SUMMARY REPORT
180 ASPEN STREET (FORMERLY 379 ASPEN STREET)
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
ft	feet
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 180 Aspen Street (Formerly 379 Aspen Street). 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 results of the IGWA sampling (if necessary) are used to determine the presence or absence of the aforementioned COPCs in groundwater and identify whether former UST locations will require additional delineation of COPCs in groundwater. In order to delineate the extent of impact to groundwater, permanent wells are installed and a sampling program is established for those former UST locations where IGWA sampling has indicated the presence of COPCs in excess of the SCDHEC RBSLs for groundwater. 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 180 Aspen Street (Formerly 379 Aspen Street). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 379 Aspen Street* (MCAS Beaufort, 2011). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Initial Groundwater Investigation Report – November and December 2015* (Resolution Consultants, 2016). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C.

2.1 UST Removal and Soil Sampling

On June 14, 2011, a single 280 gallon heating oil UST was removed from underneath the edge of the front concrete porch and the front landscaped bed area adjacent to the driveway at 180 Aspen Street (Formerly 379 Aspen Street). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The UST was removed, cleaned, and

shipped offsite for recycling. There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depth to the base of the UST was 5'9" bgs and a single soil sample was collected from that depth. The sample was collected from the fill port side of the former UST to represent a worst case scenario.

Following UST removal, a soil sample was collected from the base of the excavation 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 report is included in the UST Assessment Report presented in Appendix B. The laboratory analytical data report includes 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 location 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 180 Aspen Street (Formerly 379 Aspen Street) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated July 1, 2015, SCDHEC requested an IGWA for 180 Aspen Street (Formerly 379 Aspen Street) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

2.3 Groundwater Sampling

On November 12, 2015, a temporary monitoring well was installed at 180 Aspen Street (Formerly 379 Aspen Street), 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. The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – November and December 2015* (Resolution Consultants, 2016).

The sampling strategy for this phase of the investigation required a one-time sampling event of the temporarily installed monitoring well. Following well installation and development, groundwater samples were 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 *Initial Groundwater Investigation Report – November and December 2015* (Resolution Consultants, 2016).

2.4 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 180 Aspen Street (Formerly 379 Aspen Street) 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 at concentrations that present a potential risk to human health and the environment.

3.0 PROPERTY STATUS

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 180 Aspen Street (Formerly 379 Aspen Street). This NFA determination was obtained in a letter dated June 8, 2016. SCDHEC's NFA letter is provided in Appendix D.

4.0 REFERENCES

Marine Corps Air Station Beaufort, 2011. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 379 Aspen Street, Laurel Bay Military Housing Area*, September 2011.

Resolution Consultants, 2016. *Initial Groundwater Investigation Report – November and December 2015 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, April 2016.

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
180 Aspen Street (Formerly 379 Aspen Street)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs [1]	Results Sample Collected 06/14/11
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)		
Benzene	0.003	ND
Ethylbenzene	1.15	**0.675**
Naphthalene	0.036	**6.09**
Toluene	0.627	ND
Xylenes, Total	13.01	**5.55**
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)		
Benzo(a)anthracene	0.66	**0.476**
Benzo(b)fluoranthene	0.66	ND
Benzo(k)fluoranthene	0.66	ND
Chrysene	0.66	**0.587**
Dibenz(a,h)anthracene	0.66	ND

Notes:

[1] South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.0 and 3.1 (SCDHEC, May 2015 and SCDHEC, February 2016) and the Underground Storage Tank Assessment Guidelines (SCDHEC, February 2006).

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 - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Table 2
Laboratory Analytical Results - Groundwater
180 Aspen Street (Formerly 379 Aspen Street)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs [1]	Site-Specific Groundwater VISLs (µg/L)[2]	Results Sample Collected 11/12/15
Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)			
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	ND
Naphthalene	25	29.33	ND
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	ND
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (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

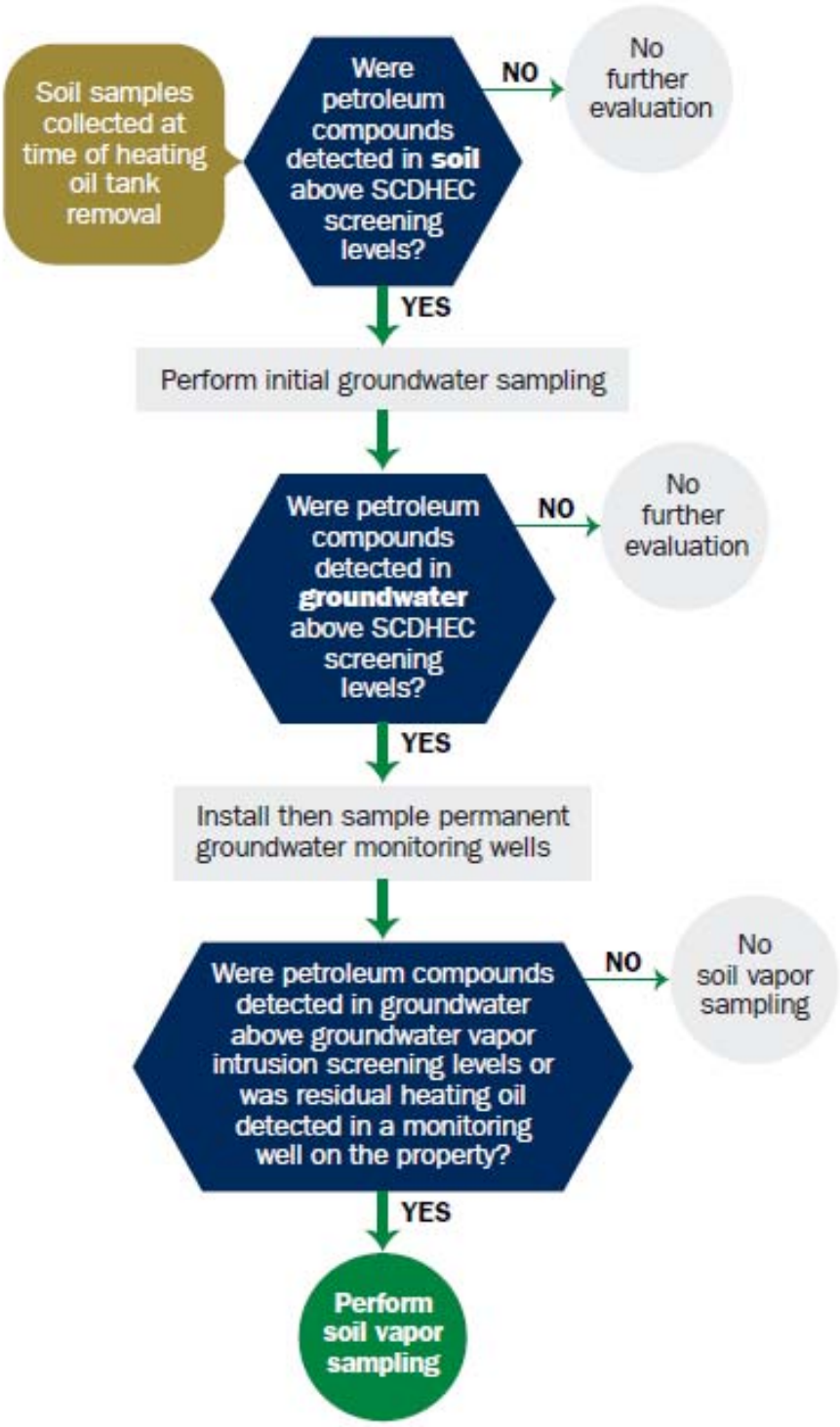
SCDHEC - South Carolina Department Of Health and Environmental Control

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 Report

CDM - AECOM
Multimedia Joint Venture

Rec'd 9/30/11

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

379 Aspen Street, 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).....	379Aspen				
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.....	Unknown				
G. Spill Prevention Equipment Y/N.....	5'9"				
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.....	6/14/11				
L. Visible Holes Y/N.....	Yes				
	Yes				

M. Method of disposal for any USTs removed from the ground (attach disposal manifests)
UST 379Aspen 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

379Aspen				
Steel & Copper				
N/A				
N/A				
Suction				
No				
Yes				
No				
Late 1950s				

A. Construction Material..(ex. Steel, FRP).....

B. Distance from UST to Dispenser.....

C. Number of Dispensers.....

D. Type of System Pressure or Suction.....

E. Was Piping Removed from the Ground? Y/N

F. Visible Corrosion or Pitting Y/N.....

G. Visible Holes Y/N.....

H. Age.....

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

Corrosion and pitting were found on the surface of the steel vent pipe. 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 #
379 Aspen	Excav at fill end	Soil	Sandy	5'9"	6/14/11 1200 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.

