

**SUMMARY REPORT**  
**109 EAST CYPRESS STREET (FORMERLY 229 EAST CYPRESS 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**  
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**JUNE 2021**

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**Prepared by:**

**CDM - AECOM**  
**Multimedia Joint Venture**

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

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## Table of Contents

<b>1.0</b>	<b>INTRODUCTION .....</b>	<b>1</b>
1.1	BACKGROUND INFORMATION.....	1
1.2	UST REMOVAL AND ASSESSMENT PROCESS.....	2
<b>2.0</b>	<b>SAMPLING ACTIVITIES AND RESULTS .....</b>	<b>3</b>
2.1	UST REMOVAL AND SOIL SAMPLING .....	4
2.2	SOIL ANALYTICAL RESULTS.....	4
2.3	GROUNDWATER SAMPLING.....	5
2.4	GROUNDWATER ANALYTICAL RESULTS .....	5
<b>3.0</b>	<b>PROPERTY STATUS.....</b>	<b>6</b>
<b>4.0</b>	<b>REFERENCES .....</b>	<b>6</b>

## Tables

Table 1	Laboratory Analytical Results - Soil
Table 2	Laboratory Analytical Results - Groundwater

## Appendices

Appendix A	Multi-Media Selection Process for LBMH
Appendix B	UST Assessment Reports
Appendix C	Laboratory Analytical Report - Groundwater
Appendix D	Regulatory Correspondence

### **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 109 East Cypress Street (Formerly 229 East Cypress 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

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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*

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*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 109 East Cypress Street (Formerly 229 East Cypress Street). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 229 Cypress Street* (MCAS Beaufort, 2008) and *SCDHEC UST Assessment Report – 229 Cypress Street* (MCAS Beaufort, 2012). The UST Assessment Reports are provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Investigation of Ground Water at Leaking Heating Oil UST Sites Report – (Resolution Consultants, 2008)* and the *Initial Groundwater Investigation Report – May and June 2015* (Resolution Consultants, 2015). 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**

In July 2007 and October 2011, two 280 gallon heating oil USTs were removed at 109 East Cypress Street (Formerly 229 East Cypress Street). Tank 1 was removed on July 11, 2007 from underneath the concrete driveway adjacent to the garage. Tank 2 was removed on October 26, 2011 from the front landscaped bed area adjacent to the front concrete porch. The former UST locations are indicated in the figures of the UST Assessment Reports (Appendix B). The USTs were 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 Reports (Appendix B), the depths to the bases of the USTs were 4'10" (Tank 1) and 5'0" (Tank 2) bgs and a single soil sample was collected for each at that depth. An additional soil sample was collected from the side of the excavation at a depth of 3'7" for Tank 1. The samples were collected from the fill port side of the former USTs to represent a worst case scenario.

Following UST removal, a soil sample was collected from the base of each excavation and the side of the excavation for Tank 1 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 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 locations (Tanks 1 and 2) 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 (Tank 1 and 2) at 109 East Cypress Street (Formerly 229 East Cypress Street) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In letters dated September 3, 2008 and May 15, 2014 regarding Tank 1 and Tank 2, respectively, SCDHEC requested an IGWAs be conducted at the former UST locations (Tanks 1 and 2) at 109 East Cypress Street (Formerly 229 East Cypress Street) to

determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letters are provided in Appendix D.

### **2.3 Groundwater Sampling**

On July 30, 2008 and May 21, 2015, temporary monitoring wells were installed at 109 East Cypress Street (Formerly 229 East Cypress 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 wells were placed in the same general location as the former heating oil USTs (Tanks 1 and 2). The former UST locations are indicated in the figures of the UST Assessment Reports (Appendix B). Further details are provided in the *Investigation of Ground Water at Leaking Heating Oil UST Sites Report* (Resolution Consultants, 2008) and the *Initial Groundwater Investigation Report – May and June 2015* (Resolution Consultants, 2015).

The sampling strategy for this phase of the investigation required a one-time sampling event of the temporarily installed monitoring wells. 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 *Investigation of Ground Water at Leaking Heating Oil UST Sites Report* (Resolution Consultants, 2008) and the *Initial Groundwater Investigation Report – May and June 2015* (Resolution Consultants, 2015).

### **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 109 East Cypress Street (Formerly 229 East Cypress 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 USTs 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 109 East Cypress Street (Formerly 229 East Cypress Street). This NFA determination was obtained in letters dated November 20, 2008 and February 22, 2016, regarding Tank 1 and Tank 2, respectively. SCDHEC's NFA letters are provided in Appendix D.

### **4.0 REFERENCES**

Marine Corps Air Station Beaufort, 2008. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 229 Cypress Street, Laurel Bay Military Housing Area*, November 2008.

