 2). The former UST location is indicated on Figure 2 of the UST Assessment Report (Appendix B). Further details are provided in the *Technical Memorandum Groundwater Investigations December 2019* (Resolution Consultants, 2020).

The sampling strategy for this phase of the investigation required a one-time sampling event of the temporary monitoring well. Following well installation and development, a groundwater sample was collected using low-flow methods and shipped to an offsite laboratory for analysis of the petroleum COPCs. Upon completion of groundwater sampling, the temporary well was abandoned in accordance with the South Carolina Well Standards and Regulations R.61-71 (SCDHEC, 2016). Field forms are provided in the *Technical Memorandum Groundwater Investigations December 2019* (Resolution Consultants, 2020).

2.4 Initial Groundwater Analytical Results

A summary of the laboratory analytical results and SCDHEC RBSLs is presented in Table 2. A copy of the laboratory analytical data report is included in Appendix C.

The groundwater results collected from 38 Gardenia Drive (Formerly 1066 Gardenia Drive) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated that the groundwater was not impacted by COPCs associated with the former UST (Tank 2) at concentrations that present a potential risk to human health and the environment.

3.0 PROPERTY STATUS

Based on the analytical results for soil (Tank 1) and groundwater (Tanks 2 and 3), SCDHEC made the determination that NFA was required for 38 Gardenia Drive (Formerly 1066 Gardenia Drive). These NFA determinations were obtained in letters dated July 1, 2015 (Tank 1) and February 24, 2020 (Tanks 2 and 3). SCDHEC's NFA letters are provided in Appendix D.

4.0 REFERENCES

Marine Corps Air Station Beaufort, 2012. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 1066 Gardenia Drive, Laurel Bay Military Housing Area*, February 2012.

Marine Corps Air Station Beaufort, 2019. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 1066 Gardenia Drive, Laurel Bay Military Housing Area*, May 2019.

Resolution Consultants, 2020. *Technical Memorandum Groundwater Investigations December 2019, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, SC,* January 2020.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2013. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division*, Revision 2.0*, April 2013.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2015. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division*, Revision 3.0*, May 2015.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2016. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division*, Revision 3.1*, February 2016.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2017*. R.61-92, Part 280, Underground Storage Tank Control Regulations*, March 2017.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2018. *Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service*, March 2018.

South Carolina Department of Health and Environmental Control Bureau of Water, 2016. *R.61-71, Well Standards*, June 2016.

Tables

Table 1
Laboratory Analytical Results - Soil
38 Gardenia Drive (Formerly 1066 Gardenia Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs [1]	Results Samples Collected 11/10/11 and 02/12/19		
		Tank 1 11/10/11	Tank 2 02/12/19	Tank 3 02/12/19
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)				
Benzene	0.003	ND	**0.52**	ND
Ethylbenzene	1.15	**0.00404**	**12**	ND
Naphthalene	0.036	**0.0276**	**41**	ND
Toluene	0.627	ND	ND	ND
Xylenes, Total	13.01	**0.0658**	**20**	ND
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)				
Benzo(a)anthracene	0.66	**0.180**	ND	ND
Benzo(b)fluoranthene	0.66	**0.0686**	ND	ND
Benzo(k)fluoranthene	0.66	**0.0470**	ND	ND
Chrysene	0.66	**0.128**	ND	ND
Dibenz(a,h)anthracene	0.66	ND	ND	ND

Notes:

[1] South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.1 (SCDHEC, February 2016).

Bold font indicates the analyte was detected.
Bold font and shading indicates the concentration exceeds the SCDHEC RBSL.
EPA - United States Environmental Protection Agency
mg/kg - milligram per kilogram
ND - not detected at the reporting limit (or method detection limit if shown on the laboratory report). The laboratory reportS ARE provided in Appendix B.
RBSL - Risk-Based Screening Level
SCDHEC - South Carolina Department Of Health and Environmental Control

Table 2
Laboratory Analytical Results - Groundwater
38 Gardenia Drive (Formerly 1066 Gardenia Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs [(1)]	Site-Specific Groundwater VISLs[(2)]	Results Sample Collected 12/10/19
Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)			
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	ND
Naphthalene	25	29.33	**0.80**
Toluene	1000	105,445	**0.52**
Xylenes, Total	10,000	2,133	ND
Semivolatile Organic Compounds Analyzed by EPA Method 8270E (µg/L)			
Benzo(a)anthracene	10	NA	ND
Benzo(b)fluoranthene	10	NA	ND
Benzo(k)fluoranthene	10	NA	ND
Chrysene	10	NA	ND
Dibenz(a,h)anthracene	10	NA	ND

Notes:

[(1)] South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.1 (SCDHEC, February 2016).

[(2)] Site-specific groundwater VISLs were calculated using the EPA JE Model Spreadsheets (Version 3.1, February 2004) and conservative modeling inputs representative of a small single-story house with an 8 foot ceiling. Site-specific groundwater VISLs were developed based on a target risk level of $1x10^{-6}$, a target hazard quotient of 1 (per target organ), and a default residential exposure scenario, assuming exposure for 24 hours/day, 350 days/year, for 26 years. Modeling was performed for a range of depths to groundwater for application as appropriate in different areas of the Laurel Bay Military Housing Area. The most conservative levels are presented for comparison. Refer to Appendix H of the Uniform Federal Policy Sampling Analysis and Sampling Plan for Vapor Media, Revision 4 (Resolution Consultants, April 2017) for additional information.

Bold font indicates the analyte was detected.

Bold font and shading indicates the concentration exceeds the SCDHEC RBSL and/or the Site-Specific Groundwater VISL.

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - not applicable

ND - not detected at the reporting limit (or method detection limit if shown on the laboratory report). The groundwater laboratory report is provided in Appendix C.

RBSL - Risk-Based Screening Level

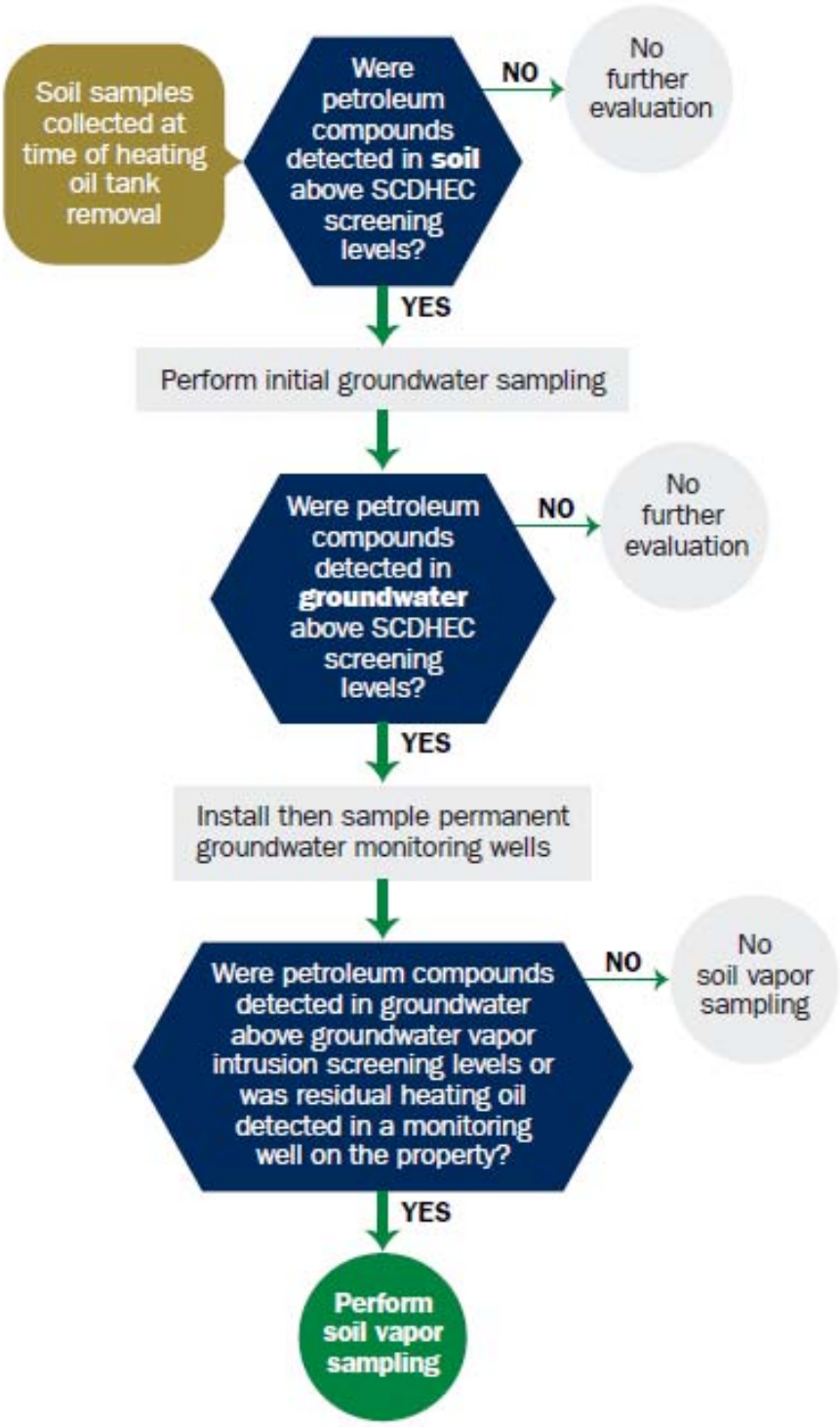
SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

Appendix A
Multi-Media Selection Process for LBMH

CDM - AECOM
Multimedia Joint Venture



Appendix A - Multi-Media Selection Process for LBMH

Appendix B
UST Assessment Reports

CDM - AECOM
Multimedia Joint Venture

rec'd 2/16/12

Attachment 1

South Carolina Department of Health and Environmental Control (SCDHEC)

Underground Storage Tank (UST) Assessment Report

Date Received
State Use Only

Submit Completed Form To:
UST Program
SCDHEC
2600 Bull Street
Columbia, South Carolina 29201
Telephone (803) 896-7957

I. OWNERSHIP OF UST (S)

MCAS Beaufort, Commanding Officer Attn: NREAO (Craig Ehde)
Owner Name (Corporation, Individual, Public Agency, Other)

P.O. Box 55001
Mailing Address

Beaufort,	South Carolina	29904-5001
City	State	Zip Code

843	228-7317	Craig Ehde
Area Code	Telephone Number	Contact Person

II. SITE IDENTIFICATION AND LOCATION

Permit I.D. #
Laurel Bay Military Housing Area, Marine Corps Air Station, Beaufort, SC
Facility Name or Company Site Identifier

1066 Gardenia St., Laurel Bay Military Housing Area
Street Address or State Road (as applicable)

Beaufort,	Beaufort
City	County

Attachment 2

III. INSURANCE INFORMATION

Insurance Statement

The petroleum release reported to DHEC on _____ at Permit ID Number _____ may qualify to receive state monies to pay for appropriate site rehabilitation activities. Before participation is allowed in the State Clean-up fund, written confirmation of the existence or non-existence of an environmental insurance policy is required. **This section must be completed.**

Is there now, or has there ever been an insurance policy or other financial mechanism that covers this UST release? **YES**____ **NO**_____ (check one)

If you answered **YES** to the above question, please complete the following information:

My policy provider is:_____
The policy deductible is: _____
The policy limit is: _____

If you have this type of insurance, please include a copy of the policy with this report.

IV. REQUEST FOR SUPERB FUNDING

I **DO** / DO **NOT** wish to participate in the SUPERB Program. (Circle one.)

V. CERTIFICATION (To be signed by the UST owner)

I certify that I have personally examined and am familiar with the information submitted in this and all attached documents; and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

_____
Name (Type or print.)

_____
Signature

To be completed by Notary Public:

Sworn before me this _____ day of_____, 20____

_____
(Name)

Notary Public for the state of_____.
Please affix State seal if you are commissioned outside South Carolina

VI. UST INFORMATION

A.	Product...(ex. Gas, Kerosene).....	1066 Gardenia				
B.	Capacity..(ex. 1k, 2k).....	Heating oil				
C.	Age.....	280 gal				
D.	Construction Material..(ex. Steel, FRP).....	Late 1950s				
E.	Month/Year of Last Use.....	Steel				
F.	Depth (ft.) To Base of Tank.....	Mid 1980s				
G.	Spill Prevention Equipment Y/N.....	6'				
H.	Overfill Prevention Equipment Y/N.....	No				
I.	Method of Closure Removed/Filled.....	No				
J.	Date Tanks Removed/Filled.....	Removed				
K.	Visible Corrosion or Pitting Y/N.....	11/10/2011				
L.	Visible Holes Y/N.....	Yes				
		Yes				

M. Method of disposal for any USTs removed from the ground (attach disposal manifests)
UST 1066Gardenia was removed from the ground, cleaned and recycled.
See Attachment "A."

N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)
Contaminated water was pumped from the tank and disposed by MCAS.

O. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST
Corrosion, pitting and holes were found throughout the tank.

VII. PIPING INFORMATION

A.	Construction Material..(ex. Steel, FRP).....	1066 Gardenia				
B.	Distance from UST to Dispenser.....	Steel & Copper				
C.	Number of Dispensers.....	N/A				
D.	Type of System Pressure or Suction.....	N/A				
E.	Was Piping Removed from the Ground? Y/N	Suction				
F.	Visible Corrosion or Pitting Y/N.....	No				
G.	Visible Holes Y/N.....	Yes				
H.	Age.....	No				
		Late 1950s				

I. If any corrosion, pitting, or holes were observed, describe the location and extent for each piping run.

Corrosion and pitting were found in the steel vent pipe. The copper supply and return lines were sound.

VIII. BRIEF SITE DESCRIPTION AND HISTORY

The USTs at the residences are constructed of single wall steel and formerly contained fuel oil for heating. These USTs were installed in the late 1950s and last used in the mid 1980s.

IX. SITE CONDITIONS

	Yes	No	Unk
A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells? If yes, indicate depth and location on the site map.		X	
B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells? If yes, indicate location on site map and describe the odor (strong, mild, etc.)		X	
C. Was water present in the UST excavation, soil borings, or trenches? If yes, how far below land surface (indicate location and depth)?		X	
D. Did contaminated soils remain stockpiled on site after closure? If yes, indicate the stockpile location on the site map. Name of DHEC representative authorizing soil removal:		X	
E. Was a petroleum sheen or free product detected on any excavation or boring waters? If yes, indicate location and thickness.		X	

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
1066 Gardenia	Excav at fill end	Soil	Sandy	6'	11/10/11 1530 hrs	P. Shaw	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

* = Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

Provide a detailed description of the methods used to collect and store the samples. Also include the preservative used for each sample. Please use the space provided below.

Sampling was performed in accordance with SC DHEC R.61-92 Part 280 and SC DHEC Assessment Guidelines. Sample containers were prepared by the testing laboratory. The grab method was utilized to fill the sample containers leaving as little head space as possible and immediately capped. Soil samples were extracted from area below tank. The samples were marked, logged, and immediately placed in a sample cooler packed with ice to maintain an approximate temperature of 4 degrees Centigrade. Tools were thoroughly cleaned and decontaminated with the seven step decon process after each use. The samples remained in custody of SBG-EEG, Inc. until they were transferred to Test America Incorporated for analysis as documented in the Chain of Custody Record.

XII. RECEPTORS

	Yes	No
A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system? *Approx 150' to stormwater canal If yes, indicate type of receptor, distance, and direction on site map.	*X	
B. Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system? If yes, indicate type of well, distance, and direction on site map.		X
C. Are there any underground structures (e.g., basements) Located within 100 feet of the UST system? If yes, indicate type of structure, distance, and direction on site map.		X
D. Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination? *Sewer, water, electricity, cable & fiber optic If yes, indicate the type of utility, distance, and direction on the site map.	*X	
E. Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete? If yes, indicate the area of contaminated soil on the site map.		X

XIII. SITE MAP

You must supply a scaled site map. It should include all buildings, road names, utilities, tank and dispenser island locations, labeled sample locations, extent of excavation, and any other pertinent information.