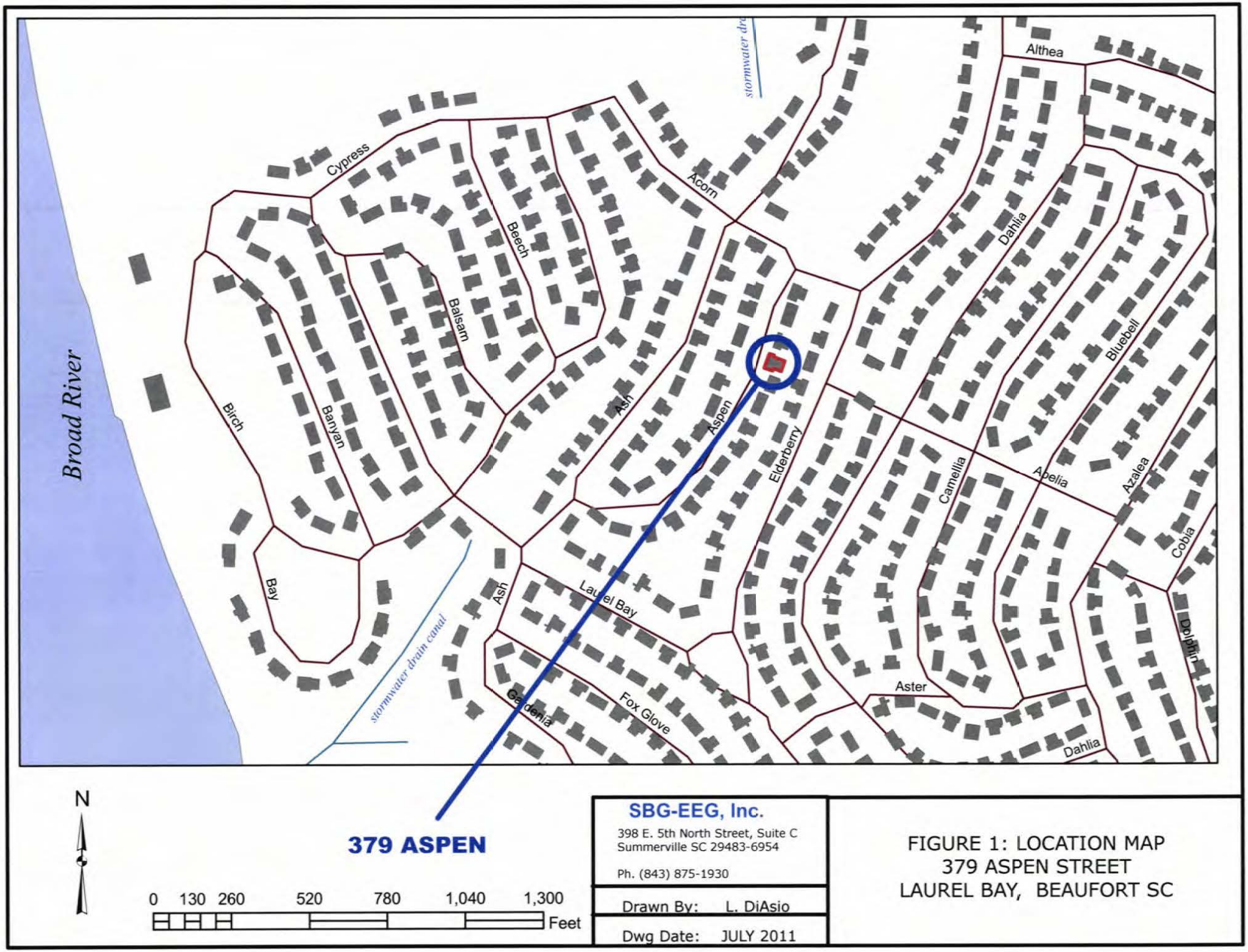
XII. RECEPTORS

	Yes	No
A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system? *~ 850' to drainage 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)

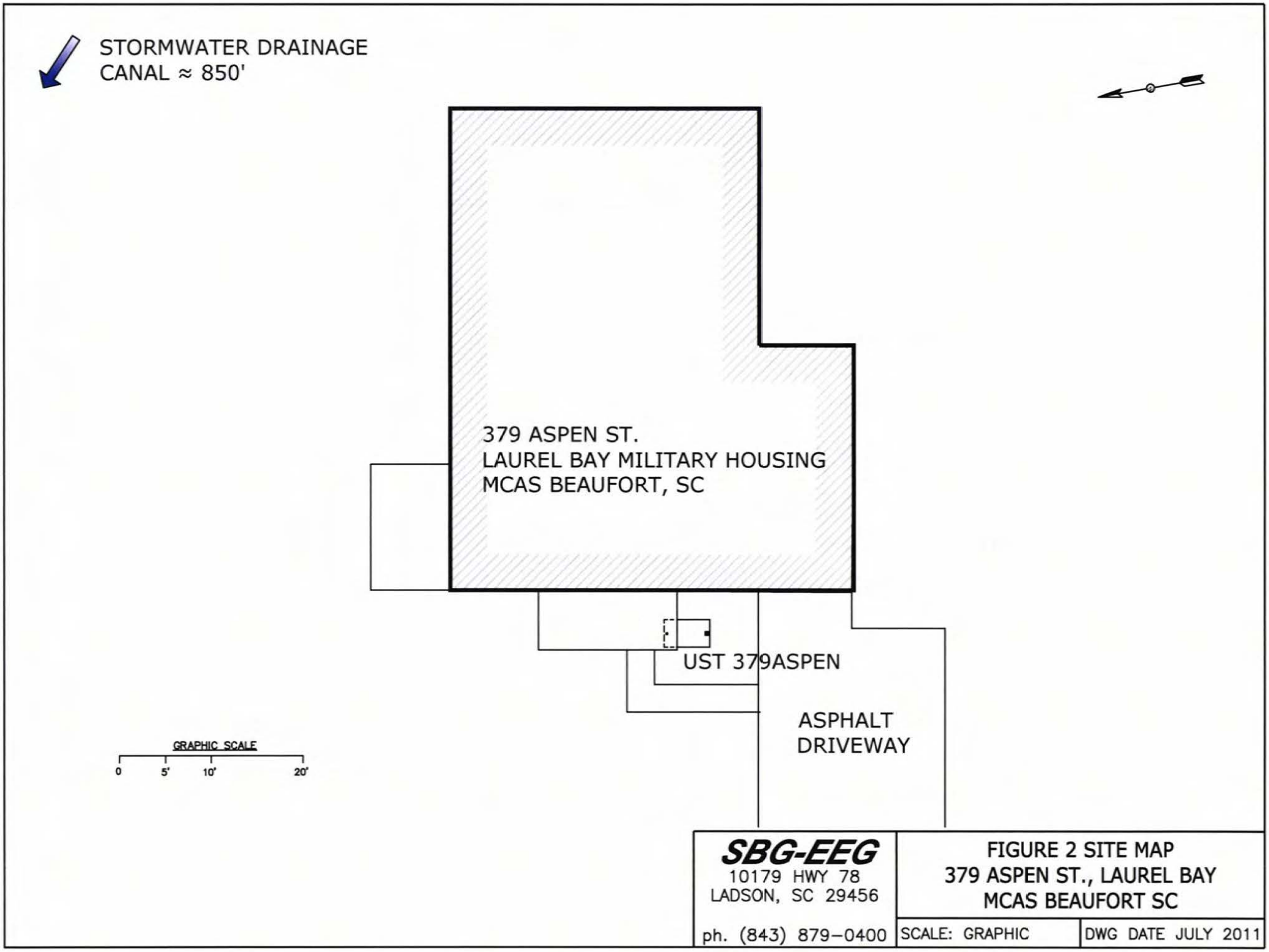


SBG-EEG, Inc.
398 E. 5th North Street, Suite C
Summerville SC 29483-6954
Ph. (843) 875-1930