Marine Corps Air Station Beaufort, 2012. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 229 Cypress Street, Laurel Bay Military Housing Area*, August 2012.

Resolution Consultants, 2008. *Investigation of Ground Water at Leaking Heating Oil UST Sites Report for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, November 2008.

Resolution Consultants, 2015. *Initial Groundwater Investigation Report – May and June 2015 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, October 2015.

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**  
**109 East Cypress Street (Formerly 229 East Cypress Street)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Results Samples Collected 07/11/07 and 10/26/11		
		229 Cypress Bottom 01 07/11/07	229 Cypress Side 01 07/11/07	229 Cypress 10/26/11
<b>Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)</b>				
Benzene	0.003	<b>0.0000611</b>	<b>0.00266</b>	<b>0.110</b>
Ethylbenzene	1.15	<b>0.000177</b>	<b>0.00815</b>	<b>12.3</b>
Naphthalene	0.036	<b>0.0062</b>	<b>0.0287</b>	<b>39.5</b>
Toluene	0.627	<b>0.000144</b>	<b>0.00629</b>	<b>0.0864</b>
Xylenes, Total	13.01	<b>0.0000867</b>	<b>0.00539</b>	<b>58.6</b>
<b>Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)</b>				
Benzo(a)anthracene	0.66	<b>0.448</b>	<b>0.0225</b>	ND
Benzo(b)fluoranthene	0.66	<b>0.476</b>	<b>0.0219</b>	ND
Benzo(k)fluoranthene	0.66	<b>0.156</b>	<b>0.0219</b>	ND
Chrysene	0.66	<b>0.837</b>	<b>0.0315</b>	ND
Dibenz(a,h)anthracene	0.66	<b>0.0293</b>	<b>0.0273</b>	ND

**Notes:**

<sup>(1)</sup> 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 - 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**  
**109 East Cypress Street (Formerly 229 East Cypress Street)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Site-Specific Groundwater VISLs (µg/L) <sup>(2)</sup>	Results Samples Collected 07/30/08 and 05/21/15	
			229 Cypress A 07/30/08	229 Cypress Street 05/21/15
<b>Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)</b>				
Benzene	5	16.24	ND	ND
Ethylbenzene	700	45.95	ND	ND
Naphthalene	25	29.33	ND	ND
Toluene	1000	105,445	ND	ND
Xylenes, Total	10,000	2,133	ND	ND
<b>Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)</b>				
Benzo(a)anthracene	10	NA	ND	ND
Benzo(b)fluoranthene	10	NA	ND	ND
Benzo(k)fluoranthene	10	NA	ND	ND
Chrysene	10	NA	ND	ND
Dibenz(a,h)anthracene	10	NA	ND	ND

**Notes:**

<sup>(1)</sup> 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).

<sup>(2)</sup> 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  $1 \times 10^{-6}$ , 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.

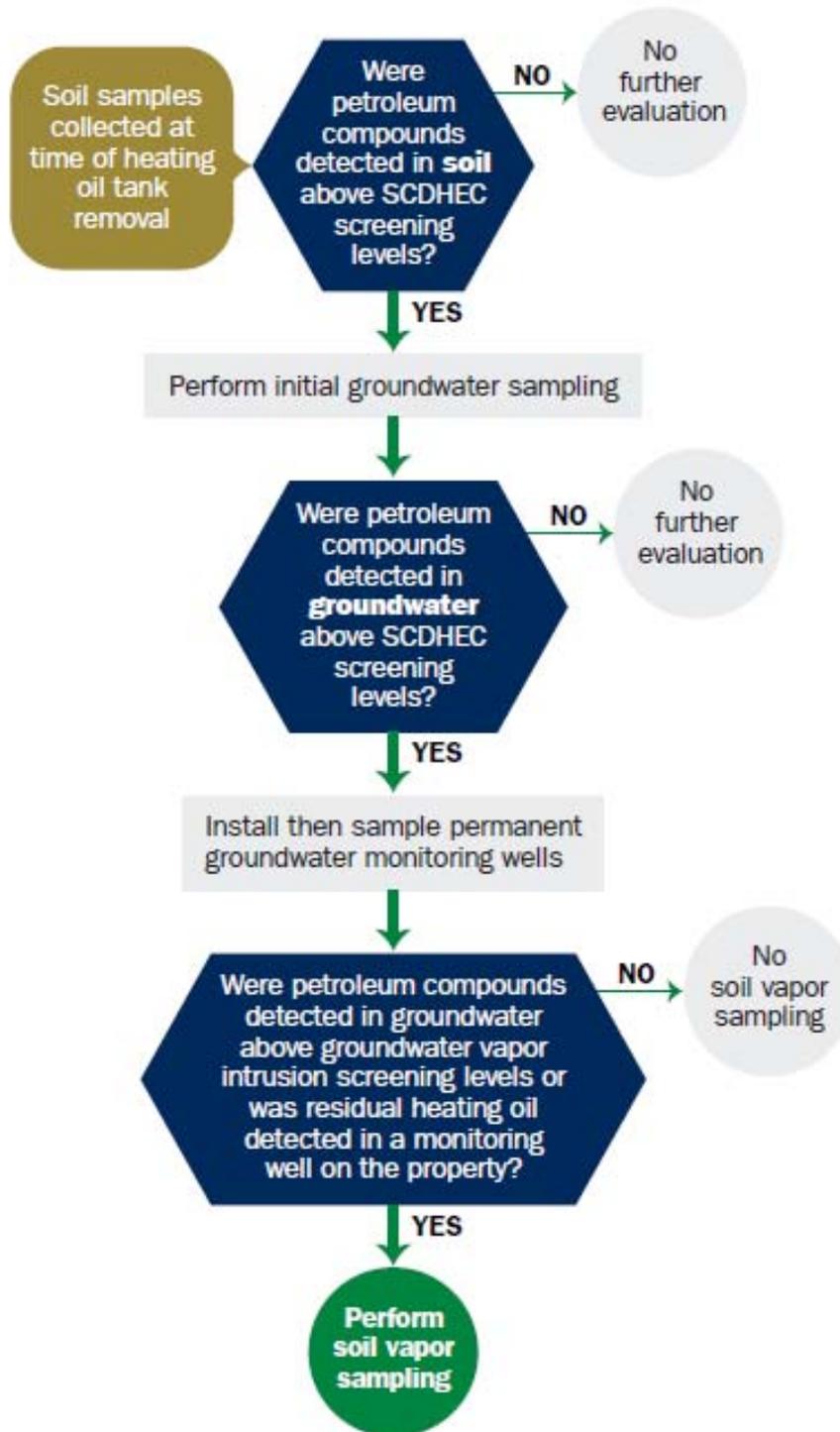
RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