(Attach Site Map Here)

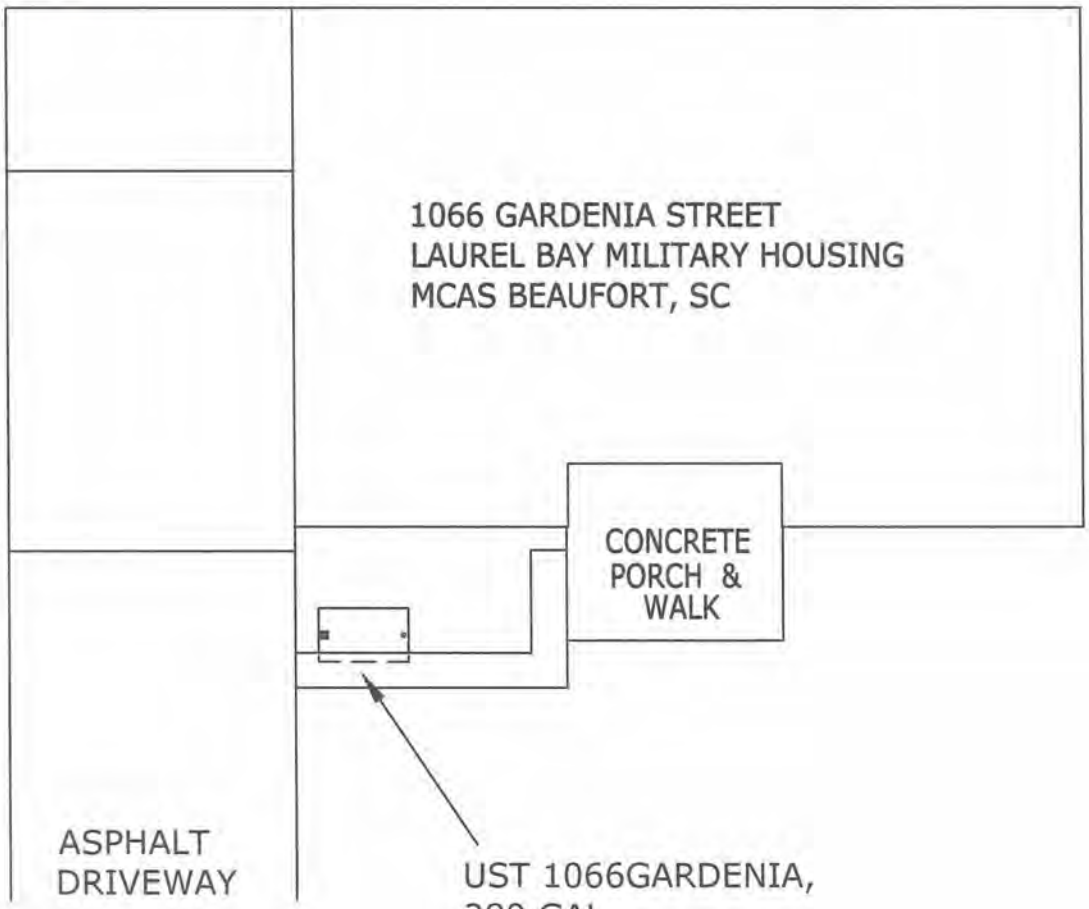
SBG-EEG, Inc.
398 E. 5th North Street, Suite C
Summerville SC 29483-6954
Ph. (843) 875-1930

Drawn By: L. DiAsio

Dwg Date: DEC 2011

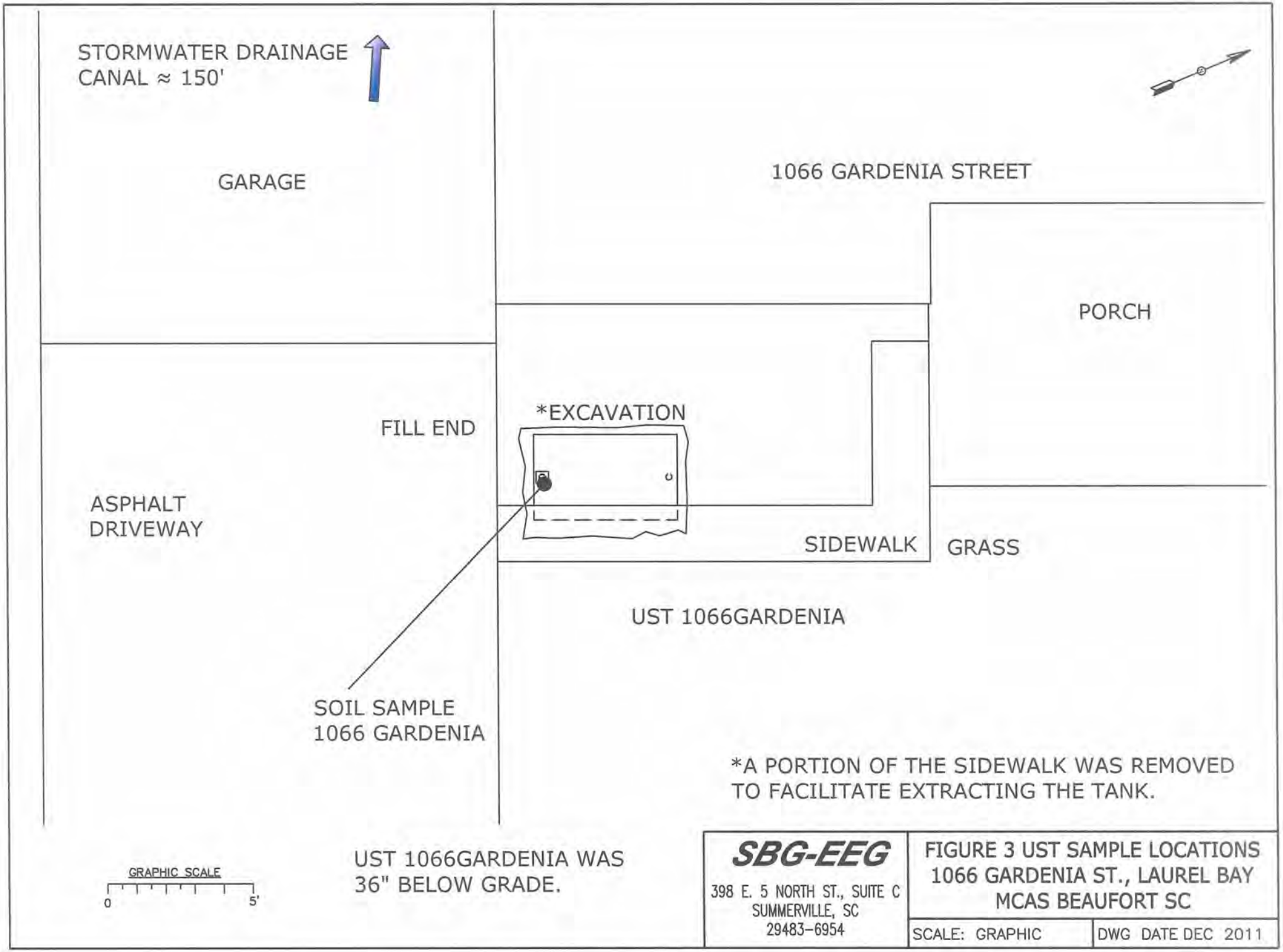
FIGURE 1: LOCATION MAP
1066 GARDENIA STREET
LAUREL BAY, BEAUFORT SC

STORMWATER DRAINAGE
CANAL ≈ 150'



GRAPHIC SCALE
0 5' 10' 20'

SBG-EEG 398 E. 5 NORTH ST., SUITE C SUMMERVILLE, SC 29483-6954	FIGURE 2 SITE MAP 1066 GARDENIA ST., LAUREL BAY MCAS BEAUFORT SC
	SCALE: GRAPHIC | DWG DATE DEC 2011


STORMWATER DRAINAGE
CANAL ≈ 150'
GARAGE
1066 GARDENIA STREET
PORCH
*EXCAVATION
FILL END
ASPHALT
DRIVEWAY
SIDEWALK
GRASS
UST 1066GARDENIA
SOIL SAMPLE
1066 GARDENIA
*A PORTION OF THE SIDEWALK WAS REMOVED
TO FACILITATE EXTRACTING THE TANK.
GRAPHIC SCALE
0
5'
UST 1066GARDENIA WAS
36" BELOW GRADE.
SBG-EEG
398 E. 5 NORTH ST., SUITE C
SUMMERVILLE, SC
29483-6954
FIGURE 3 UST SAMPLE LOCATIONS
1066 GARDENIA ST., LAUREL BAY
MCAS BEAUFORT SC
SCALE: GRAPHIC
DWG DATE DEC 2011

Picture 1: Location of UST 1066Gardenia.

Picture 2: UST 1066Gardenia excavation.

XIV. SUMMARY OF ANALYSIS RESULTS

Enter the soil analytical data for each soil boring for all COC in the table below and on the following page.

CoC UST	1066 Gardenia						
Benzene	ND						
Toluene	ND						
Ethylbenzene	0.00404 mg/kg						
Xylenes	0.0658 mg/kg						
Naphthalene	0.0276 mg/kg						
Benzo (a) anthracene	0.180 mg/kg						
Benzo (b) fluoranthene	0.0686 mg/kg						
Benzo (k) fluoranthene	0.0470 mg/kg						
Chrysene	0.128 mg/kg						
Dibenz (a, h) anthracene	ND						
TPH (EPA 3550)							

CoC								
Benzene								
Toluene								
Ethylbenzene								
Xylenes								
Naphthalene								
Benzo (a) anthracene								
Benzo (b) fluoranthene								
Benzo (k) fluoranthene								
Chrysene								
Dibenz (a, h) anthracene								
TPH (EPA 3550)								

SUMMARY OF ANALYSIS RESULTS (cont'd)

Enter the ground water analytical data for each sample for all CoC in the table below. If free product is present, indicate the measured thickness to the nearest 0.01 feet.

CoC	RBSL (µg/l)	W-1	W-2	W -3	W -4
Free Product Thickness	None				
Benzene	5				
Toluene	1,000				
Ethylbenzene	700				
Xylenes	10,000				
Total BTEX	N/A				
MTBE	40				
Naphthalene	25				
Benzo (a) anthracene	10				
Benzo (b) flouranthene	10				
Benzo (k) flouranthene	10				
Chrysene	10				
Dibenz (a, h) anthracene	10				
EDB	.05				
1,2-DCA	5				
Lead	Site specific				

XV. ANALYTICAL RESULTS

You must submit the laboratory report and chain-of-custody form for the samples. These samples must be analyzed by a South Carolina certified laboratory.

(Attach Certified Analytical Results and Chain-of-Custody Here)
(Please see Form #4)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Road
Nashville, TN 37204
Tel: 800-765-0980

TestAmerica Job ID: NUK1866
Client Project/Site: [none]
Client Project Description: Laurel Bay Housing Project

For:
EEG - Small Business Group, Inc. (2449)
10179 Highway 78
Ladson, SC 29456

Attn: Tom McElwee

Authorized for release by:
11/29/2011 12:50:44 PM

Ken A. Hayes
Senior Project Manager
ken.hayes@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NUK1866

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
NUK1866-01	278 Birch	Soil	11/08/11 14:45	11/12/11 08:30
NUK1866-02	267 Birch	Soil	11/09/11 14:00	11/12/11 08:30
NUK1866-03	1066 Gardenia	Soil	11/10/11 15:30	11/12/11 08:30

Qualifiers

GCMS Volatiles

Qualifier	Qualifier Description
M1	The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

GCMS Semivolatiles

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NUK1866

Client Sample ID: 278 Birch
Date Collected: 11/08/11 14:45
Date Received: 11/12/11 08:30

Lab Sample ID: NUK1866-01
Matrix: Soil
Percent Solids: 79.5

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Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00204	0.00112	mg/kg dry		11/08/11 14:45	11/15/11 16:03	1.00
Ethylbenzene	**0.0108**		0.00204	0.00112	mg/kg dry		11/08/11 14:45	11/15/11 16:03	1.00
Naphthalene	**0.0555**		0.00511	0.00256	mg/kg dry		11/08/11 14:45	11/15/11 16:03	1.00
Toluene	ND		0.00204	0.00112	mg/kg dry		11/08/11 14:45	11/15/11 16:03	1.00
Xylenes, total	**0.00605**		0.00511	0.00256	mg/kg dry		11/08/11 14:45	11/15/11 16:03	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*107*		*70 - 130*	*11/08/11 14:45*	*11/15/11 16:03*	*1.00*
Dibromofluoromethane	*102*		*70 - 130*	*11/08/11 14:45*	*11/15/11 16:03*	*1.00*
Toluene-d8	*102*		*70 - 130*	*11/08/11 14:45*	*11/15/11 16:03*	*1.00*
4-Bromofluorobenzene	*116*		*70 - 130*	*11/08/11 14:45*	*11/15/11 16:03*	*1.00*

Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0817	0.0415	mg/kg dry		11/16/11 09:03	11/16/11 19:24	1.00
Acenaphthylene	ND		0.0817	0.0415	mg/kg dry		11/16/11 09:03	11/16/11 19:24	1.00
Anthracene	ND		0.0817	0.0415	mg/kg dry		11/16/11 09:03	11/16/11 19:24	1.00
Benzo (a) anthracene	ND		0.0817	0.0415	mg/kg dry		11/16/11 09:03	11/16/11 19:24	1.00
Benzo (a) pyrene	ND		0.0817	0.0415	mg/kg dry		11/16/11 09:03	11/16/11 19:24	1.00
Benzo (b) fluoranthene	ND		0.0817	0.0415	mg/kg dry		11/16/11 09:03	11/16/11 19:24	1.00
Benzo (g,h,i) perylene	ND		0.0817	0.0415	mg/kg dry		11/16/11 09:03	11/16/11 19:24	1.00
Benzo (k) fluoranthene	ND		0.0817	0.0415	mg/kg dry		11/16/11 09:03	11/16/11 19:24	1.00
Chrysene	ND		0.0817	0.0415	mg/kg dry		11/16/11 09:03	11/16/11 19:24	1.00
Dibenz (a,h) anthracene	ND		0.0817	0.0415	mg/kg dry		11/16/11 09:03	11/16/11 19:24	1.00
Fluoranthene	ND		0.0817	0.0415	mg/kg dry		11/16/11 09:03	11/16/11 19:24	1.00
Fluorene	**0.0907**		0.0817	0.0415	mg/kg dry		11/16/11 09:03	11/16/11 19:24	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0817	0.0415	mg/kg dry		11/16/11 09:03	11/16/11 19:24	1.00
Naphthalene	**0.135**		0.0817	0.0415	mg/kg dry		11/16/11 09:03	11/16/11 19:24	1.00
Phenanthrene	**0.176**		0.0817	0.0415	mg/kg dry		11/16/11 09:03	11/16/11 19:24	1.00
Pyrene	ND		0.0817	0.0415	mg/kg dry		11/16/11 09:03	11/16/11 19:24	1.00
1-Methylnaphthalene	**0.391**		0.0817	0.0415	mg/kg dry		11/16/11 09:03	11/16/11 19:24	1.00
2-Methylnaphthalene	**0.664**		0.0817	0.0415	mg/kg dry		11/16/11 09:03	11/16/11 19:24	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*85*		*18 - 120*	*11/16/11 09:03*	*11/16/11 19:24*	*1.00*
2-Fluorobiphenyl	*64*		*14 - 120*	*11/16/11 09:03*	*11/16/11 19:24*	*1.00*
Nitrobenzene-d5	*60*		*17 - 120*	*11/16/11 09:03*	*11/16/11 19:24*	*1.00*

Method: SW-846 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	**79.5**		0.500	0.500	%		11/17/11 10:55	11/18/11 10:53	1.00

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NUK1866

Client Sample ID: 267 Birch
Date Collected: 11/09/11 14:00
Date Received: 11/12/11 08:30

Lab Sample ID: NUK1866-02
Matrix: Soil
Percent Solids: 94.4

5

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00214	0.00118	mg/kg dry		11/09/11 14:00	11/15/11 16:34	1.00
Ethylbenzene	ND		0.00214	0.00118	mg/kg dry		11/09/11 14:00	11/15/11 16:34	1.00
Naphthalene	ND		0.00534	0.00267	mg/kg dry		11/09/11 14:00	11/15/11 16:34	1.00
Toluene	ND		0.00214	0.00118	mg/kg dry		11/09/11 14:00	11/15/11 16:34	1.00
Xylenes, total	ND		0.00534	0.00267	mg/kg dry		11/09/11 14:00	11/15/11 16:34	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*110*		*70 - 130*	*11/09/11 14:00*	*11/15/11 16:34*	*1.00*
Dibromofluoromethane	*104*		*70 - 130*	*11/09/11 14:00*	*11/15/11 16:34*	*1.00*
Toluene-d8	*100*		*70 - 130*	*11/09/11 14:00*	*11/15/11 16:34*	*1.00*
4-Bromofluorobenzene	*111*		*70 - 130*	*11/09/11 14:00*	*11/15/11 16:34*	*1.00*

Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0703	0.0357	mg/kg dry		11/16/11 09:03	11/16/11 19:44	1.00
Acenaphthylene	ND		0.0703	0.0357	mg/kg dry		11/16/11 09:03	11/16/11 19:44	1.00
Anthracene	ND		0.0703	0.0357	mg/kg dry		11/16/11 09:03	11/16/11 19:44	1.00
Benzo (a) anthracene	ND		0.0703	0.0357	mg/kg dry		11/16/11 09:03	11/16/11 19:44	1.00
Benzo (a) pyrene	ND		0.0703	0.0357	mg/kg dry		11/16/11 09:03	11/16/11 19:44	1.00
Benzo (b) fluoranthene	ND		0.0703	0.0357	mg/kg dry		11/16/11 09:03	11/16/11 19:44	1.00
Benzo (g,h,i) perylene	ND		0.0703	0.0357	mg/kg dry		11/16/11 09:03	11/16/11 19:44	1.00
Benzo (k) fluoranthene	ND		0.0703	0.0357	mg/kg dry		11/16/11 09:03	11/16/11 19:44	1.00
Chrysene	ND		0.0703	0.0357	mg/kg dry		11/16/11 09:03	11/16/11 19:44	1.00
Dibenz (a,h) anthracene	ND		0.0703	0.0357	mg/kg dry		11/16/11 09:03	11/16/11 19:44	1.00
Fluoranthene	ND		0.0703	0.0357	mg/kg dry		11/16/11 09:03	11/16/11 19:44	1.00
Fluorene	ND		0.0703	0.0357	mg/kg dry		11/16/11 09:03	11/16/11 19:44	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0703	0.0357	mg/kg dry		11/16/11 09:03	11/16/11 19:44	1.00
Naphthalene	ND		0.0703	0.0357	mg/kg dry		11/16/11 09:03	11/16/11 19:44	1.00
Phenanthrene	ND		0.0703	0.0357	mg/kg dry		11/16/11 09:03	11/16/11 19:44	1.00
Pyrene	ND		0.0703	0.0357	mg/kg dry		11/16/11 09:03	11/16/11 19:44	1.00
1-Methylnaphthalene	ND		0.0703	0.0357	mg/kg dry		11/16/11 09:03	11/16/11 19:44	1.00
2-Methylnaphthalene	ND		0.0703	0.0357	mg/kg dry		11/16/11 09:03	11/16/11 19:44	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*88*		*18 - 120*	*11/16/11 09:03*	*11/16/11 19:44*	*1.00*
2-Fluorobiphenyl	*66*		*14 - 120*	*11/16/11 09:03*	*11/16/11 19:44*	*1.00*
Nitrobenzene-d5	*58*		*17 - 120*	*11/16/11 09:03*	*11/16/11 19:44*	*1.00*

Method: SW-846 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	94.4		0.500	0.500	%		11/17/11 10:55	11/18/11 10:53	1.00

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NUK1866

Client Sample ID: 1066 Gardenia
Date Collected: 11/10/11 15:30
Date Received: 11/12/11 08:30

Lab Sample ID: NUK1866-03
Matrix: Soil
Percent Solids: 86.2

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Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00198	0.00109	mg/kg dry		11/10/11 15:30	11/23/11 13:22	1.00
Ethylbenzene	**0.00404**		0.00198	0.00109	mg/kg dry		11/10/11 15:30	11/23/11 13:22	1.00
Naphthalene	**0.0276**		0.00494	0.00247	mg/kg dry		11/10/11 15:30	11/23/11 13:22	1.00
Toluene	ND		0.00198	0.00109	mg/kg dry		11/10/11 15:30	11/23/11 13:22	1.00
Xylenes, total	**0.0658**		0.00494	0.00247	mg/kg dry		11/10/11 15:30	11/23/11 13:22	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*107*		*70 - 130*	*11/10/11 15:30*	*11/23/11 13:22*	*1.00*
Dibromofluoromethane	*107*		*70 - 130*	*11/10/11 15:30*	*11/23/11 13:22*	*1.00*
Toluene-d8	*114*		*70 - 130*	*11/10/11 15:30*	*11/23/11 13:22*	*1.00*
4-Bromofluorobenzene	*132*	*ZX*	*70 - 130*	*11/10/11 15:30*	*11/23/11 13:22*	*1.00*

Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0775	0.0393	mg/kg dry		11/16/11 09:03	11/16/11 20:03	1.00
Acenaphthylene	ND		0.0775	0.0393	mg/kg dry		11/16/11 09:03	11/16/11 20:03	1.00
Anthracene	**0.164**		0.0775	0.0393	mg/kg dry		11/16/11 09:03	11/16/11 20:03	1.00
Benzo (a) anthracene	**0.180**		0.0775	0.0393	mg/kg dry		11/16/11 09:03	11/16/11 20:03	1.00
Benzo (a) pyrene	**0.0516**	J	0.0775	0.0393	mg/kg dry		11/16/11 09:03	11/16/11 20:03	1.00
Benzo (b) fluoranthene	**0.0686**	J	0.0775	0.0393	mg/kg dry		11/16/11 09:03	11/16/11 20:03	1.00
Benzo (g,h,i) perylene	ND		0.0775	0.0393	mg/kg dry		11/16/11 09:03	11/16/11 20:03	1.00
Benzo (k) fluoranthene	**0.0470**	J	0.0775	0.0393	mg/kg dry		11/16/11 09:03	11/16/11 20:03	1.00
Chrysene	**0.128**		0.0775	0.0393	mg/kg dry		11/16/11 09:03	11/16/11 20:03	1.00
Dibenz (a,h) anthracene	ND		0.0775	0.0393	mg/kg dry		11/16/11 09:03	11/16/11 20:03	1.00
Fluoranthene	**1.07**		0.0775	0.0393	mg/kg dry		11/16/11 09:03	11/16/11 20:03	1.00
Fluorene	**0.167**		0.0775	0.0393	mg/kg dry		11/16/11 09:03	11/16/11 20:03	1.00
Indeno (1,2,3-cd) pyrene	**0.0624**	J	0.0775	0.0393	mg/kg dry		11/16/11 09:03	11/16/11 20:03	1.00
Naphthalene	**0.0624**	J	0.0775	0.0393	mg/kg dry		11/16/11 09:03	11/16/11 20:03	1.00
Phenanthrene	**1.36**		0.0775	0.0393	mg/kg dry		11/16/11 09:03	11/16/11 20:03	1.00
Pyrene	**0.677**		0.0775	0.0393	mg/kg dry		11/16/11 09:03	11/16/11 20:03	1.00
1-Methylnaphthalene	**0.170**		0.0775	0.0393	mg/kg dry		11/16/11 09:03	11/16/11 20:03	1.00
2-Methylnaphthalene	**0.302**		0.0775	0.0393	mg/kg dry		11/16/11 09:03	11/16/11 20:03	1.00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*18 - 120*	*11/16/11 09:03*	*11/16/11 20:03*	*1.00*
2-Fluorobiphenyl	*68*		*14 - 120*	*11/16/11 09:03*	*11/16/11 20:03*	*1.00*
Nitrobenzene-d5	*63*		*17 - 120*	*11/16/11 09:03*	*11/16/11 20:03*	*1.00*

Method: SW-846 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	**86.2**		0.500	0.500	%		11/17/11 10:55	11/18/11 10:53	1.00

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Lab Sample ID: 11K3683-BLK1
Matrix: Soil
Analysis Batch: U020175

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 11K3683_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		11/15/11 09:59	11/15/11 12:31	1.00
Ethylbenzene	ND		0.00200	0.00110	mg/kg wet		11/15/11 09:59	11/15/11 12:31	1.00
Naphthalene	ND		0.00500	0.00250	mg/kg wet		11/15/11 09:59	11/15/11 12:31	1.00
Toluene	ND		0.00200	0.00110	mg/kg wet		11/15/11 09:59	11/15/11 12:31	1.00
Xylenes, total	ND		0.00500	0.00250	mg/kg wet		11/15/11 09:59	11/15/11 12:31	1.00

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*99*		*70 - 130*	*11/15/11 09:59*	*11/15/11 12:31*	*1.00*
Dibromofluoromethane	*102*		*70 - 130*	*11/15/11 09:59*	*11/15/11 12:31*	*1.00*
Toluene-d8	*105*		*70 - 130*	*11/15/11 09:59*	*11/15/11 12:31*	*1.00*
4-Bromofluorobenzene	*108*		*70 - 130*	*11/15/11 09:59*	*11/15/11 12:31*	*1.00*

Lab Sample ID: 11K3683-BLK2
Matrix: Soil
Analysis Batch: U020175

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 11K3683_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0550	mg/kg wet		11/15/11 09:59	11/15/11 13:02	50.0
Ethylbenzene	ND		0.100	0.0550	mg/kg wet		11/15/11 09:59	11/15/11 13:02	50.0
Naphthalene	ND		0.250	0.125	mg/kg wet		11/15/11 09:59	11/15/11 13:02	50.0
Toluene	ND		0.100	0.0550	mg/kg wet		11/15/11 09:59	11/15/11 13:02	50.0
Xylenes, total	ND		0.250	0.125	mg/kg wet		11/15/11 09:59	11/15/11 13:02	50.0

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*101*		*70 - 130*	*11/15/11 09:59*	*11/15/11 13:02*	*50.0*
Dibromofluoromethane	*105*		*70 - 130*	*11/15/11 09:59*	*11/15/11 13:02*	*50.0*
Toluene-d8	*104*		*70 - 130*	*11/15/11 09:59*	*11/15/11 13:02*	*50.0*
4-Bromofluorobenzene	*107*		*70 - 130*	*11/15/11 09:59*	*11/15/11 13:02*	*50.0*

Lab Sample ID: 11K3683-BS1
Matrix: Soil
Analysis Batch: U020175

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 11K3683_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	55.8		ug/kg		112	75 - 127
Ethylbenzene	50.0	55.3		ug/kg		111	80 - 134
Naphthalene	50.0	50.0		ug/kg		100	69 - 150
Toluene	50.0	56.7		ug/kg		113	80 - 132
Xylenes, total	150	166		ug/kg		111	80 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4	*109*		*70 - 130*
Dibromofluoromethane	*107*		*70 - 130*
Toluene-d8	*104*		*70 - 130*
4-Bromofluorobenzene	*107*		*70 - 130*

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B (Continued)

Lab Sample ID: 11K3683-BSD1
Matrix: Soil
Analysis Batch: U020175

Client Sample ID: Lab Control Sample Dup
Prep Type: Total
Prep Batch: 11K3683_P

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			50.0	53.6		ug/kg		107	75 - 127	4	50
Ethylbenzene			50.0	53.4		ug/kg		107	80 - 134	4	50
Naphthalene			50.0	48.2		ug/kg		96	69 - 150	4	50
Toluene			50.0	54.0		ug/kg		108	80 - 132	5	50
Xylenes, total			150	160		ug/kg		106	80 - 137	4	50

Surrogate	*LCS Dup %Recovery*	*LCS Dup Qualifier*	*Limits*
1,2-Dichloroethane-d4	*108*		*70 - 130*
Dibromofluoromethane	*105*		*70 - 130*
Toluene-d8	*103*		*70 - 130*
4-Bromofluorobenzene	*105*		*70 - 130*

Lab Sample ID: 11K3683-MS1
Matrix: Soil
Analysis Batch: U020175

Client Sample ID: Matrix Spike
Prep Type: Total
Prep Batch: 11K3683_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		2.47	3.43		mg/kg wet		139	31 - 143
Ethylbenzene	2.41		2.47	6.50	M1	mg/kg wet		166	23 - 161
Naphthalene	2.60		2.47	6.22		mg/kg wet		147	10 - 176
Toluene	ND		2.47	3.65		mg/kg wet		148	30 - 155
Xylenes, total	16.3		7.40	28.9	M1	mg/kg wet		170	25 - 162

Surrogate	*Matrix Spike %Recovery*	*Matrix Spike Qualifier*	*Limits*
1,2-Dichloroethane-d4	*102*		*70 - 130*
Dibromofluoromethane	*102*		*70 - 130*
Toluene-d8	*104*		*70 - 130*
4-Bromofluorobenzene	*108*		*70 - 130*

Lab Sample ID: 11K3683-MSD1
Matrix: Soil
Analysis Batch: U020175

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total
Prep Batch: 11K3683_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		2.47	3.05		mg/kg wet		124	31 - 143	12	50
Ethylbenzene	2.41		2.47	5.87		mg/kg wet		140	23 - 161	10	50
Naphthalene	2.60		2.47	5.55		mg/kg wet		120	10 - 176	11	50
Toluene	ND		2.47	3.28		mg/kg wet		133	30 - 155	11	50
Xylenes, total	16.3		7.40	27.1		mg/kg wet		146	25 - 162	6	50

Surrogate	*Matrix Spike Dup %Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
1,2-Dichloroethane-d4	*105*		*70 - 130*
Dibromofluoromethane	*103*		*70 - 130*
Toluene-d8	*105*		*70 - 130*
4-Bromofluorobenzene	*112*		*70 - 130*

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B (Continued)

Lab Sample ID: 11K5924-BLK1
Matrix: Soil
Analysis Batch: U020677

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 11K5924_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		11/23/11 09:51	11/23/11 12:22	1.00
Ethylbenzene	ND		0.00200	0.00110	mg/kg wet		11/23/11 09:51	11/23/11 12:22	1.00
Naphthalene	ND		0.00500	0.00250	mg/kg wet		11/23/11 09:51	11/23/11 12:22	1.00
Toluene	ND		0.00200	0.00110	mg/kg wet		11/23/11 09:51	11/23/11 12:22	1.00
Xylenes, total	ND		0.00500	0.00250	mg/kg wet		11/23/11 09:51	11/23/11 12:22	1.00

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*95*		*70 - 130*	*11/23/11 09:51*	*11/23/11 12:22*	*1.00*
Dibromofluoromethane	*105*		*70 - 130*	*11/23/11 09:51*	*11/23/11 12:22*	*1.00*
Toluene-d8	*110*		*70 - 130*	*11/23/11 09:51*	*11/23/11 12:22*	*1.00*
4-Bromofluorobenzene	*110*		*70 - 130*	*11/23/11 09:51*	*11/23/11 12:22*	*1.00*

Lab Sample ID: 11K5924-BS1
Matrix: Soil
Analysis Batch: U020677

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 11K5924_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	56.0		ug/kg		112	75 - 127
Ethylbenzene	50.0	49.3		ug/kg		99	80 - 134
Naphthalene	50.0	53.7		ug/kg		107	69 - 150
Toluene	50.0	48.6		ug/kg		97	80 - 132
Xylenes, total	150	148		ug/kg		98	80 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4	*107*		*70 - 130*
Dibromofluoromethane	*105*		*70 - 130*
Toluene-d8	*86*		*70 - 130*
4-Bromofluorobenzene	*108*		*70 - 130*

Lab Sample ID: 11K5924-BSD1
Matrix: Soil
Analysis Batch: U020677

Client Sample ID: Lab Control Sample Dup
Prep Type: Total
Prep Batch: 11K5924_P

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	50.0	54.5		ug/kg		109	75 - 127	3	50
Ethylbenzene	50.0	54.9		ug/kg		110	80 - 134	11	50
Naphthalene	50.0	52.4		ug/kg		105	69 - 150	3	50
Toluene	50.0	55.9		ug/kg		112	80 - 132	14	50
Xylenes, total	150	166		ug/kg		110	80 - 137	12	50

Surrogate	*LCS Dup %Recovery*	*LCS Dup Qualifier*	*Limits*
1,2-Dichloroethane-d4	*106*		*70 - 130*
Dibromofluoromethane	*105*		*70 - 130*
Toluene-d8	*102*		*70 - 130*
4-Bromofluorobenzene	*109*		*70 - 130*

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NUK1866

Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D

Lab Sample ID: 11K3483-BLK1
Matrix: Soil
Analysis Batch: 11K3483

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 11K3483_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Acenaphthylene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Anthracene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Benzo (a) anthracene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Benzo (a) pyrene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Benzo (b) fluoranthene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Benzo (g,h,i) perylene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Benzo (k) fluoranthene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Chrysene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Dibenz (a,h) anthracene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Fluoranthene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Fluorene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Naphthalene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Phenanthrene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Pyrene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
1-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
2-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*105*		*18 - 120*	*11/16/11 09:03*	*11/16/11 17:27*	*1.00*
2-Fluorobiphenyl	*78*		*14 - 120*	*11/16/11 09:03*	*11/16/11 17:27*	*1.00*
Nitrobenzene-d5	*70*		*17 - 120*	*11/16/11 09:03*	*11/16/11 17:27*	*1.00*