Drawn By: L. DiAsio

Dwg Date: JULY 2011

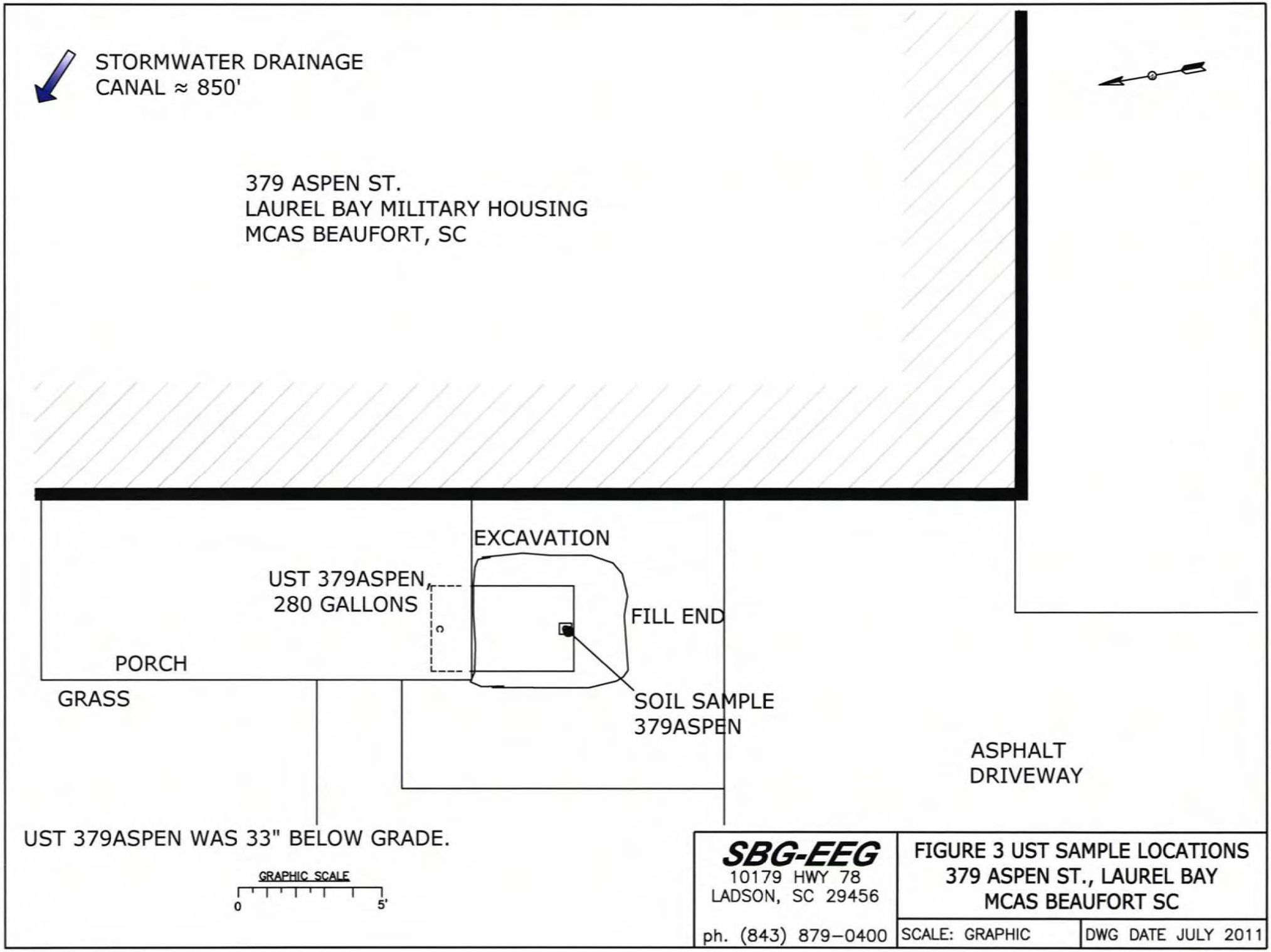
FIGURE 1: LOCATION MAP
379 ASPEN STREET
LAUREL BAY, BEAUFORT SC



SBG-EEG
10179 HWY 78
LADSON, SC 29456
ph. (843) 879-0400

FIGURE 2 SITE MAP
379 ASPEN ST., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC | DWG DATE JULY 2011



SBG-EEG
10179 HWY 78
LADSON, SC 29456
ph. (843) 879-0400

FIGURE 3 UST SAMPLE LOCATIONS
379 ASPEN ST., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC | DWG DATE JULY 2011

Picture 1: Location of UST 379Aspen.

Picture 2: UST 379Aspen excavation in progress.

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	379Aspen						
Benzene	ND						
Toluene	ND						
Ethylbenzene	0.675 mg/kg						
Xylenes	5.55 mg/kg						
Naphthalene	6.09 mg/kg						
Benzo (a) anthracene	0.476 mg/kg						
Benzo (b) fluoranthene	ND						
Benzo (k) fluoranthene	ND						
Chrysene	0.587 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: NUF3059
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:
07/05/2011 06:16:21 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.

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

Table of Contents

Sample Summary

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

TestAmerica Job ID: NUF3059

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
NUF3059-01	379 Aspen	Soil	06/14/11 12:00	06/18/11 09:10
NUF3059-02	381 Aspen	Soil	06/15/11 12:30	06/18/11 09:10

Qualifiers

GCMS Volatiles

Qualifier	Qualifier Description
J	Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
RL1	Reporting limit raised due to sample matrix effects.
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

GCMS Semivolatiles

Qualifier	Qualifier Description
I	Internal Standard recovery was outside of method limits. Matrix interference was confirmed by reanalysis.
J	Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
MNR	No results were reported for the MS/MSD. The sample used for the MS/MSD required dilution due to the sample matrix. Because of this, the spike compounds were diluted below the detection limit.
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

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.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

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

TestAmerica Job ID: NUF3059

Client Sample ID: 379 Aspen
Date Collected: 06/14/11 12:00
Date Received: 06/18/11 09:10

Lab Sample ID: NUF3059-01
Matrix: Soil
Percent Solids: 80.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00211	0.00116	mg/kg dry	☼	06/14/11 12:00	06/27/11 18:14	1.00

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*94*		*67 - 138*	*06/14/11 12:00*	*06/27/11 18:14*	*1.00*
Dibromofluoromethane	*104*		*75 - 125*	*06/14/11 12:00*	*06/27/11 18:14*	*1.00*
Toluene-d8	*782*	*ZX*	*76 - 129*	*06/14/11 12:00*	*06/27/11 18:14*	*1.00*
4-Bromofluorobenzene	*203*	*ZX*	*67 - 147*	*06/14/11 12:00*	*06/27/11 18:14*	*1.00*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**0.675**		0.123	0.0600	mg/kg dry	☼	06/14/11 12:00	06/28/11 17:06	50.0
Naphthalene	**6.09**		0.306	0.104	mg/kg dry	☼	06/14/11 12:00	06/28/11 17:06	50.0
Toluene	ND	RL1	0.123	0.0545	mg/kg dry	☼	06/14/11 12:00	06/28/11 17:06	50.0
Xylenes, total	**5.55**		0.306	0.116	mg/kg dry	☼	06/14/11 12:00	06/28/11 17:06	50.0

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*86*		*67 - 138*	*06/14/11 12:00*	*06/28/11 17:06*	*50.0*
Dibromofluoromethane	*79*		*75 - 125*	*06/14/11 12:00*	*06/28/11 17:06*	*50.0*
Toluene-d8	*106*		*76 - 129*	*06/14/11 12:00*	*06/28/11 17:06*	*50.0*
4-Bromofluorobenzene	*132*		*67 - 147*	*06/14/11 12:00*	*06/28/11 17:06*	*50.0*

Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.414	0.0866	mg/kg dry	☼	06/26/11 13:35	06/28/11 11:58	5.00
Acenaphthylene	ND		0.414	0.124	mg/kg dry	☼	06/26/11 13:35	06/28/11 11:58	5.00
Anthracene	**1.01**		0.414	0.0556	mg/kg dry	☼	06/26/11 13:35	06/28/11 11:58	5.00
Benzo (a) anthracene	**0.476**		0.414	0.0680	mg/kg dry	☼	06/26/11 13:35	06/28/11 11:58	5.00
Benzo (a) pyrene	**0.206**	**J**	0.414	0.0495	mg/kg dry	☼	06/26/11 13:35	06/28/11 11:58	5.00
Benzo (b) fluoranthene	ND		0.414	0.235	mg/kg dry	☼	06/26/11 13:35	06/28/11 11:58	5.00
Benzo (g,h,i) perylene	ND		0.414	0.0556	mg/kg dry	☼	06/26/11 13:35	06/28/11 11:58	5.00
Benzo (k) fluoranthene	ND		0.414	0.229	mg/kg dry	☼	06/26/11 13:35	06/28/11 11:58	5.00
Chrysene	**0.587**		0.414	0.192	mg/kg dry	☼	06/26/11 13:35	06/28/11 11:58	5.00
Dibenz (a,h) anthracene	ND		0.414	0.0927	mg/kg dry	☼	06/26/11 13:35	06/28/11 11:58	5.00
Fluoranthene	**1.00**		0.414	0.0680	mg/kg dry	☼	06/26/11 13:35	06/28/11 11:58	5.00
Fluorene	**4.11**		0.414	0.124	mg/kg dry	☼	06/26/11 13:35	06/28/11 11:58	5.00
Indeno (1,2,3-cd) pyrene	ND		0.414	0.192	mg/kg dry	☼	06/26/11 13:35	06/28/11 11:58	5.00
Naphthalene	**3.53**		0.414	0.0866	mg/kg dry	☼	06/26/11 13:35	06/28/11 11:58	5.00
Phenanthrene	**9.76**		0.414	0.0618	mg/kg dry	☼	06/26/11 13:35	06/28/11 11:58	5.00
Pyrene	**2.24**		0.414	0.142	mg/kg dry	☼	06/26/11 13:35	06/28/11 11:58	5.00
1-Methylnaphthalene	**13.2**		0.414	0.0742	mg/kg dry	☼	06/26/11 13:35	06/28/11 11:58	5.00
2-Methylnaphthalene	**20.2**		0.414	0.130	mg/kg dry	☼	06/26/11 13:35	06/28/11 11:58	5.00