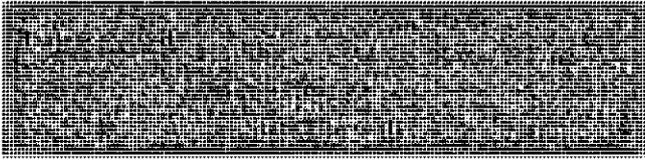
**Appendix A**  
**Multi-Media Selection Process for LBMH**



Appendix A - Multi-Media Selection Process for LBMH

**Appendix B**  
**UST Assessment Report**

Attachment 1  
 South Carolina Department of Health and Environmental Control (SCDHEC)  
 Underground Storage Tank (UST) Assessment Report



Submit Completed Form To:  
 UST Program  
 SCDHEC  
 2600 Bull Street  
 Columbia, South Carolina 29201  
 Telephone (803) 896-6240

**I. OWNERSHIP OF UST (S)**

Beaufort Military Complex Family Housing		
Owner Name (Corporation, Individual, Public Agency, Other)		
1510 Laurel Bay Blvd.		
Mailing Address		
Beaufort	SC	29906
City	State	Zip Code
843	379-3305	Kyle Broadfoot
Area Code	Telephone Number	Contact Person

**II. SITE IDENTIFICATION AND LOCATION**

N/A		
Permit I.D. #		
Actus LEND Lease Construction		
Facility Name or Company Site Identifier		
<del>N/A Laurel Bay Blvd</del> 229 Cypress		
Street Address or State Road (as applicable)		
Beaufort, SC	29906	Beaufort
City	ZIP	County

III. INSURANCE INFORMATION

Insurance Statement

The petroleum release reported to DHEC on N/A at Permit ID # 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.

And

I do/do not (circle one) wish to participate in the Superb Program.

IV. CERTIFICATION (To be signed by the UST owner/operator.)

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

V. UST INFORMATION

Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
#2 DIESEL					
280G <del>350G</del>					
Steel					
58"					
N					
N					
Removed					
7-11-07					
Y					
Y					

- A. Product...(ex. Gas, Kerosene).....
- B. Capacity..(ex. 1k, 2k)..... (APPROX.)
- C. Age.....
- D. Construction Material..(ex. Steel, FRP).....
- E. Month/Year of Last Use.....
- F. Depth (ft.) To Base of Tank.....
- G. Spill Prevention Equipment Y/N.....
- H. Overfill Prevention Equipment Y/N.....
- I. Method of Closure Removed/Filled.....
- J. Date Tanks Removed/Filled.....
- K. Visible Corrosion or Pitting Y/N.....
- L. Visible Holes Y/N.....

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

Recycling - Scrap Steel

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

TREATMENT FACILITY - Broadhurst Landfill  
Solidification and Subtitle D Landfill

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

THERE WERE MANY SMALL HOLES ALONG BOTH SIDES AND THE ENDS WHERE THE GROUND WATER WAS.