Lab Sample ID: 11K3483-BS1
Matrix: Soil
Analysis Batch: 11K3483

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 11K3483_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1.67	1.35		mg/kg wet		81	36 - 120
Acenaphthylene	1.67	1.22		mg/kg wet		73	38 - 120
Anthracene	1.67	1.39		mg/kg wet		84	46 - 124
Benzo (a) anthracene	1.67	1.49		mg/kg wet		89	45 - 120
Benzo (a) pyrene	1.67	1.54		mg/kg wet		93	45 - 120
Benzo (b) fluoranthene	1.67	1.59		mg/kg wet		95	42 - 120
Benzo (g,h,i) perylene	1.67	1.30		mg/kg wet		78	38 - 120
Benzo (k) fluoranthene	1.67	1.31		mg/kg wet		79	42 - 120
Chrysene	1.67	1.41		mg/kg wet		85	43 - 120
Dibenz (a,h) anthracene	1.67	1.24		mg/kg wet		74	32 - 128
Fluoranthene	1.67	1.50		mg/kg wet		90	46 - 120
Fluorene	1.67	1.56		mg/kg wet		94	42 - 120
Indeno (1,2,3-cd) pyrene	1.67	1.23		mg/kg wet		74	41 - 121
Naphthalene	1.67	1.32		mg/kg wet		79	32 - 120
Phenanthrene	1.67	1.39		mg/kg wet		83	45 - 120
Pyrene	1.67	1.51		mg/kg wet		90	43 - 120
1-Methylnaphthalene	1.67	0.987		mg/kg wet		59	32 - 120
2-Methylnaphthalene	1.67	1.27		mg/kg wet		76	28 - 120

Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D (Continued)

Lab Sample ID: 11K3483-BS1
Matrix: Soil
Analysis Batch: 11K3483

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 11K3483_P

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*92*		*18 - 120*
2-Fluorobiphenyl	*69*		*14 - 120*
Nitrobenzene-d5	*57*		*17 - 120*

Lab Sample ID: 11K3483-MS1
Matrix: Soil
Analysis Batch: 11K3483

Client Sample ID: Matrix Spike
Prep Type: Total
Prep Batch: 11K3483_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		1.70	1.25		mg/kg dry		73	19 - 120
Acenaphthylene	ND		1.70	1.12		mg/kg dry		66	25 - 120
Anthracene	ND		1.70	1.30		mg/kg dry		76	28 - 125
Benzo (a) anthracene	ND		1.70	1.37		mg/kg dry		80	23 - 120
Benzo (a) pyrene	ND		1.70	1.35		mg/kg dry		79	15 - 128
Benzo (b) fluoranthene	ND		1.70	1.20		mg/kg dry		70	12 - 133
Benzo (g,h,i) perylene	ND		1.70	1.14		mg/kg dry		67	22 - 120
Benzo (k) fluoranthene	ND		1.70	1.33		mg/kg dry		78	28 - 120
Chrysene	ND		1.70	1.30		mg/kg dry		76	20 - 120
Dibenz (a,h) anthracene	ND		1.70	1.12		mg/kg dry		66	12 - 128
Fluoranthene	ND		1.70	1.33		mg/kg dry		78	10 - 143
Fluorene	ND		1.70	1.37		mg/kg dry		81	20 - 120
Indeno (1,2,3-cd) pyrene	ND		1.70	1.12		mg/kg dry		66	22 - 121
Naphthalene	ND		1.70	1.22		mg/kg dry		72	10 - 120
Phenanthrene	ND		1.70	1.28		mg/kg dry		75	21 - 122
Pyrene	ND		1.70	1.41		mg/kg dry		83	20 - 123
1-Methylnaphthalene	ND		1.70	0.926		mg/kg dry		54	10 - 120
2-Methylnaphthalene	ND		1.70	1.15		mg/kg dry		68	13 - 120

Surrogate	*Matrix Spike %Recovery*	*Matrix Spike Qualifier*	*Limits*
Terphenyl-d14	*84*		*18 - 120*
2-Fluorobiphenyl	*61*		*14 - 120*
Nitrobenzene-d5	*52*		*17 - 120*

Lab Sample ID: 11K3483-MSD1
Matrix: Soil
Analysis Batch: 11K3483

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total
Prep Batch: 11K3483_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		1.70	1.23		mg/kg dry		72	19 - 120	2	50
Acenaphthylene	ND		1.70	1.11		mg/kg dry		65	25 - 120	1	50
Anthracene	ND		1.70	1.33		mg/kg dry		78	28 - 125	2	49
Benzo (a) anthracene	ND		1.70	1.45		mg/kg dry		85	23 - 120	6	50
Benzo (a) pyrene	ND		1.70	1.43		mg/kg dry		84	15 - 128	6	50
Benzo (b) fluoranthene	ND		1.70	1.34		mg/kg dry		79	12 - 133	12	50
Benzo (g,h,i) perylene	ND		1.70	1.11		mg/kg dry		65	22 - 120	3	50
Benzo (k) fluoranthene	ND		1.70	1.25		mg/kg dry		74	28 - 120	6	45
Chrysene	ND		1.70	1.30		mg/kg dry		76	20 - 120	0.1	49
Dibenz (a,h) anthracene	ND		1.70	1.15		mg/kg dry		68	12 - 128	3	50
Fluoranthene	ND		1.70	1.31		mg/kg dry		77	10 - 143	2	50

Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D (Continued)

Lab Sample ID: 11K3483-MSD1
Matrix: Soil
Analysis Batch: 11K3483

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total
Prep Batch: 11K3483_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluorene	ND		1.70	1.37		mg/kg dry	☼	80	20 - 120	0.4	50
Indeno (1,2,3-cd) pyrene	ND		1.70	1.13		mg/kg dry	☼	66	22 - 121	0.6	50
Naphthalene	ND		1.70	1.23		mg/kg dry	☼	72	10 - 120	0.5	50
Phenanthrene	ND		1.70	1.32		mg/kg dry	☼	78	21 - 122	3	50
Pyrene	ND		1.70	1.41		mg/kg dry	☼	83	20 - 123	0.5	50
1-Methylnaphthalene	ND		1.70	0.938		mg/kg dry	☼	55	10 - 120	1	50
2-Methylnaphthalene	ND		1.70	1.15		mg/kg dry	☼	68	13 - 120	0.5	50

Surrogate	*Matrix Spike Dup %Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
Terphenyl-d14	*85*		*18 - 120*
2-Fluorobiphenyl	*62*		*14 - 120*
Nitrobenzene-d5	*53*		*17 - 120*

Method: SW-846 - General Chemistry Parameters

Lab Sample ID: 11K4341-DUP1
Matrix: Soil
Analysis Batch: 11K4341

Client Sample ID: Duplicate
Prep Type: Total
Prep Batch: 11K4341_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
% Dry Solids	80.7		81.0		%		0.3	20

GCMS Volatiles

Analysis Batch: U020175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K3683-BLK1	Method Blank	Total	Soil	SW846 8260B	11K3683_P
11K3683-BLK2	Method Blank	Total	Soil	SW846 8260B	11K3683_P
11K3683-BS1	Lab Control Sample	Total	Soil	SW846 8260B	11K3683_P
11K3683-BSD1	Lab Control Sample Dup	Total	Soil	SW846 8260B	11K3683_P
11K3683-MS1	Matrix Spike	Total	Soil	SW846 8260B	11K3683_P
11K3683-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8260B	11K3683_P
NUK1866-01	278 Birch	Total	Soil	SW846 8260B	11K3683_P
NUK1866-02	267 Birch	Total	Soil	SW846 8260B	11K3683_P

Analysis Batch: U020677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K5924-BLK1	Method Blank	Total	Soil	SW846 8260B	11K5924_P
11K5924-BS1	Lab Control Sample	Total	Soil	SW846 8260B	11K5924_P
11K5924-BSD1	Lab Control Sample Dup	Total	Soil	SW846 8260B	11K5924_P
NUK1866-03 - RE1	1066 Gardenia	Total	Soil	SW846 8260B	11K5924_P

Prep Batch: 11K3683_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K3683-BLK1	Method Blank	Total	Soil	EPA 5035	
11K3683-BLK2	Method Blank	Total	Soil	EPA 5035	
11K3683-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11K3683-BSD1	Lab Control Sample Dup	Total	Soil	EPA 5035	
11K3683-MS1	Matrix Spike	Total	Soil	EPA 5035	
11K3683-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 5035	
NUK1866-01	278 Birch	Total	Soil	EPA 5035	
NUK1866-02	267 Birch	Total	Soil	EPA 5035	

Prep Batch: 11K5924_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K5924-BLK1	Method Blank	Total	Soil	EPA 5035	
11K5924-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11K5924-BSD1	Lab Control Sample Dup	Total	Soil	EPA 5035	
NUK1866-03 - RE1	1066 Gardenia	Total	Soil	EPA 5035	

GCMS Semivolatiles

Analysis Batch: 11K3483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K3483-BLK1	Method Blank	Total	Soil	SW846 8270D	11K3483_P
11K3483-BS1	Lab Control Sample	Total	Soil	SW846 8270D	11K3483_P
11K3483-MS1	Matrix Spike	Total	Soil	SW846 8270D	11K3483_P
11K3483-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8270D	11K3483_P
NUK1866-01	278 Birch	Total	Soil	SW846 8270D	11K3483_P
NUK1866-02	267 Birch	Total	Soil	SW846 8270D	11K3483_P
NUK1866-03	1066 Gardenia	Total	Soil	SW846 8270D	11K3483_P

Prep Batch: 11K3483_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K3483-BLK1	Method Blank	Total	Soil	EPA 3550B	
11K3483-BS1	Lab Control Sample	Total	Soil	EPA 3550B	
11K3483-MS1	Matrix Spike	Total	Soil	EPA 3550B	
11K3483-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 3550B	

GCMS Semivolatiles (Continued)

Prep Batch: 11K3483_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
NUK1866-01	278 Birch	Total	Soil	EPA 3550B	
NUK1866-02	267 Birch	Total	Soil	EPA 3550B	
NUK1866-03	1066 Gardenia	Total	Soil	EPA 3550B	

Extractions

Analysis Batch: 11K4341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K4341-DUP1	Duplicate	Total	Soil	SW-846	11K4341_P
NUK1866-01	278 Birch	Total	Soil	SW-846	11K4341_P
NUK1866-02	267 Birch	Total	Soil	SW-846	11K4341_P
NUK1866-03	1066 Gardenia	Total	Soil	SW-846	11K4341_P

Prep Batch: 11K4341_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K4341-DUP1	Duplicate	Total	Soil	% Solids	
NUK1866-01	278 Birch	Total	Soil	% Solids	
NUK1866-02	267 Birch	Total	Soil	% Solids	
NUK1866-03	1066 Gardenia	Total	Soil	% Solids	

Client Sample ID: 278 Birch

Lab Sample ID: NUK1866-01

Date Collected: 11/08/11 14:45

Matrix: Soil

Date Received: 11/12/11 08:30

Percent Solids: 79.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.813	11K3683_P	11/08/11 14:45	TSP	TAL NSH
Total	Analysis	SW846 8260B		1.00	U020175	11/15/11 16:03	KKK	TAL NSH
Total	Prep	EPA 3550B		0.970	11K3483_P	11/16/11 09:03	JJR	TAL NSH
Total	Analysis	SW846 8270D		1.00	11K3483	11/16/11 19:24	KJP	TAL NSH
Total	Prep	% Solids		1.00	11K4341_P	11/17/11 10:55	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11K4341	11/18/11 10:53	RRS	TAL NSH

Client Sample ID: 267 Birch

Lab Sample ID: NUK1866-02

Date Collected: 11/09/11 14:00

Matrix: Soil

Date Received: 11/12/11 08:30

Percent Solids: 94.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		1.01	11K3683_P	11/09/11 14:00	TSP	TAL NSH
Total	Analysis	SW846 8260B		1.00	U020175	11/15/11 16:34	KKK	TAL NSH
Total	Prep	EPA 3550B		0.990	11K3483_P	11/16/11 09:03	JJR	TAL NSH
Total	Analysis	SW846 8270D		1.00	11K3483	11/16/11 19:44	KJP	TAL NSH
Total	Prep	% Solids		1.00	11K4341_P	11/17/11 10:55	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11K4341	11/18/11 10:53	RRS	TAL NSH

Client Sample ID: 1066 Gardenia

Lab Sample ID: NUK1866-03

Date Collected: 11/10/11 15:30

Matrix: Soil

Date Received: 11/12/11 08:30

Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5035	RE1	0.852	11K5924_P	11/10/11 15:30	TSP	TAL NSH
Total	Analysis	SW846 8260B	RE1	1.00	U020677	11/23/11 13:22	KKK	TAL NSH
Total	Prep	EPA 3550B		0.996	11K3483_P	11/16/11 09:03	JJR	TAL NSH
Total	Analysis	SW846 8270D		1.00	11K3483	11/16/11 20:03	KJP	TAL NSH
Total	Prep	% Solids		1.00	11K4341_P	11/17/11 10:55	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11K4341	11/18/11 10:53	RRS	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Road, Nashville, TN 37204, TEL 800-765-0980

Method Summary

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NUK1866

Method	Method Description	Protocol	Laboratory
SW-846	General Chemistry Parameters		TAL NSH
SW846 8260B	Volatile Organic Compounds by EPA Method 8260B		TAL NSH
SW846 8270D	Polyaromatic Hydrocarbons by EPA 8270D		TAL NSH

Protocol References:

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Road, Nashville, TN 37204, TEL 800-765-0980

Certification Summary

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NUK1866

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Nashville		ACIL		393
TestAmerica Nashville	A2LA	ISO/IEC 17025		0453.07
TestAmerica Nashville	A2LA	WY UST		453.07
TestAmerica Nashville	AIHA - LAP	IHLAP		100790
TestAmerica Nashville	Alabama	State Program	4	41150
TestAmerica Nashville	Alaska	Alaska UST	10	UST-087
TestAmerica Nashville	Arizona	State Program	9	AZ0473
TestAmerica Nashville	Arkansas	State Program	6	88-0737
TestAmerica Nashville	CALA	CALA		3744
TestAmerica Nashville	California	NELAC	9	1168CA
TestAmerica Nashville	Colorado	State Program	8	N/A
TestAmerica Nashville	Connecticut	State Program	1	PH-0220
TestAmerica Nashville	Florida	NELAC	4	E87358
TestAmerica Nashville	Illinois	NELAC	5	200010
TestAmerica Nashville	Iowa	State Program	7	131
TestAmerica Nashville	Kansas	NELAC	7	E-10229
TestAmerica Nashville	Kentucky	Kentucky UST	4	19
TestAmerica Nashville	Kentucky	State Program	4	90038
TestAmerica Nashville	Louisiana	NELAC	6	30613
TestAmerica Nashville	Louisiana	NELAC	6	LA100011
TestAmerica Nashville	Maryland	State Program	3	316
TestAmerica Nashville	Massachusetts	State Program	1	M-TN032
TestAmerica Nashville	Minnesota	NELAC	5	047-999-345
TestAmerica Nashville	Mississippi	State Program	4	N/A
TestAmerica Nashville	Montana	MT DEQ UST	8	NA
TestAmerica Nashville	New Hampshire	NELAC	1	2963
TestAmerica Nashville	New Jersey	NELAC	2	TN965
TestAmerica Nashville	New York	NELAC	2	11342
TestAmerica Nashville	North Carolina	North Carolina DENR	4	387
TestAmerica Nashville	North Dakota	State Program	8	R-146
TestAmerica Nashville	Ohio	OVAP	5	CL0033
TestAmerica Nashville	Oklahoma	State Program	6	9412
TestAmerica Nashville	Oregon	NELAC	10	TN200001
TestAmerica Nashville	Pennsylvania	NELAC	3	68-00585
TestAmerica Nashville	Rhode Island	State Program	1	LAO00268
TestAmerica Nashville	South Carolina	State Program	4	84009
TestAmerica Nashville	South Carolina	State Program	4	84009
TestAmerica Nashville	Tennessee	State Program	4	2008
TestAmerica Nashville	Texas	NELAC	6	T104704077-09-TX
TestAmerica Nashville	USDA	USDA		S-48469
TestAmerica Nashville	Utah	NELAC	8	TAN
TestAmerica Nashville	Virginia	NELAC Secondary AB	3	460152
TestAmerica Nashville	Virginia	State Program	3	00323
TestAmerica Nashville	Washington	State Program	10	C789
TestAmerica Nashville	West Virginia	West Virginia DEP	3	219

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

NUK1866
11/29/11 23:59

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Nashville Division
2960 Foster Creighton
Nashville, TN 37204

Phone: 615-726-0177
Toll Free: 800-765-0980
Fax: 615-726-3404

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?