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*78*		*18 - 120*	*06/26/11 13:35*	*06/28/11 11:58*	*5.00*
2-Fluorobiphenyl	*46*		*14 - 120*	*06/26/11 13:35*	*06/28/11 11:58*	*5.00*
Nitrobenzene-d5	*15*	*ZX*	*17 - 120*	*06/26/11 13:35*	*06/28/11 11:58*	*5.00*

Method: SW-846 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	**80.5**		0.500	0.500	%		06/28/11 16:00	06/29/11 11:43	1.00

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

TestAmerica Job ID: NUF3059

Client Sample ID: 381 Aspen
Date Collected: 06/15/11 12:30
Date Received: 06/18/11 09:10

Lab Sample ID: NUF3059-02
Matrix: Soil
Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00228	0.00126	mg/kg dry	☼	06/15/11 12:30	06/28/11 15:31	1.00
Ethylbenzene	ND		0.00228	0.00112	mg/kg dry	☼	06/15/11 12:30	06/28/11 15:31	1.00
Naphthalene	**0.00833**		0.00571	0.00194	mg/kg dry	☼	06/15/11 12:30	06/28/11 15:31	1.00
Toluene	ND		0.00228	0.00102	mg/kg dry	☼	06/15/11 12:30	06/28/11 15:31	1.00
Xylenes, total	**0.00273**	**J**	0.00571	0.00217	mg/kg dry	☼	06/15/11 12:30	06/28/11 15:31	1.00

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*102*		*67 - 138*	*06/15/11 12:30*	*06/28/11 15:31*	*1.00*
Dibromofluoromethane	*101*		*75 - 125*	*06/15/11 12:30*	*06/28/11 15:31*	*1.00*
Toluene-d8	*108*		*76 - 129*	*06/15/11 12:30*	*06/28/11 15:31*	*1.00*
4-Bromofluorobenzene	*126*		*67 - 147*	*06/15/11 12:30*	*06/28/11 15:31*	*1.00*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0782	0.0163	mg/kg dry	☼	06/26/11 13:35	06/28/11 01:45	1.00
Acenaphthylene	ND		0.0782	0.0233	mg/kg dry	☼	06/26/11 13:35	06/28/11 01:45	1.00
Anthracene	ND		0.0782	0.0105	mg/kg dry	☼	06/26/11 13:35	06/28/11 01:45	1.00
Benzo (a) anthracene	ND		0.0782	0.0128	mg/kg dry	☼	06/26/11 13:35	06/28/11 01:45	1.00
Benzo (a) pyrene	ND		0.0782	0.00933	mg/kg dry	☼	06/26/11 13:35	06/28/11 01:45	1.00
Benzo (b) fluoranthene	ND		0.0782	0.0443	mg/kg dry	☼	06/26/11 13:35	06/28/11 01:45	1.00
Benzo (g,h,i) perylene	ND		0.0782	0.0105	mg/kg dry	☼	06/26/11 13:35	06/28/11 01:45	1.00
Benzo (k) fluoranthene	ND		0.0782	0.0432	mg/kg dry	☼	06/26/11 13:35	06/28/11 01:45	1.00
Chrysene	**0.0478**	**J**	0.0782	0.0362	mg/kg dry	☼	06/26/11 13:35	06/28/11 01:45	1.00
Dibenz (a,h) anthracene	ND		0.0782	0.0175	mg/kg dry	☼	06/26/11 13:35	06/28/11 01:45	1.00
Fluoranthene	**0.0482**	**J**	0.0782	0.0128	mg/kg dry	☼	06/26/11 13:35	06/28/11 01:45	1.00
Fluorene	ND		0.0782	0.0233	mg/kg dry	☼	06/26/11 13:35	06/28/11 01:45	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0782	0.0362	mg/kg dry	☼	06/26/11 13:35	06/28/11 01:45	1.00
Naphthalene	ND		0.0782	0.0163	mg/kg dry	☼	06/26/11 13:35	06/28/11 01:45	1.00
Phenanthrene	ND		0.0782	0.0117	mg/kg dry	☼	06/26/11 13:35	06/28/11 01:45	1.00
Pyrene	**0.0863**		0.0782	0.0268	mg/kg dry	☼	06/26/11 13:35	06/28/11 01:45	1.00
1-Methylnaphthalene	ND		0.0782	0.0140	mg/kg dry	☼	06/26/11 13:35	06/28/11 01:45	1.00
2-Methylnaphthalene	ND		0.0782	0.0245	mg/kg dry	☼	06/26/11 13:35	06/28/11 01:45	1.00

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*66*		*18 - 120*	*06/26/11 13:35*	*06/28/11 01:45*	*1.00*
2-Fluorobiphenyl	*49*		*14 - 120*	*06/26/11 13:35*	*06/28/11 01:45*	*1.00*
Nitrobenzene-d5	*47*		*17 - 120*	*06/26/11 13:35*	*06/28/11 01:45*	*1.00*

Method: SW-846 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	**83.4**		0.500	0.500	%		06/28/11 16:00	06/29/11 11:43	1.00

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

Lab Sample ID: 11F6770-BLK1
Matrix: Soil
Analysis Batch: U011504

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 11F6770_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		06/27/11 10:14	06/27/11 12:51	1.00
Ethylbenzene	ND		0.00200	0.000980	mg/kg wet		06/27/11 10:14	06/27/11 12:51	1.00
Naphthalene	ND		0.00500	0.00170	mg/kg wet		06/27/11 10:14	06/27/11 12:51	1.00
Toluene	ND		0.00200	0.000890	mg/kg wet		06/27/11 10:14	06/27/11 12:51	1.00
Xylenes, total	ND		0.00500	0.00190	mg/kg wet		06/27/11 10:14	06/27/11 12:51	1.00

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*112*		*67 - 138*	*06/27/11 10:14*	*06/27/11 12:51*	*1.00*
Dibromofluoromethane	*111*		*75 - 125*	*06/27/11 10:14*	*06/27/11 12:51*	*1.00*
Toluene-d8	*102*		*76 - 129*	*06/27/11 10:14*	*06/27/11 12:51*	*1.00*
4-Bromofluorobenzene	*107*		*67 - 147*	*06/27/11 10:14*	*06/27/11 12:51*	*1.00*

Lab Sample ID: 11F6770-BLK2
Matrix: Soil
Analysis Batch: U011504

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 11F6770_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0550	mg/kg wet		06/27/11 10:14	06/27/11 13:23	50.0
Ethylbenzene	ND		0.100	0.0490	mg/kg wet		06/27/11 10:14	06/27/11 13:23	50.0
Naphthalene	ND		0.250	0.0850	mg/kg wet		06/27/11 10:14	06/27/11 13:23	50.0
Toluene	ND		0.100	0.0445	mg/kg wet		06/27/11 10:14	06/27/11 13:23	50.0
Xylenes, total	ND		0.250	0.0950	mg/kg wet		06/27/11 10:14	06/27/11 13:23	50.0

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*95*		*67 - 138*	*06/27/11 10:14*	*06/27/11 13:23*	*50.0*
Dibromofluoromethane	*89*		*75 - 125*	*06/27/11 10:14*	*06/27/11 13:23*	*50.0*
Toluene-d8	*103*		*76 - 129*	*06/27/11 10:14*	*06/27/11 13:23*	*50.0*
4-Bromofluorobenzene	*105*		*67 - 147*	*06/27/11 10:14*	*06/27/11 13:23*	*50.0*

Lab Sample ID: 11F6770-BS1
Matrix: Soil
Analysis Batch: U011504

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 11F6770_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Benzene	50.0	51.6		ug/kg		103	78 - 126
Ethylbenzene	50.0	60.6		ug/kg		121	79 - 130
Naphthalene	50.0	60.5		ug/kg		121	72 - 150
Toluene	50.0	57.1		ug/kg		114	76 - 126
Xylenes, total	150	181		ug/kg		120	80 - 130

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4	*91*		*67 - 138*
Dibromofluoromethane	*96*		*75 - 125*
Toluene-d8	*102*		*76 - 129*
4-Bromofluorobenzene	*107*		*67 - 147*

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

Lab Sample ID: 11F6770-BSD1
Matrix: Soil
Analysis Batch: U011504

Client Sample ID: Lab Control Sample Dup
Prep Type: Total
Prep Batch: 11F6770_P

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene	50.0	60.7		ug/kg		121	78 - 126	16	50
Ethylbenzene	50.0	59.7		ug/kg		119	79 - 130	1	50
Naphthalene	50.0	57.9		ug/kg		116	72 - 150	4	50
Toluene	50.0	56.7		ug/kg		113	76 - 126	0.7	50
Xylenes, total	150	179		ug/kg		119	80 - 130	1	50