Compliance Monitoring? Yes ____ No ____

Enforcement Action? Yes ____ No ____

Client Name/Account #: EEG - SBG # 2449

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29456

Site State: SC

Project Manager: Tom McElwee email: mcelwee@eeginc.net

PO#: 1035

Telephone Number: 843.412.2097 Fax No.: 843-879-0401

TA Quote #:

Sampler Name: (Print) Pratt Shaw

Project ID: Laurel Bay Housing Project

Sampler Signature:

Project #:

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Ice	HNO_3 (Red Label)	~~NaOH (Blue Label)~~ Buffalo	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	None (Black Label)	Other (Specify) Methanol	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	Analyze For: BTEX + Napth - 8260B	PAH - 8270D	RUSH TAT (Pre-Schedule)
278 Birch	11/8/11	1145	5	X				2					2	1					X		X	X	
267 Birch	11/9/11	1400	5	X				2					2	1					X		X	X	
1066 GARDENIA	11/10/11	1530	5	X				2					2	1					X		X	X	

Special Instructions:

Method of Shipment: FEDEX

Relinquished by:	Date	Time	Received by:	Date	Time
	11/11/10	1000	Fedex		
Relinquished by:	Date	Time	Received by TestAmerica:	Date	Time

Laboratory Comments:
Temperature Upon Receipt:
VOCs Free of Headspace? Y

T.A. Nash 11-12-11 08:30
0.5

11/29/2011

ATTACHMENT A

UST Certificate of Disposal

CONTRACTOR

Small Business Group, Inc.
10179 Highway 78
Ladson, SC 29456

TEL (843) 879-0403
FAX (843) 879-0401

TANK ID & LOCATION

UST 1066Gardenia, 1066 Gardenia Street, Laurel Bay Housing Area, MCAS Beaufort, S.C.

DISPOSAL LOCATION

Coastal Auto Salvage Co., Inc.
130 Laurel Bay Road
Beaufort, S.C. 29906

TYPE OF TANK	SIZE (GAL)
Steel	280

CLEANING/DISPOSAL METHOD

The tank and piping were unearthed, cut open, cleaned with a pressure washer, cut into sections, and recycled.

DISPOSAL CERTIFICATION

I certify that the above tank, piping and equipment has been properly cleaned and disposed of.

T.R. McAfee / 12/6/11
(Name) (Date)

Attachment 1

South Carolina Department of Health and Environmental Control (SCDHEC)

Underground Storage Tank (UST) Assessment Report

Date Received State Use Only

Submit Completed Form To:
UST Program
SCDHEC
2600 Bull Street
Columbia, South Carolina 29201
Telephone (803) 896-7957

I. OWNERSHIP OF UST (S)

MCAS Beaufort, Commanding Officer Attn: NREAO (Craig Ehde)
Owner Name (Corporation, Individual, Public Agency, Other)

P.O. Box 55001
Mailing Address

Beaufort,	South Carolina	29904-5001
City	State	Zip Code

843	228-7317	Craig Ehde
Area Code	Telephone Number	Contact Person

II. SITE IDENTIFICATION AND LOCATION

Permit I.D. #
Laurel Bay Military Housing Area, Marine Corps Air Station, Beaufort, SC
Facility Name or Company Site Identifier

38 Gardenia St., Laurel Bay Military Housing Area (Formerly 1066)
Street Address or State Road (as applicable)

Beaufort,	Beaufort
City	County

Attachment 2

III. INSURANCE INFORMATION

Insurance Statement

The petroleum release reported to DHEC on _____ at Permit ID Number _____ may qualify to receive state monies to pay for appropriate site rehabilitation activities. Before participation is allowed in the State Clean-up fund, written confirmation of the existence or non-existence of an environmental insurance policy is required. **This section must be completed.**

Is there now, or has there ever been an insurance policy or other financial mechanism that covers this UST release? **YES**____ **NO**_____ (check one)

If you answered **YES** to the above question, please complete the following information:

My policy provider is:_____
The policy deductible is: _____
The policy limit is: _____

If you have this type of insurance, please include a copy of the policy with this report.

IV. REQUEST FOR SUPERB FUNDING

I **DO** / DO **NOT** wish to participate in the SUPERB Program. (Circle one.)

V. CERTIFICATION (To be signed by the UST owner)

I certify that I have personally examined and am familiar with the information submitted in this and all attached documents; and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

_____
Name (Type or print.)

_____
Signature

To be completed by Notary Public:

Sworn before me this _____ day of_____, 20____

_____
(Name)

Notary Public for the state of_____.
Please affix State seal if you are commissioned outside South Carolina

VI. UST INFORMATION

A. Product...(ex. Gas, Kerosene).....	1066-2 Gardenia	1066-3 Gardenia		
B. Capacity..(ex. 1k, 2k).....	Heating oil	Heating Oil		
C. Age.....	280 gal	280 gal		
D. Construction Material..(ex. Steel, FRP).....	Late 1950s	""		
E. Month/Year of Last Use.....	Steel	Steel		
F. Depth (ft.) To Base of Tank.....	Mid 1980s	Mid 1980s		
G. Spill Prevention Equipment Y/N.....	4'5"	4'5"		
H. Overfill Prevention Equipment Y/N.....	No	No		
I. Method of Closure Removed/Filled.....	No	No		
J. Date Tanks Removed/Filled.....	Removed	Removed		
K. Visible Corrosion or Pitting Y/N.....	2/12/19	2/12/19		
L. Visible Holes Y/N.....	Yes	Yes		
	Yes	Yes		

M. Method of disposal for any USTs removed from the ground (attach disposal manifests)

UST 1066-2 Gardenia was emptied of fluids, removed from the ground and disposed at a Subtitle D Landfill, 1066-3 was full of sand. It was removed from the ground and disposed of at a Subtitle D Landfill. See Attachment A.

N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)

Contaminated water was pumped from the tank by AECOM. These wastes will be properly manifested and disposed of along with similar aqueous petroleum wastes.

Disposal manifests will be provided under separate cover following transportation and disposal activities.

O. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST

Corrosion, pitting and holes were found throughout the tanks.

VII. PIPING INFORMATION

	1066-2 Gardenia	1066-3 Gardenia			
A.	Steel & Copper	None Present			
B.	N/A	N/A			
C.	N/A	N/A			
D.	Suction	N/A			
E.	Steel - yes No Copper	N/A			
F.	Yes	N/A			
G.	No	N/A			
H.	Late 1950s	N/A			

I. If any corrosion, pitting, or holes were observed, describe the location and extent for each piping run.

Corrosion and pitting were found in the steel vent pipe. The copper supply and return lines were sound.

VIII. BRIEF SITE DESCRIPTION AND HISTORY

The USTs at the residences are constructed of single wall steel and formerly contained fuel oil for heating. These USTs were installed in the late 1950s and last used in the mid 1980s.

IX. SITE CONDITIONS

	Yes	No	Unk
A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells? If yes, indicate depth and location on the site map.		X	
B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells? If yes, indicate location on site map and describe the odor (strong, mild, etc.) Mild Odor	X		
C. Was water present in the UST excavation, soil borings, or trenches? If yes, how far below land surface (indicate location and depth)?		X	
D. Did contaminated soils remain stockpiled on site after closure? If yes, indicate the stockpile location on the site map. Name of DHEC representative authorizing soil removal:		X	
E. Was a petroleum sheen or free product detected on any excavation or boring waters? If yes, indicate location and thickness.		X	

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 2010001

B. 1066 Gardenia

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
BEALB1066SB02	1066-2	Soil	Sandy	5.5'	02/12/19 1030hr	Reibling	
BEALB1066SB03	1066-3	soil	sandy	5.5'	02/12/19 0930	Reibling	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

* = Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

Provide a detailed description of the methods used to collect and store the samples. Also include the preservative used for each sample. Please use the space provided below.

Sampling was performed in accordance with SC DHEC R.61-92 Part 280 and SC DHEC Assessment Guidelines. Sample containers were prepared by the testing laboratory. The grab method was utilized to fill the sample containers leaving as little head space as possible and immediately capped. Soil samples were extracted from beneath the fill port side of the tank. The samples were marked, logged, and immediately placed in a sample cooler packed with ice to maintain an approximate temperature of 4 degrees Centigrade. Tools were thoroughly cleaned and decontaminated with the seven step decon process after each use. The samples remained in custody of AECOM until they were transferred to Shealy Environmental Laboratory for analysis as documented in the Chain of Custody Record.

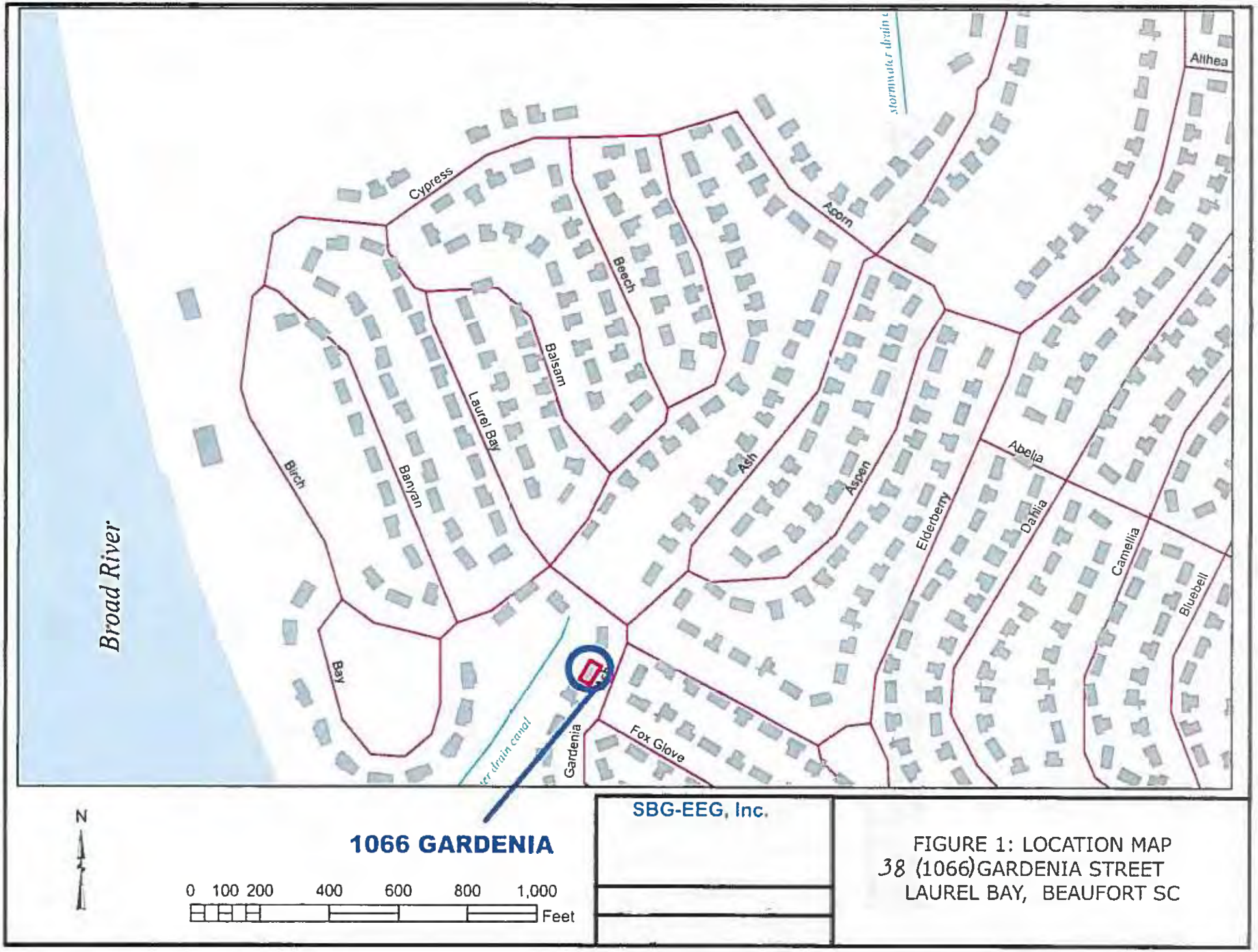
XII. RECEPTORS

	Yes	No
A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system? *Approx 150' to stormwater canal If yes, indicate type of receptor, distance, and direction on site map.	*X	
B. Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system? If yes, indicate type of well, distance, and direction on site map.		X
C. Are there any underground structures (e.g., basements) Located within 100 feet of the UST system? If yes, indicate type of structure, distance, and direction on site map.		X
D. Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination? *Sewer, water, electricity, cable & fiber optic If yes, indicate the type of utility, distance, and direction on the site map.	*X	
E. Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete? If yes, indicate the area of contaminated soil on the site map.		X

XIII. SITE MAP

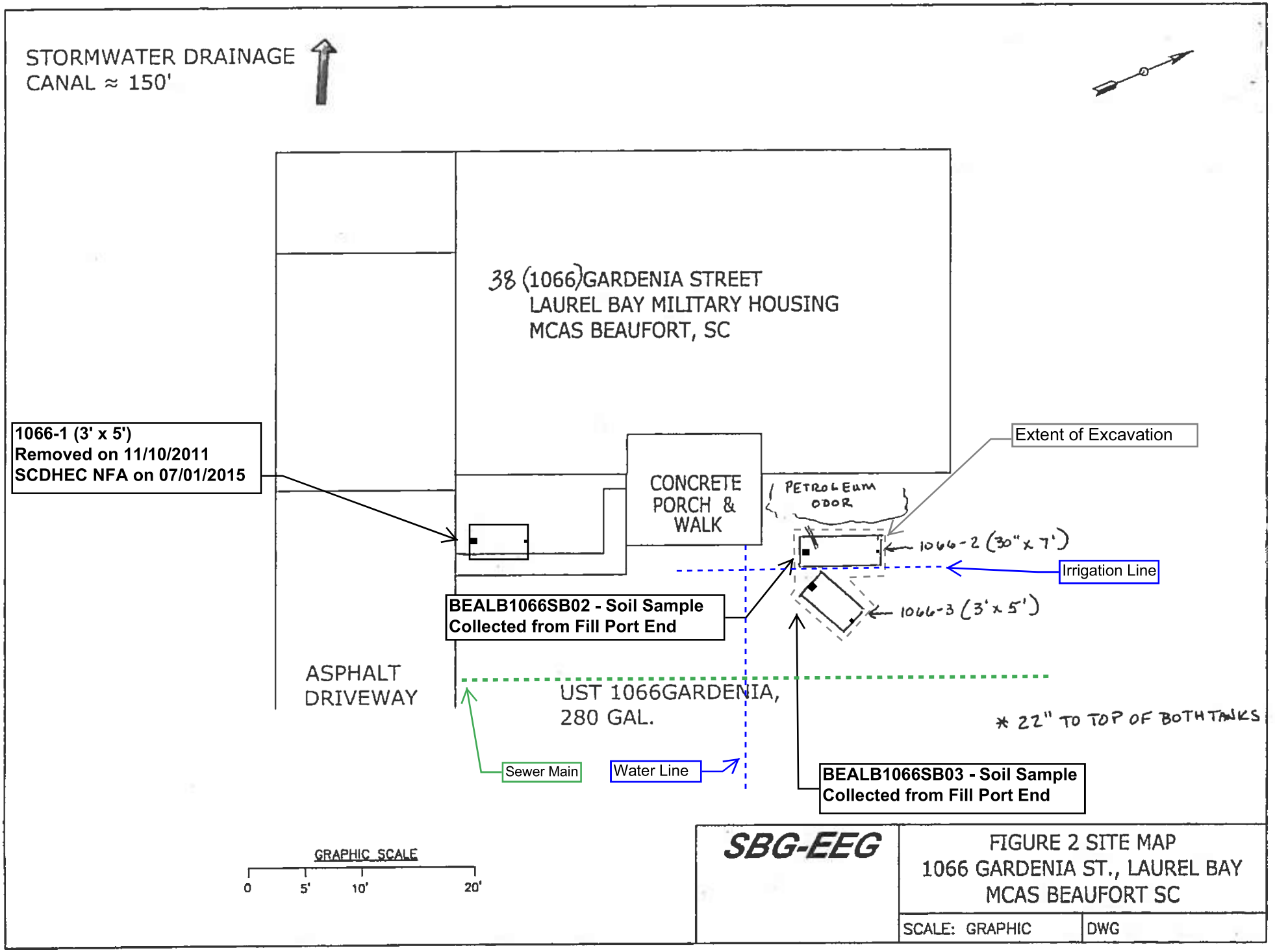
You must supply a <u>scaled</u> site map. It should include all buildings, road names, utilities, tank and dispenser island locations, labeled sample locations, extent of excavation, and any other pertinent information.

(Attach Site Map Here)



SBG-EEG, Inc.

FIGURE 1: LOCATION MAP
38 (1066) GARDENIA STREET
LAUREL BAY, BEAUFORT SC


STORMWATER DRAINAGE
CANAL ≈ 150'
38 (1066) GARDENIA STREET
LAUREL BAY MILITARY HOUSING
MCAS BEAUFORT, SC
1066-1 (3' x 5')
Removed on 11/10/2011
SCDHEC NFA on 07/01/2015
CONCRETE PORCH & WALK
PETROLEUM ODOR
Extent of Excavation
1066-2 (30" x 7')
Irrigation Line
1066-3 (3' x 5')
BEALB1066SB02 - Soil Sample
Collected from Fill Port End
ASPHALT DRIVEWAY
UST 1066GARDENIA,
280 GAL.
* 22" TO TOP OF BOTH TANKS
Sewer Main
Water Line
BEALB1066SB03 - Soil Sample
Collected from Fill Port End
GRAPHIC SCALE
0
5'
10'
20'
SBG-EEG
FIGURE 2 SITE MAP
1066 GARDENIA ST., LAUREL BAY
MCAS BEAUFORT SC
SCALE: GRAPHIC
DWG

38 Gardenia – (formerly 1066 Gardenia)

Uncovering Tank – 1066-2

Removal of 1066-2

Uncovering 1066-3

Removal of 1066-3

Empty excavation site of 1066-3

Tanks 1066-2 and 1066-3 wrapped and ready for disposal

Yard restored

XIV. SUMMARY OF ANALYSIS RESULTS

Enter the soil analytical data for each soil boring for all COC in the table below and on the following page.

CoC	BEALB1066SB02SO20190212	BEALB1066SB03SO20190212					
Benzene	520	<4.3					
Toluene	<12	<4.3					
Ethylbenzene	12,000	<4.3					
Xylenes	20,000	<8.8					
Naphthalene	41,000	<4.3					
Benzo (a) anthracene	<25	<13					
Benzo (b) fluoranthene	<13	<6.4					
Benzo (k) fluoranthene	<13	<6.4					
Chrysene	<13	<6.4					
Dibenz (a, h) anthracene	<25	<13					
TPH (EPA 3550)							

CoC								
Benzene								
Toluene								
Ethylbenzene								
Xylenes								
Naphthalene								
Benzo (a) anthracene								
Benzo (b) fluoranthene								
Benzo (k) fluoranthene								
Chrysene								
Dibenz (a, h) anthracene								
TPH (EPA 3550)								

SUMMARY OF ANALYSIS RESULTS (cont'd)

Enter the ground water analytical data for each sample for all CoC in the table below. If free product is present, indicate the measured thickness to the nearest 0.01 feet.

CoC	RBSL (µg/l)	W-1	W-2	W -3	W -4
Free Product Thickness	None				
Benzene	5				
Toluene	1,000				
Ethylbenzene	700				
Xylenes	10,000				
Total BTEX	N/A				
MTBE	40				
Naphthalene	25				
Benzo (a) anthracene	10				
Benzo (b) flouranthene	10				
Benzo (k) flouranthene	10				
Chrysene	10				
Dibenz (a, h) anthracene	10				
EDB	.05				
1,2-DCA	5				
Lead	Site specific				

XV. ANALYTICAL RESULTS

You must submit the laboratory report and chain-of-custody form for the samples. These samples must be analyzed by a South Carolina certified laboratory.

(Attach Certified Analytical Results and Chain-of-Custody Here)
(Please see Form #4)

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

AECOM
4016 Salt Pointe Parkway
North Charleston, SC 29405
Attention: Shawn Dolan

Project Name: WE-52 LBMH, MCAS Beaufort SC

Project Number: 60541602.7

Lot Number:**UB14086**

Date Completed:03/01/2019

N. Saikaly

03/01/2019 3:29 PM
Approved and released by:
Project Manager: Nisreen Saikaly

The electronic signature above is the equivalent of a handwritten signature.

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

Case Narrative
AECOM
Lot Number: UB14086

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 Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), applicable Shealy standard operating procedures (SOPs), the 2003 NELAC standard, and Shealy policies. Additionally, the DoD QSM version 5.1 has been followed for these samples. Any exceptions to the QAMP, SOPs, NELAC standards, the DoD QSM, or policies are qualified on the results page or discussed below.

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

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

Volatile Organic Compounds

Surrogate recovery for the following sample was outside control limits: UB14086-001. Re-extraction and/or re-analysis was performed with concurring results. Sample was initially analyzed at 100X and had over range hit of Naphthalene. The sample was reanalyzed at 500X.

Semivolatile Organic Compounds

The following samples were diluted due to the nature of the sample matrix: UB14086-001, UB14086-002, UB14086-003. The LOQ has been elevated to reflect the dilution. Dilutions greater than 5X impact the surrogate recoveries, thus negating their usefulness concerning quality control. The sample results are reported and no corrective action is required.

The matrix spike and matrix spike duplicate (MS/MSD) recoveries in batch 86640 were outside acceptance criteria. All other QC criteria for the batch was 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.

Sample Summary
AECOM
Lot Number: UB14086

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	BEALB1066SB02SO20190212	Solid	02/12/2019 1030	02/14/2019
002	BEALB1066SB03SO20190212	Solid	02/12/2019 0930	02/14/2019
003	BEALB1066SB03SO20190212-a	Solid	02/12/2019 0930	02/14/2019
004	BEALB1066SB02SO20190212-d	Aqueous	02/12/2019 1040	02/14/2019
005	BEALB1223SB02SO20190213	Solid	02/13/2019 1140	02/14/2019
006	BEALB1223SB02ESO20190213	Solid	02/13/2019 1150	02/14/2019
007	BEALB1066SB03SO20190212-c	Aqueous	02/12/2019 0930	02/14/2019

(7 samples)

Detection Summary

AECOM

Lot Number: UB14086

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	BEALB1066SB02SO20190212	Solid	Benzene	8260B	520	JQ	ug/kg	6
001	BEALB1066SB02SO20190212	Solid	Ethylbenzene	8260B	12000	Q	ug/kg	6
001	BEALB1066SB02SO20190212	Solid	Naphthalene	8260B	41000	Q	ug/kg	6
001	BEALB1066SB02SO20190212	Solid	Xylenes (total)	8260B	20000	Q	ug/kg	6
005	BEALB1223SB02SO20190213	Solid	Benzo(a)anthracene	8270D (SIM)	88		ug/kg	15
005	BEALB1223SB02SO20190213	Solid	Benzo(b)fluoranthene	8270D (SIM)	67		ug/kg	15
005	BEALB1223SB02SO20190213	Solid	Benzo(k)fluoranthene	8270D (SIM)	29		ug/kg	15
005	BEALB1223SB02SO20190213	Solid	Chrysene	8270D (SIM)	85		ug/kg	15
005	BEALB1223SB02SO20190213	Solid	Dibenzo(a,h)anthracene	8270D (SIM)	4.4	J	ug/kg	15
006	BEALB1223SB02ESO20190213	Solid	Benzo(a)anthracene	8270D (SIM)	15		ug/kg	17
006	BEALB1223SB02ESO20190213	Solid	Benzo(b)fluoranthene	8270D (SIM)	13		ug/kg	17
006	BEALB1223SB02ESO20190213	Solid	Benzo(k)fluoranthene	8270D (SIM)	6.2	J	ug/kg	17
006	BEALB1223SB02ESO20190213	Solid	Chrysene	8270D (SIM)	14		ug/kg	17

(13 detections)

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BEALB1066SB02SO20190212**
Date Sampled: **02/12/2019 1030**
Date Received: **02/14/2019**

Laboratory ID: **UB14086-001**
Matrix: **Solid**
% Solids: **77.8** **02/16/2019 0133**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035 High	8260B	2	02/19/2019 1152	JM1		98061	5.45
2	5035 High	8260B	10	02/20/2019 1453	JM1		98233	5.45

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	**71-43-2**	**8260B**	**520**	**JQ**	**730**	12	**290**	**ug/kg**	**1**
Ethylbenzene	**100-41-4**	**8260B**	**12000**	**Q**	**730**	12	**290**	**ug/kg**	**1**
Naphthalene	**91-20-3**	**8260B**	**41000**	**Q**	**3700**	59	**1500**	**ug/kg**	**2**
Toluene	108-88-3	8260B	12	UQ	730	12	290	ug/kg	1
Xylenes (total)	**1330-20-7**	**8260B**	**20000**	**Q**	**1500**	24	**590**	**ug/kg**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		106	79-119		118	79-119
Dibromofluoromethane		113	78-119		117	78-119
1,2-Dichloroethane-d4		107	71-136		112	71-136
Toluene-d8	N	118	85-116	N	128	85-116

LOQ = Limit of Quantitation
U = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
LOD = Limit of Detection
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BEALB1066SB02SO20190212**
Date Sampled: **02/12/2019 1030**
Date Received: **02/14/2019**

Laboratory ID: **UB14086-001**
Matrix: **Solid**
% Solids: **77.8** **02/16/2019 0133**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D (SIM)	10	02/26/2019 1617	NCM	02/19/2019 1543	98046

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzo(a)anthracene	56-55-3	8270D (SIM)	25	UQS	42	25	7.5	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D (SIM)	13	UQ	42	13	6.4	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D (SIM)	13	UQ	42	13	6.1	ug/kg	1
Chrysene	218-01-9	8270D (SIM)	13	UQS	42	13	5.7	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D (SIM)	25	UQ	42	25	6.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Fluoranthene-d10	N	257	37-135
2-Methylnaphthalene-d10	N	487	17-119

LOQ = Limit of Quantitation
U = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
LOD = Limit of Detection
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **UB14086-002**
Description: **BEALB1066SB03SO20190212**
Matrix: **Solid**
Date Sampled: **02/12/2019 0930**
% Solids: **77.7** **02/16/2019 0133**
Date Received: **02/14/2019**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5035	8260B	1	02/22/2019 1802	JM1		98466

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	4.3	U	5.4	4.3	2.1	ug/kg	2
Ethylbenzene	100-41-4	8260B	4.3	U	5.4	4.3	2.1	ug/kg	2
Naphthalene	91-20-3	8260B	4.3	U	5.4	4.3	2.1	ug/kg	2
Toluene	108-88-3	8260B	4.3	U	5.4	4.3	2.1	ug/kg	2
Xylenes (total)	1330-20-7	8260B	8.8	U	11	8.8	4.3	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		94	79-119
Dibromofluoromethane		95	78-119
1,2-Dichloroethane-d4		89	71-136
Toluene-d8		106	85-116

LOQ = Limit of Quantitation
U = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
LOD = Limit of Detection
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BEALB1066SB03SO20190212**
Date Sampled: **02/12/2019 0930**
Date Received: **02/14/2019**

Laboratory ID: **UB14086-002**
Matrix: **Solid**
% Solids: **77.7** **02/16/2019 0133**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D (SIM)	5	02/26/2019 1511	NCM	02/19/2019 1543	98046

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzo(a)anthracene	56-55-3	8270D (SIM)	13	U	21	13	3.8	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D (SIM)	6.4	U	21	6.4	3.2	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D (SIM)	6.4	U	21	6.4	3.1	ug/kg	1
Chrysene	218-01-9	8270D (SIM)	6.4	U	21	6.4	2.9	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D (SIM)	13	U	21	13	3.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Fluoranthene-d10		39	37-135
2-Methylnaphthalene-d10		71	17-119

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOQ	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

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Volatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BEALB1066SB03SO20190212-a**
Date Sampled: **02/12/2019 0930**
Date Received: **02/14/2019**

Laboratory ID: **UB14086-003**
Matrix: **Solid**
% Solids: **79.0** **02/16/2019 0133**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	02/18/2019 0122	KGT		97809

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	4.2	U	5.2	4.2	2.1	ug/kg	1
Ethylbenzene	100-41-4	8260B	4.2	U	5.2	4.2	2.1	ug/kg	1
Naphthalene	91-20-3	8260B	4.2	U	5.2	4.2	2.1	ug/kg	1
Toluene	108-88-3	8260B	4.2	U	5.2	4.2	2.1	ug/kg	1
Xylenes (total)	1330-20-7	8260B	8.0	U	10	8.0	4.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		86	79-119
Dibromofluoromethane		97	78-119
1,2-Dichloroethane-d4		87	71-136
Toluene-d8		103	85-116

LOQ = Limit of Quantitation
U = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
LOD = Limit of Detection
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BEALB1066SB03SO20190212-a**
Date Sampled: **02/12/2019 0930**
Date Received: **02/14/2019**

Laboratory ID: **UB14086-003**
Matrix: **Solid**
% Solids: **79.0** **02/16/2019 0133**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D (SIM)	2	02/26/2019 1538	NCM	02/19/2019 1543	98046

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzo(a)anthracene	56-55-3	8270D (SIM)	4.9	U	8.1	4.9	1.5	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D (SIM)	2.5	U	8.1	2.5	1.2	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D (SIM)	2.5	U	8.1	2.5	1.2	ug/kg	1
Chrysene	218-01-9	8270D (SIM)	2.5	U	8.1	2.5	1.1	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D (SIM)	4.9	U	8.1	4.9	1.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Fluoranthene-d10		87	37-135
2-Methylnaphthalene-d10		72	17-119

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOQ	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

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Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **UB14086-004**
Description: **BEALB1066SB02SO20190212-d**
Matrix: **Aqueous**
Date Sampled: **02/12/2019 1040**
Date Received: **02/14/2019**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/19/2019 1616	BWS		98028

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Naphthalene	91-20-3	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Toluene	108-88-3	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	0.80	U	1.0	0.80	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		94	85-114
Dibromofluoromethane		96	80-119
1,2-Dichloroethane-d4		103	81-118
Toluene-d8		95	89-112

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOQ	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **UB14086-004**
Description: **BEALB1066SB02SO20190212-d**
Matrix: **Aqueous**
Date Sampled: **02/12/2019 1040**
Date Received: **02/14/2019**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	02/18/2019 1417	CMP2	02/15/2019 1748	97720

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzo(a)anthracene	56-55-3	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Chrysene	218-01-9	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	0.10	U	0.20	0.10	0.040	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Nitrobenzene-d5		78	44-120
2-Fluorobiphenyl		66	44-119
Terphenyl-d14		94	50-134

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOQ	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

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Volatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BEALB1223SB02SO20190213**
Date Sampled: **02/13/2019 1140**
Date Received: **02/14/2019**

Laboratory ID: **UB14086-005**
Matrix: **Solid**
% Solids: **77.8** **02/16/2019 0133**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	02/18/2019 0144	KGT		97809

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	5.0	U	6.3	5.0	2.5	ug/kg	1
Ethylbenzene	100-41-4	8260B	5.0	U	6.3	5.0	2.5	ug/kg	1
Naphthalene	91-20-3	8260B	5.0	U	6.3	5.0	2.5	ug/kg	1
Toluene	108-88-3	8260B	5.0	U	6.3	5.0	2.5	ug/kg	1
Xylenes (total)	1330-20-7	8260B	10	U	13	10	5.0	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		92	79-119
Dibromofluoromethane		96	78-119
1,2-Dichloroethane-d4		90	71-136
Toluene-d8		105	85-116

LOQ = Limit of Quantitation
U = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
LOD = Limit of Detection
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BEALB1223SB02SO20190213**
Date Sampled: **02/13/2019 1140**
Date Received: **02/14/2019**

Laboratory ID: **UB14086-005**
Matrix: **Solid**
% Solids: **77.8** **02/16/2019 0133**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D (SIM)	5	02/26/2019 1417	NCM	02/19/2019 1543	98046

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzo(a)anthracene	**56-55-3**	**8270D (SIM)**	**88**		**21**	13	**3.7**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270D (SIM)**	**67**		**21**	6.4	**3.2**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270D (SIM)**	**29**		**21**	6.4	**3.0**	**ug/kg**	**1**
Chrysene	**218-01-9**	**8270D (SIM)**	**85**		**21**	6.4	**2.8**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	**53-70-3**	**8270D (SIM)**	**4.4**	**J**	**21**	13	**3.2**	**ug/kg**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Fluoranthene-d10		56	37-135
2-Methylnaphthalene-d10		74	17-119