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
1,2-Dichloroethane-d4	*109*		*67 - 138*
Dibromofluoromethane	*113*		*75 - 125*
Toluene-d8	*103*		*76 - 129*
4-Bromofluorobenzene	*106*		*67 - 147*

Lab Sample ID: 11F6770-MS1
Matrix: Soil
Analysis Batch: U011504

Client Sample ID: Matrix Spike
Prep Type: Total
Prep Batch: 11F6770_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Benzene	0.00265		0.0482	0.0499		mg/kg dry	☼	98	42 - 141
Ethylbenzene	0.00285		0.0482	0.0575		mg/kg dry	☼	113	21 - 165
Naphthalene	ND		0.0482	0.0481		mg/kg dry	☼	100	10 - 160
Toluene	0.00833		0.0482	0.0608		mg/kg dry	☼	109	45 - 145
Xylenes, total	0.00714		0.145	0.169		mg/kg dry	☼	112	31 - 159

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
1,2-Dichloroethane-d4	*91*		*67 - 138*
Dibromofluoromethane	*93*		*75 - 125*
Toluene-d8	*106*		*76 - 129*
4-Bromofluorobenzene	*110*		*67 - 147*

Lab Sample ID: 11F6770-MSD1
Matrix: Soil
Analysis Batch: U011504

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total
Prep Batch: 11F6770_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	0.00265		0.0507	0.0649		mg/kg dry	☼	123	42 - 141	26	50
Ethylbenzene	0.00285		0.0507	0.0647		mg/kg dry	☼	122	21 - 165	12	50
Naphthalene	ND		0.0507	0.0568		mg/kg dry	☼	112	10 - 160	17	50
Toluene	0.00833		0.0507	0.0737		mg/kg dry	☼	129	45 - 145	19	50
Xylenes, total	0.00714		0.152	0.190		mg/kg dry	☼	120	31 - 159	11	50

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
1,2-Dichloroethane-d4	*110*		*67 - 138*
Dibromofluoromethane	*111*		*75 - 125*
Toluene-d8	*111*		*76 - 129*
4-Bromofluorobenzene	*123*		*67 - 147*

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

Lab Sample ID: 11F7149-BLK1
Matrix: Soil
Analysis Batch: U011573

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 11F7149_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		06/28/11 11:50	06/28/11 14:28	1.00
Ethylbenzene	ND		0.00200	0.000980	mg/kg wet		06/28/11 11:50	06/28/11 14:28	1.00
Naphthalene	ND		0.00500	0.00170	mg/kg wet		06/28/11 11:50	06/28/11 14:28	1.00
Toluene	ND		0.00200	0.000890	mg/kg wet		06/28/11 11:50	06/28/11 14:28	1.00
Xylenes, total	ND		0.00500	0.00190	mg/kg wet		06/28/11 11:50	06/28/11 14:28	1.00

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*97*		*67 - 138*	*06/28/11 11:50*	*06/28/11 14:28*	*1.00*
Dibromofluoromethane	*96*		*75 - 125*	*06/28/11 11:50*	*06/28/11 14:28*	*1.00*
Toluene-d8	*103*		*76 - 129*	*06/28/11 11:50*	*06/28/11 14:28*	*1.00*
4-Bromofluorobenzene	*110*		*67 - 147*	*06/28/11 11:50*	*06/28/11 14:28*	*1.00*

Lab Sample ID: 11F7149-BLK2
Matrix: Soil
Analysis Batch: U011573

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 11F7149_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0550	mg/kg wet		06/28/11 11:50	06/28/11 15:00	50.0
Ethylbenzene	ND		0.100	0.0490	mg/kg wet		06/28/11 11:50	06/28/11 15:00	50.0
Naphthalene	ND		0.250	0.0850	mg/kg wet		06/28/11 11:50	06/28/11 15:00	50.0
Toluene	ND		0.100	0.0445	mg/kg wet		06/28/11 11:50	06/28/11 15:00	50.0
Xylenes, total	ND		0.250	0.0950	mg/kg wet		06/28/11 11:50	06/28/11 15:00	50.0

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*94*		*67 - 138*	*06/28/11 11:50*	*06/28/11 15:00*	*50.0*
Dibromofluoromethane	*90*		*75 - 125*	*06/28/11 11:50*	*06/28/11 15:00*	*50.0*
Toluene-d8	*103*		*76 - 129*	*06/28/11 11:50*	*06/28/11 15:00*	*50.0*
4-Bromofluorobenzene	*108*		*67 - 147*	*06/28/11 11:50*	*06/28/11 15:00*	*50.0*

Lab Sample ID: 11F7149-BS1
Matrix: Soil
Analysis Batch: U011573

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 11F7149_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Benzene	50.0	53.0		ug/kg		106	78 - 126
Ethylbenzene	50.0	58.0		ug/kg		116	79 - 130
Naphthalene	50.0	57.3		ug/kg		115	72 - 150
Toluene	50.0	57.0		ug/kg		114	76 - 126
Xylenes, total	150	178		ug/kg		119	80 - 130

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4	*97*		*67 - 138*
Dibromofluoromethane	*100*		*75 - 125*
Toluene-d8	*102*		*76 - 129*
4-Bromofluorobenzene	*106*		*67 - 147*

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

Lab Sample ID: 11F7149-BSD1
Matrix: Soil
Analysis Batch: U011573

Client Sample ID: Lab Control Sample Dup
Prep Type: Total
Prep Batch: 11F7149_P

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene			50.0	52.4		ug/kg		105	78 - 126	1	50
Ethylbenzene			50.0	60.2		ug/kg		120	79 - 130	4	50
Naphthalene			50.0	58.9		ug/kg		118	72 - 150	3	50
Toluene			50.0	57.8		ug/kg		116	76 - 126	1	50
Xylenes, total			150	179		ug/kg		120	80 - 130	0.8	50

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
1,2-Dichloroethane-d4	*93*		*67 - 138*
Dibromofluoromethane	*98*		*75 - 125*
Toluene-d8	*105*		*76 - 129*
4-Bromofluorobenzene	*108*		*67 - 147*

Lab Sample ID: 11F7149-MS1
Matrix: Soil
Analysis Batch: U011573

Client Sample ID: 379 Aspen
Prep Type: Total
Prep Batch: 11F7149_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits		
Benzene	ND		61.3	67.0		mg/kg dry	☼	109	42 - 141		
Ethylbenzene	ND		61.3	77.1		mg/kg dry	☼	126	21 - 165		
Naphthalene	8.15		61.3	76.4		mg/kg dry	☼	111	10 - 160		
Toluene	ND		61.3	72.5		mg/kg dry	☼	118	45 - 145		
Xylenes, total	7.13		184	237		mg/kg dry	☼	125	31 - 159		

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
1,2-Dichloroethane-d4	*90*		*67 - 138*
Dibromofluoromethane	*95*		*75 - 125*
Toluene-d8	*103*		*76 - 129*
4-Bromofluorobenzene	*106*		*67 - 147*

Lab Sample ID: 11F7149-MSD1
Matrix: Soil
Analysis Batch: U011573

Client Sample ID: 379 Aspen
Prep Type: Total
Prep Batch: 11F7149_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		61.3	63.3		mg/kg dry	☼	103	42 - 141	6	50
Ethylbenzene	ND		61.3	76.0		mg/kg dry	☼	124	21 - 165	2	50
Naphthalene	8.15		61.3	79.7		mg/kg dry	☼	117	10 - 160	4	50
Toluene	ND		61.3	69.7		mg/kg dry	☼	114	45 - 145	4	50
Xylenes, total	7.13		184	225		mg/kg dry	☼	119	31 - 159	5	50

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
1,2-Dichloroethane-d4	*85*		*67 - 138*
Dibromofluoromethane	*89*		*75 - 125*
Toluene-d8	*103*		*76 - 129*
4-Bromofluorobenzene	*112*		*67 - 147*