LOQ = Limit of Quantitation
U = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
LOD = Limit of Detection
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Volatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BEALB1223SB02ESO20190213**
Date Sampled: **02/13/2019 1150**
Date Received: **02/14/2019**

Laboratory ID: **UB14086-006**
Matrix: **Solid**
% Solids: **85.9** **02/16/2019 0133**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	1	02/18/2019 0206	KGT		97809

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	4.6	U	5.8	4.6	2.3	ug/kg	1
Ethylbenzene	100-41-4	8260B	4.6	U	5.8	4.6	2.3	ug/kg	1
Naphthalene	91-20-3	8260B	4.6	U	5.8	4.6	2.3	ug/kg	1
Toluene	108-88-3	8260B	4.6	U	5.8	4.6	2.3	ug/kg	1
Xylenes (total)	1330-20-7	8260B	9.6	U	12	9.6	4.6	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		90	79-119
Dibromofluoromethane		96	78-119
1,2-Dichloroethane-d4		89	71-136
Toluene-d8		100	85-116

LOQ = Limit of Quantitation
U = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
LOD = Limit of Detection
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **BEALB1223SB02ESO20190213**
Date Sampled: **02/13/2019 1150**
Date Received: **02/14/2019**

Laboratory ID: **UB14086-006**
Matrix: **Solid**
% Solids: **85.9** **02/16/2019 0133**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D (SIM)	2	02/27/2019 1016	NCM	02/19/2019 1543	98046

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzo(a)anthracene	**56-55-3**	**8270D (SIM)**	**15**		**7.6**	4.6	**1.4**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270D (SIM)**	**13**		**7.6**	2.3	**1.1**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270D (SIM)**	**6.2**	**J**	**7.6**	2.3	**1.1**	**ug/kg**	**1**
Chrysene	**218-01-9**	**8270D (SIM)**	**14**		**7.6**	2.3	**1.0**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270D (SIM)	4.6	U	7.6	4.6	1.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Fluoranthene-d10		103	37-135
2-Methylnaphthalene-d10		102	17-119

LOQ = Limit of Quantitation
U = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
LOD = Limit of Detection
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **UB14086-007**
Description: **BEALB1066SB03SO20190212-c**
Matrix: **Aqueous**
Date Sampled: **02/12/2019 0930**
Date Received: **02/14/2019**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/19/2019 1314	BWS		98028

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Naphthalene	91-20-3	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Toluene	108-88-3	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	0.80	U	1.0	0.80	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		92	85-114
Dibromofluoromethane		96	80-119
1,2-Dichloroethane-d4		102	81-118
Toluene-d8		96	89-112

LOQ = Limit of Quantitation
U = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
LOD = Limit of Detection
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ97809-001
Batch: 97809
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
Benzene	4.0	U	1	5.0	4.0	2.0	ug/kg	02/17/2019 2118
Ethylbenzene	4.0	U	1	5.0	4.0	2.0	ug/kg	02/17/2019 2118
Naphthalene	4.0	U	1	5.0	4.0	2.0	ug/kg	02/17/2019 2118
Toluene	4.0	U	1	5.0	4.0	2.0	ug/kg	02/17/2019 2118
Xylenes (total)	8.0	U	1	10	8.0	4.0	ug/kg	02/17/2019 2118

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		86	79-119
Dibromofluoromethane		97	78-119
1,2-Dichloroethane-d4		88	71-136
Toluene-d8		87	85-116

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

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Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ97809-002
Batch: 97809
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	51		1	101	77-121	02/17/2019 2033
Ethylbenzene	50	59		1	117	76-122	02/17/2019 2033
Naphthalene	50	59		1	118	62-129	02/17/2019 2033
Toluene	50	53		1	105	77-121	02/17/2019 2033
Xylenes (total)	100	110		1	109	78-124	02/17/2019 2033

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		90	79-119
Dibromofluoromethane		93	78-119
1,2-Dichloroethane-d4		86	71-136
Toluene-d8		93	85-116

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

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Volatile Organic Compounds by GC/MS - LCSD

Sample ID: UQ97809-003
Batch: 97809
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	48		1	97	4.5	77-121	20	02/17/2019 2056
Ethylbenzene	50	55		1	109	7.2	76-122	20	02/17/2019 2056
Naphthalene	50	57		1	113	4.6	62-129	20	02/17/2019 2056
Toluene	50	46		1	92	14	77-121	20	02/17/2019 2056
Xylenes (total)	100	100		1	103	5.8	78-124	20	02/17/2019 2056

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		85	79-119
Dibromofluoromethane		95	78-119
1,2-Dichloroethane-d4		90	71-136
Toluene-d8		88	85-116

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

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Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ98028-001
Batch: 98028
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
Benzene	0.80	U	1	1.0	0.80	0.40	ug/L	02/19/2019 1143
Ethylbenzene	0.80	U	1	1.0	0.80	0.40	ug/L	02/19/2019 1143
Methyl tertiary butyl ether (MTBE)	0.80	U	1	1.0	0.80	0.40	ug/L	02/19/2019 1143
Naphthalene	0.80	U	1	1.0	0.80	0.40	ug/L	02/19/2019 1143
Toluene	0.80	U	1	1.0	0.80	0.40	ug/L	02/19/2019 1143
Xylenes (total)	0.80	U	1	1.0	0.80	0.40	ug/L	02/19/2019 1143

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	85-114
Dibromofluoromethane		96	80-119
1,2-Dichloroethane-d4		104	81-118
Toluene-d8		97	89-112

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

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Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ98028-002
Batch: 98028
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	47		1	93	79-120	02/19/2019 1022
Ethylbenzene	50	51		1	102	79-121	02/19/2019 1022
Methyl tertiary butyl ether (MTBE)	50	48		1	96	71-124	02/19/2019 1022
Naphthalene	50	55		1	111	61-128	02/19/2019 1022
Toluene	50	49		1	99	80-121	02/19/2019 1022
Xylenes (total)	100	100		1	104	79-121	02/19/2019 1022

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	85-114
Dibromofluoromethane		95	80-119
1,2-Dichloroethane-d4		98	81-118
Toluene-d8		97	89-112

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

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Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ98061-001
Batch: 98061
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035 High

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
Benzene	4.0	U	1	250	4.0	100	ug/kg	02/20/2019 1137
Ethylbenzene	4.0	U	1	250	4.0	100	ug/kg	02/20/2019 1137
Toluene	4.0	U	1	250	4.0	100	ug/kg	02/20/2019 1137
Xylenes (total)	8.0	U	1	500	8.0	200	ug/kg	02/20/2019 1137

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	79-119
Dibromofluoromethane		92	78-119
1,2-Dichloroethane-d4		86	71-136
Toluene-d8		97	85-116

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

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Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ98061-002
Batch: 98061
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035 High

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	2500	2500		1	98	77-121	02/20/2019 1114
Ethylbenzene	2500	3000		1	118	76-122	02/20/2019 1114
Toluene	2500	2800		1	111	77-121	02/20/2019 1114
Xylenes (total)	5000	5800		1	116	78-124	02/20/2019 1114

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	79-119
Dibromofluoromethane		97	78-119
1,2-Dichloroethane-d4		90	71-136
Toluene-d8		103	85-116

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

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Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ98233-001
Batch: 98233
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035 High

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
Naphthalene	4.0	U	1	250	4.0	100	ug/kg	02/20/2019 1137

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	79-119
Dibromofluoromethane		92	78-119
1,2-Dichloroethane-d4		86	71-136
Toluene-d8		97	85-116

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

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Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ98233-002
Batch: 98233
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035 High

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Naphthalene	2500	2700		1	110	62-129	02/20/2019 1114

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	79-119
Dibromofluoromethane		97	78-119
1,2-Dichloroethane-d4		90	71-136
Toluene-d8		103	85-116

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

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Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ98466-001
Batch: 98466
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
Benzene	4.0	U	1	5.0	4.0	2.0	ug/kg	02/22/2019 1623
Ethylbenzene	4.0	U	1	5.0	4.0	2.0	ug/kg	02/22/2019 1623
Naphthalene	4.0	U	1	5.0	4.0	2.0	ug/kg	02/22/2019 1623
Toluene	4.0	U	1	5.0	4.0	2.0	ug/kg	02/22/2019 1623
Xylenes (total)	8.0	U	1	10	8.0	4.0	ug/kg	02/22/2019 1623

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	79-119
Dibromofluoromethane		97	78-119
1,2-Dichloroethane-d4		90	71-136
Toluene-d8		99	85-116

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

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Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ98466-002
Batch: 98466
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	52		1	105	77-121	02/22/2019 1522
Ethylbenzene	50	54		1	108	76-122	02/22/2019 1522
Naphthalene	50	51		1	103	62-129	02/22/2019 1522
Toluene	50	54		1	108	77-121	02/22/2019 1522
Xylenes (total)	100	110		1	107	78-124	02/22/2019 1522

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	79-119
Dibromofluoromethane		96	78-119
1,2-Dichloroethane-d4		90	71-136
Toluene-d8		102	85-116

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

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Volatile Organic Compounds by GC/MS - LCSD

Sample ID: UQ98466-003
Batch: 98466
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	49		1	98	6.2	77-121	20	02/22/2019 1602
Ethylbenzene	50	51		1	102	6.3	76-122	20	02/22/2019 1602
Naphthalene	50	49		1	98	4.8	62-129	20	02/22/2019 1602
Toluene	50	51		1	102	5.7	77-121	20	02/22/2019 1602
Xylenes (total)	100	100		1	103	3.6	78-124	20	02/22/2019 1602

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		103	79-119
Dibromofluoromethane		99	78-119
1,2-Dichloroethane-d4		90	71-136
Toluene-d8		103	85-116

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

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Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ97720-001
Batch: 97720
Analytical Method: 8270D
Matrix: Aqueous
Prep Method: 3520C
Prep Date: 02/15/2019 1748

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
Benzo(a)anthracene	0.10	U	1	0.20	0.10	0.040	ug/L	02/18/2019 1136
Benzo(b)fluoranthene	0.10	U	1	0.20	0.10	0.040	ug/L	02/18/2019 1136
Benzo(k)fluoranthene	0.10	U	1	0.20	0.10	0.040	ug/L	02/18/2019 1136
Chrysene	0.10	U	1	0.20	0.10	0.040	ug/L	02/18/2019 1136
Dibenzo(a,h)anthracene	0.10	U	1	0.20	0.10	0.040	ug/L	02/18/2019 1136

Surrogate	Q	% Rec	Acceptance Limit
Nitrobenzene-d5		60	44-120
2-Fluorobiphenyl		54	44-119
Terphenyl-d14		96	50-134

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

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Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ97720-002
Batch: 97720
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 02/15/2019 1748

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzo(a)anthracene	8.0	6.5		1	81	58-125	02/18/2019 1159
Benzo(b)fluoranthene	8.0	6.2		1	77	53-131	02/18/2019 1159
Benzo(k)fluoranthene	8.0	6.5		1	81	57-129	02/18/2019 1159
Chrysene	8.0	6.7		1	84	59-123	02/18/2019 1159
Dibenzo(a,h)anthracene	8.0	6.3		1	78	51-134	02/18/2019 1159

Surrogate	Q	% Rec	Acceptance Limit
Nitrobenzene-d5		74	44-120
2-Fluorobiphenyl		67	44-119
Terphenyl-d14		96	50-134

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

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Semivolatile Organic Compounds by GC/MS - MS

Sample ID: UB14086-004MS
Batch: 97720
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 02/15/2019 1748

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzo(a)anthracene	ND	16	13		1	83	58-125	02/18/2019 1440
Benzo(b)fluoranthene	ND	16	13		1	80	53-131	02/18/2019 1440
Benzo(k)fluoranthene	ND	16	14		1	87	57-129	02/18/2019 1440
Chrysene	ND	16	14		1	86	59-123	02/18/2019 1440
Dibenzo(a,h)anthracene	ND	16	14		1	85	51-134	02/18/2019 1440

Surrogate	Q	% Rec	Acceptance Limit
Nitrobenzene-d5		70	44-120
2-Fluorobiphenyl		55	44-119
Terphenyl-d14		98	50-134

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

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Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: UB14086-004MD
Batch: 97720
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 02/15/2019 1748

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzo(a)anthracene	ND	16	13		1	80	3.8	58-125	40	02/18/2019 1503
Benzo(b)fluoranthene	ND	16	12		1	77	3.3	53-131	40	02/18/2019 1503
Benzo(k)fluoranthene	ND	16	13		1	82	6.0	57-129	40	02/18/2019 1503
Chrysene	ND	16	14		1	85	1.9	59-123	40	02/18/2019 1503
Dibenzo(a,h)anthracene	ND	16	13		1	83	2.8	51-134	40	02/18/2019 1503

Surrogate	Q	% Rec	Acceptance Limit
Nitrobenzene-d5		69	44-120
2-Fluorobiphenyl		57	44-119
Terphenyl-d14		93	50-134

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

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Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ98046-001
Batch: 98046
Analytical Method: 8270D (SIM)

Matrix: Solid
Prep Method: 3550C
Prep Date: 02/19/2019 1543

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
Benzo(a)anthracene	2.0	U	1	3.3	2.0	0.59	ug/kg	02/26/2019 1323
Benzo(b)fluoranthene	1.0	U	1	3.3	1.0	0.50	ug/kg	02/26/2019 1323
Benzo(k)fluoranthene	1.0	U	1	3.3	1.0	0.48	ug/kg	02/26/2019 1323
Chrysene	1.0	U	1	3.3	1.0	0.45	ug/kg	02/26/2019 1323
Dibenzo(a,h)anthracene	2.0	U	1	3.3	2.0	0.51	ug/kg	02/26/2019 1323

Surrogate	Q	% Rec	Acceptance Limit
Fluoranthene-d10		105	37-135
2-Methylnaphthalene-d10		83	17-119

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

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Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ98046-002
Batch: 98046
Analytical Method: 8270D (SIM)

Matrix: Solid
Prep Method: 3550C
Prep Date: 02/19/2019 1543

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzo(a)anthracene	20	19		1	96	54-122	02/26/2019 1350
Benzo(b)fluoranthene	20	20		1	99	53-128	02/26/2019 1350
Benzo(k)fluoranthene	20	20		1	99	56-123	02/26/2019 1350
Chrysene	20	18		1	91	57-118	02/26/2019 1350
Dibenzo(a,h)anthracene	20	19		1	95	50-129	02/26/2019 1350

Surrogate	Q	% Rec	Acceptance Limit
Fluoranthene-d10		111	37-135
2-Methylnaphthalene-d10		80	17-119

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

Shealy Environmental Services, Inc.
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Semivolatile Organic Compounds by GC/MS - MS

Sample ID: UB14086-001MS
Batch: 98046
Analytical Method: 8270D (SIM)

Matrix: Solid
Prep Method: 3550C
Prep Date: 02/19/2019 1543

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzo(a)anthracene	ND	25	36	N	10	142	54-122	02/26/2019 1644
Benzo(b)fluoranthene	ND	25	15		10	61	53-128	02/26/2019 1644
Benzo(k)fluoranthene	ND	25	14		10	58	56-123	02/26/2019 1644
Chrysene	ND	25	58	N	10	231	57-118	02/26/2019 1644
Dibenzo(a,h)anthracene	ND	25	15		10	61	50-129	02/26/2019 1644

Surrogate	Q	% Rec	Acceptance Limit
Fluoranthene-d10	N	272	37-135
2-Methylnaphthalene-d10	N	1470	17-119

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

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Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: UB14086-001MD
Batch: 98046
Analytical Method: 8270D (SIM)

Matrix: Solid
Prep Method: 3550C
Prep Date: 02/19/2019 1543

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzo(a)anthracene	ND	25	34	N	10	135	3.6	54-122	20	02/26/2019 1711
Benzo(b)fluoranthene	ND	25	16		10	64	5.4	53-128	20	02/26/2019 1711
Benzo(k)fluoranthene	ND	25	16		10	61	7.3	56-123	20	02/26/2019 1711
Chrysene	ND	25	57	N	10	224	1.8	57-118	20	02/26/2019 1711
Dibenzo(a,h)anthracene	ND	25	17		10	68	12	50-129	20	02/26/2019 1711

Surrogate	Q	% Rec	Acceptance Limit
Fluoranthene-d10	N	305	37-135
2-Methylnaphthalene-d10	N	2310	17-119

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

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

Shealy Environmental Services, Inc.
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Chain of Custody
and
Miscellaneous Documents

Shealy Environmental Services, Inc.
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SHEALY **Chain of Custody Record**