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

Lab Sample ID: 11F5035-BLK1
Matrix: Soil
Analysis Batch: 11F5035

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 11F5035_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0140	mg/kg wet		06/26/11 13:35	06/28/11 00:04	1.00
Acenaphthylene	ND		0.0670	0.0200	mg/kg wet		06/26/11 13:35	06/28/11 00:04	1.00
Anthracene	ND		0.0670	0.00900	mg/kg wet		06/26/11 13:35	06/28/11 00:04	1.00
Benzo (a) anthracene	ND		0.0670	0.0110	mg/kg wet		06/26/11 13:35	06/28/11 00:04	1.00
Benzo (a) pyrene	ND		0.0670	0.00800	mg/kg wet		06/26/11 13:35	06/28/11 00:04	1.00
Benzo (b) fluoranthene	ND		0.0670	0.0380	mg/kg wet		06/26/11 13:35	06/28/11 00:04	1.00
Benzo (g,h,i) perylene	ND		0.0670	0.00900	mg/kg wet		06/26/11 13:35	06/28/11 00:04	1.00
Benzo (k) fluoranthene	ND		0.0670	0.0370	mg/kg wet		06/26/11 13:35	06/28/11 00:04	1.00
Chrysene	ND		0.0670	0.0310	mg/kg wet		06/26/11 13:35	06/28/11 00:04	1.00
Dibenz (a,h) anthracene	ND		0.0670	0.0150	mg/kg wet		06/26/11 13:35	06/28/11 00:04	1.00
Fluoranthene	ND		0.0670	0.0110	mg/kg wet		06/26/11 13:35	06/28/11 00:04	1.00
Fluorene	ND		0.0670	0.0200	mg/kg wet		06/26/11 13:35	06/28/11 00:04	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0670	0.0310	mg/kg wet		06/26/11 13:35	06/28/11 00:04	1.00
Naphthalene	ND		0.0670	0.0140	mg/kg wet		06/26/11 13:35	06/28/11 00:04	1.00
Phenanthrene	ND		0.0670	0.0100	mg/kg wet		06/26/11 13:35	06/28/11 00:04	1.00
Pyrene	ND		0.0670	0.0230	mg/kg wet		06/26/11 13:35	06/28/11 00:04	1.00
1-Methylnaphthalene	ND		0.0670	0.0120	mg/kg wet		06/26/11 13:35	06/28/11 00:04	1.00
2-Methylnaphthalene	ND		0.0670	0.0210	mg/kg wet		06/26/11 13:35	06/28/11 00:04	1.00

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*88*		*18 - 120*	*06/26/11 13:35*	*06/28/11 00:04*	*1.00*
2-Fluorobiphenyl	*63*		*14 - 120*	*06/26/11 13:35*	*06/28/11 00:04*	*1.00*
Nitrobenzene-d5	*60*		*17 - 120*	*06/26/11 13:35*	*06/28/11 00:04*	*1.00*

Lab Sample ID: 11F5035-BS1
Matrix: Soil
Analysis Batch: 11F5035

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 11F5035_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Acenaphthene	1.67	1.26	MNR	mg/kg wet		76	49 - 120
Acenaphthylene	1.67	1.22	MNR	mg/kg wet		73	52 - 120
Anthracene	1.67	1.35	MNR	mg/kg wet		81	58 - 120
Benzo (a) anthracene	1.67	1.32	MNR	mg/kg wet		79	57 - 120
Benzo (a) pyrene	1.67	1.45	MNR	mg/kg wet		87	55 - 120
Benzo (b) fluoranthene	1.67	1.38	MNR	mg/kg wet		83	51 - 123
Benzo (g,h,i) perylene	1.67	1.17	MNR	mg/kg wet		70	49 - 121
Benzo (k) fluoranthene	1.67	1.20	MNR	mg/kg wet		72	42 - 129
Chrysene	1.67	1.29	MNR	mg/kg wet		77	55 - 120
Dibenz (a,h) anthracene	1.67	1.25	MNR	mg/kg wet		75	50 - 123
Fluoranthene	1.67	1.47	MNR	mg/kg wet		88	58 - 120
Fluorene	1.67	1.35	MNR	mg/kg wet		81	54 - 120
Indeno (1,2,3-cd) pyrene	1.67	1.25	MNR	mg/kg wet		75	50 - 122
Naphthalene	1.67	1.16	MNR	mg/kg wet		70	28 - 120
Phenanthrene	1.67	1.29	MNR	mg/kg wet		77	56 - 120
Pyrene	1.67	1.30	MNR	mg/kg wet		78	56 - 120
1-Methylnaphthalene	1.67	0.948		mg/kg wet		57	36 - 120
2-Methylnaphthalene	1.67	1.13		mg/kg wet		68	36 - 120

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

Lab Sample ID: 11F5035-BS1
Matrix: Soil
Analysis Batch: 11F5035

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 11F5035_P

Surrogate	LCS % Recovery	LCS Qualifier	Limits
Terphenyl-d14	79		18 - 120
2-Fluorobiphenyl	59		14 - 120
Nitrobenzene-d5	53		17 - 120

Lab Sample ID: 11F5035-MS1
Matrix: Soil
Analysis Batch: 11F5035

Client Sample ID: 379 Aspen
Prep Type: Total
Prep Batch: 11F5035_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Acenaphthene	1.56		2.06	43.7	I	mg/kg dry	☼	2050	42 - 120
Acenaphthylene	0.933		2.06	50.9	I	mg/kg dry	☼	2420	32 - 120
Anthracene	7.61		2.06	14.1	I	mg/kg dry	☼	315	10 - 200
Benzo (a) anthracene	0.467		2.06	2.17	I	mg/kg dry	☼	82	41 - 120
Benzo (a) pyrene	0.199		2.06	1.89	I	mg/kg dry	☼	82	33 - 121
Benzo (b) fluoranthene	0.397		2.06	3.42	I	mg/kg dry	☼	147	26 - 137
Benzo (g,h,i) perylene	0.0878		2.06	1.86	I	mg/kg dry	☼	86	21 - 124
Benzo (k) fluoranthene	0.449		2.06	3.87	I	mg/kg dry	☼	166	14 - 140
Chrysene	0.515		2.06	2.30	I	mg/kg dry	☼	87	28 - 123
Dibenz (a,h) anthracene	ND		2.06	1.72	I	mg/kg dry	☼	83	25 - 127
Fluoranthene	0.349		2.06	0.238	I	mg/kg dry	☼	-5	38 - 120
Fluorene	0.260		2.06	125	I	mg/kg dry	☼	6060	41 - 120
Indeno (1,2,3-cd) pyrene	0.0812		2.06	1.76	I	mg/kg dry	☼	81	25 - 123
Naphthalene	4.63		2.06	5.35	I	mg/kg dry	☼	35	25 - 120
Phenanthrene	7.41		2.06	13.7	I	mg/kg dry	☼	307	37 - 120
Pyrene	0.237		2.06	9.17	I	mg/kg dry	☼	433	29 - 125
1-Methylnaphthalene	15.8		2.06	1.90		mg/kg dry	☼	-672	19 - 120
2-Methylnaphthalene	23.1		2.06	8.91		mg/kg dry	☼	-690	11 - 120

Surrogate	Matrix Spike % Recovery	Matrix Spike Qualifier	Limits
Terphenyl-d14	154		18 - 120
2-Fluorobiphenyl	1320		14 - 120
Nitrobenzene-d5	30		17 - 120

Lab Sample ID: 11F5035-MSD1
Matrix: Soil
Analysis Batch: 11F5035

Client Sample ID: 379 Aspen
Prep Type: Total
Prep Batch: 11F5035_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	1.56		2.05	1.59	I	mg/kg dry	☼	1	42 - 120	186	40
Acenaphthylene	0.933		2.05	1.13	I	mg/kg dry	☼	10	32 - 120	191	30
Anthracene	7.61		2.05	8.71	I	mg/kg dry	☼	54	10 - 200	47	50
Benzo (a) anthracene	0.467		2.05	1.81	I	mg/kg dry	☼	65	41 - 120	18	30
Benzo (a) pyrene	0.199		2.05	1.66	I	mg/kg dry	☼	71	33 - 121	13	33
Benzo (b) fluoranthene	0.397		2.05	1.68	I	mg/kg dry	☼	63	26 - 137	68	42
Benzo (g,h,i) perylene	0.0878		2.05	1.60	I	mg/kg dry	☼	74	21 - 124	15	32
Benzo (k) fluoranthene	0.449		2.05	1.91	I	mg/kg dry	☼	71	14 - 140	68	39
Chrysene	0.515		2.05	1.92	I	mg/kg dry	☼	69	28 - 123	18	34
Dibenz (a,h) anthracene	ND		2.05	1.52	I	mg/kg dry	☼	74	25 - 127	12	31
Fluoranthene	0.349		2.05	0.229	I	mg/kg dry	☼	-6	38 - 120	4	35

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

Lab Sample ID: 11F5035-MSD1
Matrix: Soil
Analysis Batch: 11F5035

Client Sample ID: 379 Aspen
Prep Type: Total
Prep Batch: 11F5035_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	0.260		2.05	0.298	I	mg/kg dry	☼	2	41 - 120	199	37
Indeno (1,2,3-cd) pyrene	0.0812		2.05	1.57	I	mg/kg dry	☼	73	25 - 123	11	32
Naphthalene	4.63		2.05	5.85	I	mg/kg dry	☼	60	25 - 120	9	42
Phenanthrene	7.41		2.05	8.48	I	mg/kg dry	☼	52	37 - 120	47	32
Pyrene	0.237		2.05	0.272	I	mg/kg dry	☼	2	29 - 125	188	40
1-Methylnaphthalene	15.8		2.05	16.5	I	mg/kg dry	☼	34	19 - 120	159	45
2-Methylnaphthalene	23.1		2.05	23.7	I	mg/kg dry	☼	25	11 - 120	91	50

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
Terphenyl-d14	*136*		*18 - 120*
2-Fluorobiphenyl	*65*		*14 - 120*
Nitrobenzene-d5	*57*		*17 - 120*

Method: SW-846 - General Chemistry Parameters

Lab Sample ID: 11F6205-DUP1
Matrix: Soil
Analysis Batch: 11F6205

Client Sample ID: Duplicate
Prep Type: Total
Prep Batch: 11F6205_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
% Dry Solids	82.2		91.8		%		11	20

QC Association Summary

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

TestAmerica Job ID: NUF3059

GCMS Volatiles

Analysis Batch: U011504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11F6770-BS1	Lab Control Sample	Total	Soil	SW846 8260B	11F6770_P
11F6770-BSD1	Lab Control Sample Dup	Total	Soil	SW846 8260B	11F6770_P
11F6770-BLK1	Method Blank	Total	Soil	SW846 8260B	11F6770_P
11F6770-BLK2	Method Blank	Total	Soil	SW846 8260B	11F6770_P
NUF3059-01	379 Aspen	Total	Soil	SW846 8260B	11F6770_P
11F6770-MS1	Matrix Spike	Total	Soil	SW846 8260B	11F6770_P
11F6770-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8260B	11F6770_P

Analysis Batch: U011573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11F7149-BS1	Lab Control Sample	Total	Soil	SW846 8260B	11F7149_P
11F7149-BSD1	Lab Control Sample Dup	Total	Soil	SW846 8260B	11F7149_P
11F7149-BLK1	Method Blank	Total	Soil	SW846 8260B	11F7149_P
11F7149-BLK2	Method Blank	Total	Soil	SW846 8260B	11F7149_P
NUF3059-02 - RE1	381 Aspen	Total	Soil	SW846 8260B	11F7149_P
NUF3059-01 - RE1	379 Aspen	Total	Soil	SW846 8260B	11F7149_P
11F7149-MS1	379 Aspen	Total	Soil	SW846 8260B	11F7149_P
11F7149-MSD1	379 Aspen	Total	Soil	SW846 8260B	11F7149_P

Prep Batch: 11F6770_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11F6770-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11F6770-BSD1	Lab Control Sample Dup	Total	Soil	EPA 5035	
11F6770-BLK1	Method Blank	Total	Soil	EPA 5035	
11F6770-BLK2	Method Blank	Total	Soil	EPA 5035	
NUF3059-01	379 Aspen	Total	Soil	EPA 5035	
11F6770-MS1	Matrix Spike	Total	Soil	EPA 5035	
11F6770-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 5035	

Prep Batch: 11F7149_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11F7149-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11F7149-BSD1	Lab Control Sample Dup	Total	Soil	EPA 5035	
11F7149-BLK1	Method Blank	Total	Soil	EPA 5035	
11F7149-BLK2	Method Blank	Total	Soil	EPA 5035	
NUF3059-02 - RE1	381 Aspen	Total	Soil	EPA 5035	
NUF3059-01 - RE1	379 Aspen	Total	Soil	EPA 5035	
11F7149-MS1	379 Aspen	Total	Soil	EPA 5035	
11F7149-MSD1	379 Aspen	Total	Soil	EPA 5035	

GCMS Semivolatiles

Analysis Batch: 11F5035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11F5035-BLK1	Method Blank	Total	Soil	SW846 8270D	11F5035_P
11F5035-BS1	Lab Control Sample	Total	Soil	SW846 8270D	11F5035_P
11F5035-MS1	379 Aspen	Total	Soil	SW846 8270D	11F5035_P
11F5035-MSD1	379 Aspen	Total	Soil	SW846 8270D	11F5035_P
NUF3059-02	381 Aspen	Total	Soil	SW846 8270D	11F5035_P
NUF3059-01 - RE1	379 Aspen	Total	Soil	SW846 8270D	11F5035_P

GCMS Semivolatiles (Continued)

Prep Batch: 11F5035_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11F5035-BLK1	Method Blank	Total	Soil	EPA 3550C	
11F5035-BS1	Lab Control Sample	Total	Soil	EPA 3550C	
11F5035-MS1	379 Aspen	Total	Soil	EPA 3550C	
11F5035-MSD1	379 Aspen	Total	Soil	EPA 3550C	
NUF3059-02	381 Aspen	Total	Soil	EPA 3550C	
NUF3059-01 - RE1	379 Aspen	Total	Soil	EPA 3550C	

Extractions

Analysis Batch: 11F6205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11F6205-DUP1	Duplicate	Total	Soil	SW-846	11F6205_P
NUF3059-01	379 Aspen	Total	Soil	SW-846	11F6205_P
NUF3059-02	381 Aspen	Total	Soil	SW-846	11F6205_P

Prep Batch: 11F6205_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11F6205-DUP1	Duplicate	Total	Soil	% Solids	
NUF3059-01	379 Aspen	Total	Soil	% Solids	
NUF3059-02	381 Aspen	Total	Soil	% Solids	

Analysis Batch: 11F5035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
NUF3059-01	379 Aspen	Total	Soil	SW846 8270D	

Lab Chronicle

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

TestAmerica Job ID: NUF3059

Client Sample ID: 379 Aspen

Date Collected: 06/14/11 12:00
Date Received: 06/18/11 09:10

Lab Sample ID: NUF3059-01

Matrix: Soil
Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.847	11F6770_P	06/14/11 12:00	AAN	TAL NSH
Total	Analysis	SW846 8260B		1.00	U011504	06/27/11 18:14	MJH	TAL NSH
Total	Prep	EPA 5035	RE1	0.986	11F7149_P	06/14/11 12:00	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE1	50.0	U011573	06/28/11 17:06	MJH	TAL NSH
Total	Prep	EPA 3550C	RE1	0.995	11F5035_P	06/26/11 13:35	JJR	TAL NSH
Total	Analysis	SW846 8270D	RE1	5.00	11F5035	06/28/11 11:58	BES	TAL NSH
Total	Prep	% Solids		1.00	11F6205_P	06/28/11 16:00	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11F6205	06/29/11 11:43	RRS	TAL NSH
Total	Analysis	SW846 8270D		1.00	11F5035	06/28/11 00:44		TAL NSH

Client Sample ID: 381 Aspen

Date Collected: 06/15/11 12:30
Date Received: 06/18/11 09:10

Lab Sample ID: NUF3059-02

Matrix: Soil
Percent Solids: 83.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total	Prep	EPA 5035	RE1	0.952	11F7149_P	06/15/11 12:30	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE1	1.00	U011573	06/28/11 15:31	MJH	TAL NSH
Total	Prep	EPA 3550C		0.973	11F5035_P	06/26/11 13:35	JJR	TAL NSH
Total	Analysis	SW846 8270D		1.00	11F5035	06/28/11 01:45	BES	TAL NSH
Total	Prep	% Solids		1.00	11F6205_P	06/28/11 16:00	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11F6205	06/29/11 11:43	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: NUF3059

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: NUF3059

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Nashville	A2LA	ISO/IEC 17025		0453.07
TestAmerica Nashville	A2LA	WY UST		453.07
TestAmerica Nashville	AIHA	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	LA100011
TestAmerica Nashville	Louisiana	NELAC	6	30613
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	Nevada	State Program	9	TN00032
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
TestAmerica Nashville	Wisconsin	State Program	5	998020430

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.