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 89696

Client: AECOM	Report to Contact: Doria Cullom	Telephone No. / E-mail: 8643145364 / Doria.Cullom@aecom.com	Quote No.
Address: 4016 Salt Pointe Pkwy	Sampler's Signature: x	Analysis (Attach list if more space is needed)	Page 1 of 1
City: North Charleston	State: SC	Zip Code: 29405	Printed Name: Brian Reibling	
Project Name: WE52: LBMH, MCAS Beaufort, SC.			
Project No.: 60541602.7	P.O. No.: Non-PO		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date 2019	Time	# Grab / # Composite	Matrix: Aqueous	Matrix: Solid	Matrix: Non-Aqueous	No of Containers by Preservative Type: Unpres	HNO3	H2SO4	HCl	NaOH	S2O3 NaOH	8260 TCL + Naphthalene	8270 PAHs	Remarks / Cooler I.D.
BEALB10665B02502019021 2	2/12	1030	6		X		6						X	X	UB14086
BEALB10665B02502019021 2-MS		1030			X								X	X	NES
BEALB10665B02502019021 2-MSD		1030			X								X	X	
BEALB10665B03502019021 2		0930			X								X	X	
BEALB10665B03502019021 2-D		0930			X								X	X	
BEALB10665B02502019021 2-D		1040		X			2			3			X	X	
BEALB12235B02502019021 3	2/13	1140			X		6						X	X	
BEALB12235B02ES02619021 3		1150			X								X	X	
BEALB10665B03502019021 2-C	2/12	0930		X						2			X		

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

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab

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

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by	2/13/2019	1800	1. Received by: FedEx	2/13/19	1800
2. Relinquished by	Date	Time	2. Received by	Date	Time
3. Relinquished by	Date	Time	3. Received by	Date	Time
4. Relinquished by: FedEx	Date: 2-14-19	Time: 1010	4. Laboratory received by: Brian Brown	Date 2.14.19	Time 1010

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

LAB USE ONLY
Received on Ice (Circle) (Yes) No Ice Pack Receipt Temp. 1.4 °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: ME0018C-14

Page 1 of 1
Effective Date: 8/2/2018

Sample Receipt Checklist (SRC)

Client: AECOM Cooler Inspected by/date: ETB / 2.14.19 Lot #: UB140186

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☑ FedEx ☐ Other:			
☑ Yes	☐ No		1. Were custody seals present on the cooler?
☑ Yes	☐ No	☐ NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA			
Original temperature upon receipt / Derived (Corrected) temperature upon receipt: 1.4 / 1.4 °C / / °C / / °C / / °C ETB %Solid Snap-Cup ID: 18-2489			
Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C			
Method of coolant: ☑ Wet Ice ☐ Ice Packs ☐ Dry Ice ☐ None			
☐ Yes	☐ No	☑ NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
☑ 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		6. Were sample IDs listed on the COC?
☑ Yes	☐ No		7. Were sample IDs listed on all sample containers?
☑ Yes	☐ No		8. Was collection date & time listed on the COC?
☑ Yes	☐ No		9. Was collection date & time listed on all sample containers?
☑ Yes	☐ No		10. Did all container label information (ID, date, time) agree with the COC?
☑ Yes	☐ No		11. Were tests to be performed listed on the COC?
☑ Yes	☐ No		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
☑ Yes	☐ No		13. Was adequate sample volume available?
☐ Yes	☑ No		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
☐ Yes	☑ No		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
☐ Yes	☑ No	☐ NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼"or 6mm in diameter) in any of the VOA vials?
☐ Yes	☐ No	☑ NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes	☐ No	☑ NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes	☐ No	☑ NA	19. Were all applicable NH_3/TKN/cyanide/phenol/625 (< 0.5mg/L) samples free of residual chlorine?
☐ Yes	☐ No	☑ NA	20. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
☐ Yes	☑ No		21. Was the quote number listed on the container label? If yes, Quote #

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

Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # _____.
Time of preservation NA. If more than one preservative is needed, please note in the comments below.

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

Samples(s) NA were received with TRC > 0.5 mg/L (If #19 is *no*) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: _____.

SR barcode labels applied by: ETB Date: 2.14.19

Comments:

ATTACHMENT A

Waste Disposal Documentation

NON-HAZARDOUS MANIFEST

WASTE MANAGEMENT

NON-HAZARDOUS MANIFEST

1. Generator's US EPA ID No. | Manifest Doc No. | 2. Page 1 of

GENERATOR

3. Generator's Mailing Address
MCAS BEAUFORT
LAUREL BAY HOUSING
BEAUFORT, SC 29904
4. Generator's Phone 843-228-6461

Generator's Site Address (if different than mailing):
212 Cardinal (1223 Cardinal)
38 Gardenia (1006 Gardenia)

A. Manifest Number: 8676468

B. State Generator's ID: SC175D216169

5. Transporter 1 Company Name: SBG

6. US EPA ID Number

C. State Transporter's ID

D. Transporter's Phone: 843-412-2097

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name & Site Address
HICKORY HILL LANDFILL
2621 LOW COUNTRY DRIVE
RIDGELAND, SC 29936

10. US EPA ID Number

G. State Facility ID: 272401-1101

H. State Facility Phone: 843-548-6004

11. Description of Waste Materials	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments
a HEATING OIL TANKS FREE OF LIQUID WM Profile # 102655SC	3	EA	3	EA	8676468
		TNK	2.23	TON	
b. WM Profile #					
c. WM Profile #					
d. WM Profile #					

J. Additional Descriptions for Materials Listed Above
3EA HEATING OIL TANKS FROM
212 CARDINAL (1EA) + 38 GARDENIA (2EA)

K. Disposal Location
Cell | Level
Grid

15. Special Handling Instructions and Additional Information
BEAUFORT COUNTY

Purchase Order # | EMERGENCY CONTACT / PHONE NO.:

16. GENERATOR'S CERTIFICATION
I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Printed Name	Signature "On behalf of"	Month	Day	Year
Corey Jackson		2	14	19

TRANSPORTER

17. Transporter 1 Acknowledgment of Receipt of Materials

Printed Name	Signature	Month	Day	Year
James Baldwin	James Baldwin	2	14	19

18. Transporter 2 Acknowledgment of Receipt of Materials

Printed Name	Signature	Month	Day	Year

FACILITY

19. Certificate of Final Treatment/Disposal
I certify, on behalf of the listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.

Printed Name	Signature	Month	Day	Year
JoAnn Cofield	JoAnn Cofield	2	14	19

Appendix C
Laboratory Analytical Report – Initial Groundwater

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **UL11098-004**
Description: **BEALB1066TW02WG20191210**
Matrix: **Aqueous**
Date Sampled: **12/09/2019 1045**
Date Received: **12/11/2019**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/18/2019 0228	TML		39393

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260D	0.80	U	1.0	0.80	0.40	ug/L	1
Ethylbenzene	100-41-4	8260D	0.80	U	1.0	0.80	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260D**	**0.80**	**J**	**1.0**	0.80	**0.40**	**ug/L**	**1**
Toluene	**108-88-3**	**8260D**	**0.52**	**J**	**1.0**	0.80	**0.40**	**ug/L**	**1**
Xylenes (total)	1330-20-7	8260D	0.80	U	1.0	0.80	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	85-114
Dibromofluoromethane		104	80-119
1,2-Dichloroethane-d4		101	81-118
Toluene-d8		102	89-112

LOQ = Limit of Quantitation
U = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
LOD = Limit of Detection
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **UL11098-004**
Description: **BEALB1066TW02WG20191210**
Matrix: **Aqueous**
Date Sampled: **12/09/2019 1045**
Date Received: **12/11/2019**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270E	1	12/17/2019 1759	JCG	12/15/2019 2003	39061

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzo(a)anthracene	56-55-3	8270E	0.10	U	0.20	0.10	0.040	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270E	0.10	U	0.20	0.10	0.040	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270E	0.10	U	0.20	0.10	0.040	ug/L	1
Chrysene	218-01-9	8270E	0.10	U	0.20	0.10	0.040	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270E	0.10	U	0.20	0.10	0.040	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		47	44-119
Nitrobenzene-d5		46	44-120
Terphenyl-d14		78	50-134

LOQ = Limit of Quantitation
U = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
LOD = Limit of Detection
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Appendix D
Regulatory Correspondence

CDM - AECOM
Multimedia Joint Venture

dhec
Healthy People. Healthy Communities.

June 12, 2019

Commanding Officer
Attention: NREAO Mr. Christopher L. Vaigneur
United State Marine Corps Air Station (MCAS)
Post Office Box 55001
Beaufort, SC 29904-5001

RE: Review Draft Final UST Removal Completion Report dated May 2019
Laurel Bay Military Housing Area

Dear Mr. Vaigneur,

The South Carolina Department of Health and Environmental Control (DHEC) received the above referenced report on May 13, 2019. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended). DHEC has reviewed the report. Based on this review, DHEC has generated the following comment:

1. Although there is no indication of soil contamination at 1066 Gardenia Drive – Tank 3; DHEC does not agree with the NFA recommendation due to the potential impact to groundwater associated with 1066 Gardenia - Tank 2. DHEC will update the status of Tank 3 once the groundwater investigation of Tank 2 is complete.

As recommended, since submitted analytical results indicate that petroleum constituents are above established Risk Based Screening Levels, further investigation is warranted at two tank sites (1066 Gardenia Drive – Tank 2 and 1223 Cardinal Lane – Tank 2). DHEC requests that a groundwater sampling proposal be generated to determine if there has been an impact to groundwater at these two tank locations.

No change to this document is necessary and DHEC considers this report to be final.

Please note that DHEC's decision is based on information provided by MCAS to date. Any information found to be contradictory to this decision may require additional action. Furthermore, DHEC retains the right to request further investigation if deemed necessary. If you have any questions, please contact Kent Krieg at kriegkm@dhec.sc.gov or 803-898-0255.

Sincerely,

Lisa Appel

Lisa Appel, Project Manager
RCRA Federal Facilities Section

cc: Bryan Beck, NAVFAC MIDLANT (via email)
Craig Ehde, NREAO (via email)
Shawn Dolan, Resolution Consultants (via email)
Reahnita Tuten, EQC Region 8 (via email)

D H E C
PROMOTE PROTECT PROSPER
Catherine E. Heigel, Director
Promoting and protecting the health of the public and the environment

July 1, 2015

Commanding Officer
Attention: NREAO Mr. William A. Drawdy
United State Marine Corps Air Station
Post Office Box 55001
Beaufort, SC 29904-5001

RE: No Further Action
Laurel Bay Underground Storage Tank Assessment Reports for:
See attached sheet

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received the referenced Underground Storage Tanks (USTs) Assessment Reports for the addresses listed above. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

The Department has reviewed the referenced assessment reports and agrees there is no indication of soil or groundwater contamination on these properties, and therefore no further investigation is required at this time.

Please note that the Department's decision is based on information provided by the Marine Corps Air Station (MCAS) to date. Any information found to be contradictory to this decision may require additional action. Furthermore, the Department retains the right to request further investigation if deemed necessary.

If you have any questions, please contact me at kriegkm@dhec.sc.gov or 803-898-0255.

Sincerely,

Kent Krieg
Department of Defense Corrective Action Section
Bureau of Land and Waste Management
South Carolina Department of Health and Environmental Control

Cc: Russell Berry (via email)
Craig Ehde (via email)
Bryan Beck (via email)

D H E C
PROMOTE PROTECT PROSPER
Catherine E. Heigel, Director
Promoting and protecting the health of the public and the environment

Attachment to: Krieg to Drawdy
Subject: NFA
Dated 7/1/2015

Laurel Bay Underground Storage Tank Assessment Reports for: (153 addresses/161 tanks)

111 Birch	363 Aspen
123 Banyan	364 Aspen
131 Banyan	366 Aspen
134 Banyan	369 Aspen
145 Laurel Bay	373 Aspen
150 Laurel Bay	381 Aspen
153 Laurel Bay	401 Elderberry
154 Laurel Bay	402 Elderberry
155 Laurel Bay	404 Elderberry
200 Balsam	410 Elderberry
202 Balsam	420 Elderberry
203 Balsam	424 Elderberry
208 Balsam	435 Elderberry Tank 3
210 Balsam	452 Elderberry
211 Balsam	460 Elderberry
220 Cypress	465 Dogwood
222 Cypress	477 Laurel Bay
223 Cypress	487Laurel Bay
252 Beech Tank 2	513 Laurel Bay
271 Beech Tank 1	519 Laurel Bay
271 Beech Tank 2	524 Laurel Bay
284 Birch Tank 1	535 Laurel Bay
284 Birch Tank 2	553 Dahlia
308 Ash	590 Aster
311 Ash	591 Aster
312 Ash	610 Dahlia
317 Ash	612 Dahlia
318 Ash	628 Dahlia
337 Ash	636 Dahlia
351 Ash Tank 1	637 Dahlia Tank 1
351 Ash Tank 2	637 Dahlia Tank 2
355 Ash Tank 1	641 Dahlia
355 Ash Tank 2	642 Dahlia Tank 1
360 Aspen	642 Dahlia Tank 2

Laurel Bay Underground Storage Tank Assessment Reports for: (153 addresses/161 tanks) cont.

655 Camellia	920 Albacore
662 Camellia	922 Barracuda Tank 1
683 Camellia	922 Barracuda Tank 2
684 Camellia	924 Albacore
689 Abelia	925 Albacore
694 Abelia	926 Albacore
695 Abelia	930 Albacore
741 Blue Bell	931 Albacore
742 Blue Bell	933 Albacore
755 Althea	936 Albacore
757 Althea	938 Albacore
776 Laurel Bay	939 Albacore
777 Azalea	940 Albacore
779 Laurel Bay	1010 Foxglove
781 Laurel Bay	1066 Gardenia
802 Azalea	1068 Gardenia
816 Azalea	1071 Heather Tank 2
822 Azalea	1100 Iris Tank 2
823 Azalea	1128 Iris
825 Azalea	1178 Bobwhite
828 Azalea	1204 Cardinal
837 Azalea	1208 Cardinal
851 Dolphin	1209 Cardinal
856 Dolphin	1210 Cardinal
857 Dolphin	1215 Cardinal
861 Dolphin	1216 Cardinal
864 Dolphin	1217 Cardinal Tank 1
868 Dolphin	1217 Cardinal Tank 2
872 Dolphin	1233 Dove
879 Cobia	1244 Dove
886 Cobia	1250 Dove
888 Cobia	1252 Dove
889 Cobia	1254 Dove
901 Barracuda	1256 Dove
902 Barracuda	1258 Dove
903 Barracuda	1263 Dove
904 Barracuda	1269 Dove
909 Barracuda	1276 Dove
910 Barracuda	1283 Dove
914 Barracuda	1285 Dove
915 Barracuda	1288 Eagle

Laurel Bay Underground Storage Tank Assessment Reports for: (153 addresses/161 tanks) cont.

1296 Eagle	1330 Albatross
1307 Eagle	1331 Albatross
1321 Albatross	1333 Albatross
1322 Albatross	1334 Albatross
1327 Albatross	1335 Albatross
1328 Albatross	

dhec
Healthy People. Healthy Communities.

February 24, 2020

Commanding Officer
Attention: NREAO Mr. Christopher L. Vaigneur
United States Marine Corps Air Station
Post Office Box 55001
Beaufort, SC 29904-5001

RE: Approval Draft Final Technical Memo – Groundwater Investigations December 2019
Laurel Bay Military Housing Area, Multiple Properties, Beaufort, SC
(CDM - AECOM Multimedia JV, dated January 2020)

Dear Mr. Vaigneur,

The South Carolina Department of Health and Environmental Control (DHEC) received the above referenced document on January 30, 2020. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

Based on its review, DHEC did not generate any comments and approves this document as Final. DHEC agrees with the recommendations, including no further action (NFA) for the following two (2) properties:

- 38 Gardenia Drive (formerly 1066 Gardenia)
- 212 Cardinal Lane (formerly 1223 Cardinal)

Please note that DHEC's decision is based on information provided by the Marine Corps Air Station (MCAS) to date. Any information found to be contradictory to this may require additional action. Furthermore, DHEC retains the right to request further investigation if it is deemed necessary. If you have any questions, please contact Kent Krieg at kriegkm@dhec.sc.gov or 803-898-0255.

Sincerely,

Lisa Appel

Lisa Appel, Project Manager
RCRA Federal Facilities Section
Division of Waste Management

cc: Bryan Beck, NAVFAC MIDLANT (via email)
Craig Ehde, NREAO (via email)
Shawn Dolan, AECOM (via email)
Reahnita Tuten, EQC Region 8 (via email)