TestAmerica
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#: 1627

Telephone Number: 843.412.2097 Fax No.: (843) 871-6401

TA Quote #:

Sampler Name: (Print) Brad Shaw

Project ID: Laurel Bay Housing Project

Sampler Signature:

Project #:

NUF3059
07/05/11 23:59

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Ice	HNO3 (Red Label)	HCl (Blue Label)	NaOH (Orange Label)	H2SO4 Plastic (Yellow Label)	H2SO4 Glass(Yellow Label)	None (Black Label)	Other (Specify)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify)	Analyze For: BTEX + Napth - 8260B	PAH - 8270D	RUSH TAT (Pre-Schedule)
379 ASPEN	6/14/11	1200	5	X					2				2	1					X		X	X	
381 ASPEN	6/15/11	1230	5	X					2				2	1					X		X	X	

Special Instructions:

Method of Shipment: FEDEX

Relinquished by	Date	Time	Received by	Date	Time
	6/17/11	1000	Fedex		
Relinquished by:	Date	Time	Received by TestAmerica:	Date	Time
				6/18/11	0910

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

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 379Aspen; 379 Aspen 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. L. McGee / 7/25/11
(Name) (Date)

Appendix C
Laboratory Analytical Report - Groundwater

CDM - AECOM
Multimedia Joint Venture

Volatile Organic Compounds by GC/MS

Client: **AECOM - Resolution Consultants**
Laboratory ID: **QK13041-009**
Description: **BEALB379TW01WG20151112**
Matrix: **Aqueous**
Date Sampled: **11/12/2015 1735**
Date Received: **11/13/2015**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/25/2015 1441	ALL		90579

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	0.45	U	5.0	0.45	0.21	ug/L	1
Ethylbenzene	100-41-4	8260B	0.51	U	5.0	0.51	0.21	ug/L	1
Naphthalene	91-20-3	8260B	0.96	U	5.0	0.96	0.14	ug/L	1
Toluene	108-88-3	8260B	0.48	U	5.0	0.48	0.24	ug/L	1
Xylenes (total)	1330-20-7	8260B	0.57	U	5.0	0.57	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		99	75-120
1,2-Dichloroethane-d4		95	70-120
Toluene-d8		92	85-120
Dibromofluoromethane		97	85-115

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

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

Semivolatile Organic Compounds by GC/MS (SIM)

Client: **AECOM - Resolution Consultants**
Laboratory ID: **QK13041-009**
Description: **BEALB379TW01WG20151112**
Matrix: **Aqueous**
Date Sampled: **11/12/2015 1735**
Date Received: **11/13/2015**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D (SIM)	1	11/25/2015 1048	RBH	11/18/2015 1236	89918

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzo(a)anthracene	56-55-3	8270D (SIM)	0.040	U	0.20	0.040	0.019	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D (SIM)	0.040	U	0.20	0.040	0.019	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D (SIM)	0.040	U	0.20	0.040	0.024	ug/L	1
Chrysene	218-01-9	8270D (SIM)	0.040	U	0.20	0.040	0.021	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D (SIM)	0.080	U	0.20	0.080	0.040	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Methylnaphthalene-d10		97	15-139
Fluoranthene-d10		114	23-154

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

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

Appendix D
Regulatory Correspondence

CDM - AECOM
Multimedia Joint Venture

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: IGWA
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 Tank 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. The submitted analytical results indicate that petroleum constituents are above established Risk-Based Screening Levels and additional investigation is warranted. Specifically, the Department requests that a groundwater sampling proposal be generated to determine if there has been an impact to groundwater at this site.

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 M. Krieg

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)

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

Laurel Bay Underground Storage Tank Assessment Reports for: (97 addresses/110 tanks)

118 Banyan	343 Ash Tank 2
126 Banyan	344 Ash Tank 2
127 Banyan	347 Ash Tank 2
130 Banyan Tank 1	378 Aspen Tank 2
141 Laurel Bay	379 Aspen
151 Laurel Bay	382 Aspen Tank 1
224 Cypress	382 Aspen Tank 2
227 Cypress	394 Acorn Tank 2
256 Beech Tank 2	400 Elderberry
257 Beech Tank 1	432 Elderberry
257 Beech Tank 2	436 Elderberry
264 Beech	473 Dogwood Tank 2
265 Beech Tank 2	482 Laurel Bay
265 Beech Tank 3	517 Laurel Bay
275 Birch	586 Aster
277 Birch Tank 1	632 Dahlia
285 Birch	639 Dahlia Tank 2
292 Birch Tank 3	643 Dahlia Tank 1
297 Birch	644 Dahlia Tank 1
301 Ash	644 Dahlia Tank 2
306 Ash	646 Dahlia Tank 1
310 Ash Tank 1	646 Dahlia Tank 2
313 Ash	665 Camellia
315 Ash Tank 2	699 Abelia
316 Ash	744 Blue Bell
319 Ash	745 Blue Bell Tank 1
320 Ash	747 Blue Bell Tank 1
321 Ash	747 Blue Bell Tank 2
329 Ash	747 Blue Bell Tank 3
330 Ash Tank 2	749 Blue Bell Tank 1
331 Ash	749 Blue Bell Tank 2
332 Ash	751 Blue Bell
333 Ash	762 Althea
335 Ash Tank 1	765 Althea Tank 2
335 Ash Tank 2	766 Althea Tank 4
341 Ash	767 Althea Tank 1
342 Ash Tank 1	768 Althea Tank 2
342 Ash Tank 2	768 Althea Tank 3

Laurel Bay Underground Storage Tank Assessment Reports for: (98 addresses/110 tanks) cont.

768 Althea Tank 4	1067 Gardenia
769 Althea Tank 1	1077 Heather
769 Althea Tank 2	1081 Heather
775 Althea	1101 Iris Tank 2
819 Azalea	1104 Iris
840 Azalea	1105 Iris Tank 2
878 Cobia	1124 Iris Tank 2
891 Cobia	1142 Iris Tank 2
913 Barracuda	1146 Iris Tank 2
916 Barracuda	1218 Cardinal
923 Albacore	1240 Dove
1004 Bobwhite	1266 Dove
1022 Foxglove	1292 Eagle
1031 Foxglove	1299 Eagle Tank 1
1034 Foxglove Tank 2	1302 Eagle
1061 Gardenia Tank 3	1336 Albatross
1064 Gardenia	1351 Cardinal

D H E C
PROMOTE PROTECT PROSPER

Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

Division of Waste Management
Bureau of Land and Waste Management

June 8, 2016

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

RE: Approval and Concurrence with Draft Final Initial Groundwater Investigation Report-November and December 2015
Laurel Bay Military Housing Area Multiple Properties
Dated April 2015

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received groundwater data in the above referenced Groundwater Investigation Report for the attached addresses on May 2, 2016. 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).

Per the Department's request, groundwater samples were collected from the attached referenced addresses. The Department reviewed the groundwater data and previous investigations and it agrees with the conclusions and recommendations included in the document. To further assess the impact to groundwater, permanent wells should be installed at the 15 stated addresses. For the remaining 80 addresses, there is no indication of contamination on the property 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 petruslb@dhec.sc.gov or 803-898-0294.

Sincerely,

Laurel Petrus
RCRA Federal Facilities Section

Attachment: Specific Property Recommendations

Cc: Russell Berry, EQC Region 8 (via email)
Shawn Dolan, Resolution Consultants (via email)
Bryan Beck, NAVFAC MIDATLANTIC (via email)
Craig Ehde (via email)

Attachment to: Petrus to Drawdy
Subject: Draft Final Initial Groundwater Investigation Report-November and December 2015
Specific Property Recommendations
Dated June 8, 2016

Draft Final Initial Groundwater Investigation Report for (95 addresses)

Permanent Monitoring Well Investigation recommendation (15 addresses)	
130 Banyan Drive	473 Dogwood Drive
256 Beech Street	747 Blue Bell Lane
285 Birch Drive	749 Blue Bell Lane
292 Birch Drive	775 Althea Street
330 Ash Street	1034 Foxglove Street
331 Ash Street	1104 Iris Lane
335 Ash Street	1124 Iris Lane
342 Ash Street	

No Further Action recommendation (80 addresses)	
118 Banyan Drive	644 Dahlia Drive
126 Banyan Drive	646 Dahlia Drive
127 Banyan Drive	665 Camellia Drive
141 Laurel Bay Blvd	699 Abelia Street
151 Laurel Bay Blvd	744 Blue Bell Lane
224 Cypress Street	745 Blue Bell Lane
227 Cypress Street	751 Blue Bell Lane
257 Beech Street	762 Althea Street
264 Beech Street	765 Althea Street
265 Beech Street	766 Althea Street
275 Birch Drive	767 Althea Street
277 Birch Drive	768 Althea Street
297 Birch Drive	769 Althea Street
301 Ash Street	819 Azalea Drive
306 Ash Street	840 Azalea Drive
310 Ash Street	878 Cobia Drive
313 Ash Street	891 Cobia Drive
315 Ash Street	913 Barracuda Drive
316 Ash Street	916 Barracuda Drive
319 Ash Street	923 Wren Lane
320 Ash Street	1004 Bobwhite Drive
321 Ash Street	1022 Foxglove Street
329 Ash Street	1031 Foxglove Street
332 Ash Street	1061 Gardenia Drive
333 Ash Street	1064 Gardenia Drive
341 Ash Street	1067 Gardenia Drive
347 Ash Street	1077 Heather Street
378 Aspen Street	1081 Heather Street
379 Aspen Street	1101 Iris Lane
382 Aspen Street	1105 Iris Lane
394 Acorn Street	1142 Iris Lane
400 Elderberry Drive	1146 Iris Lane
432 Elderberry Drive	1218 Cardinal Lane
436 Elderberry Drive	1240 Dove Lane
482 Laurel Bay Blvd	1266 Dove Lane
517 Laurel Bay Blvd	1292 Eagle Lane
586 Aster Street	1299 Eagle Lane
632 Dahlia Drive	1302 Eagle Lane
639 Dahlia Drive	1336 Albatross Drive
643 Dahlia Drive	1351 Cardinal Lane