## VI. PIPING INFORMATION

- 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.....

	Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
A.	Steel					
B.	N/A					
C.	-0-					
D.	Electrical Pump					
E.	Y					
F.	N					
G.	N					
H.						

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

Fill pipes and vent pipes were corroded

## VII. BRIEF SITE DESCRIPTION AND HISTORY

Home Heating Oil TANK - RESIDENTIAL

## VIII. SITE CONDITIONS

	Yes	No	Unk
<p>A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells?</p> <p>If yes, indicate depth and location on the site map.</p>		X	
<p>B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells?</p> <p>If yes, indicate location on site map and describe the odor (strong, mild, etc.)</p>		X	
<p>C. Was water present in the UST excavation, soil borings, or trenches?</p> <p>If yes, how far below land surface (indicate location and depth)?</p> <p>GROUND WATER WAS ABOUT 41" DOWN. 17" DEEP</p>	X		
<p>D. Did contaminated soils remain stockpiled on site after closure?</p> <p>If yes, indicate the stockpile location on the site map.</p> <p>Name of DHEC representative authorizing soil removal:</p>		X	
<p>E. Was a petroleum sheen or free product detected on any excavation or boring waters?</p> <p>If yes, indicate location and thickness.</p>		X	

**IX. SAMPLE INFORMATION**

A.

SCDHEC Lab Certification Number DW: 84009002

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
						ECHENADZA	
1	BOTTOM	S	SAND	58"	7-11-07 1020	X. MAWLEY	ND
2	SIDE	S	SAND	43"	1030	X. MAWLEY	ND
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

\* = Depth Below the Surrounding Land Surface

X.

### 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.

EPA Method 8260 B Volatile Organic Compounds  
- Preservative: 2ea Sodium Bisulfate 1ea  
EPA Method 8270 Poly Aromatic Hydrocarbons  
- No Preservative

One (1) Sidewall and one (1) Bottom  
Sample were secured from tank excavation  
Samples were stored and shipped in an  
insulated cooler w/ ice.

## XI. RECEPTORS

	Yes	No
<p>A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?</p> <p>If yes, indicate type of receptor, distance, and direction on site map.</p>		X
<p>B. Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?</p> <p>If yes, indicate type of well, distance, and direction on site map.</p>		✓
<p>C. Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?</p> <p>If yes, indicate type of structure, distance, and direction on site map.</p>		✓
<p>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?</p> <p>If yes, indicate the type of utility, distance, and direction on the site map.</p>		✓
<p>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?</p> <p>If yes, indicate the area of contaminated soil on the site map.</p>		✓

**SUMMARY OF ANALYSIS RESULTS**

*N/A*

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

CoC	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8
Benzene								
Toluene								
Ethylbenzene								
Xylenes								
Naphthalene								
Benzo(a)anthracene								
Benzo(b)flouranthene								
Benzo(k)flouranthene								
Chrysene								
Dibenz(a,h)anthracene								
TPH (EPA 3550)								

CoC	SB-9	SB-10	SB-11	SB-12	SB-13	SB-14	SB-15	SB-16
Benzene								
Toluene								
Ethylbenzene								
Xylenes								
Naphthalene								
Benzo(a)anthracene								
Benzo(b)flouranthene								
Benzo(k)flouranthene								
Chrysene								
Dibenz(a,h)anthracene								
TPH (EPA 3550)								

SUMMARY OF ANALYSIS RESULTS (cont'd)

N/A

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	.05				
Lead	Site specific				

## **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)

Client: EPG, INC.  
 PO BOX 1096  
 MT PLEASANT, SC 29465  
 Attn: JOHN MAHONEY

Work Order: OQG0325  
 Project: LAUREL BAY  
 Project Number: EP2362

Sampled: 07/09/07-07/11/07  
 Received: 07/17/07

**LABORATORY REPORT**  
 Sample ID: 259 BEECH SIDE 04 - Lab Number: OQG0325-08 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>Polynuclear Aromatic Hydrocarbons by EPA Method 8270 - Cont.</b>											
85-01-8	Phenanthrene	61.2	I	ug/kg dry	48.9	207	1	07/24/07 15:19	JLS	EPA 8270C	7G19004
129-00-0	Pyrene	55.5	I	ug/kg dry	42.1	207	1	07/24/07 15:19	JLS	EPA 8270C	7G19004
	Surrogate: 2-Fluorobiphenyl (24-121%)	76 %									
	Surrogate: Nitrobenzene-d5 (19-111%)	72 %									
	Surrogate: Terphenyl-d14 (44-171%)	125 %									

**LABORATORY REPORT**  
 Sample ID: 229 CYPRESS BOTTOM 01 - Lab Number: OQG0325-09 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>General Chemistry Parameters</b>											
NA	% Solids	74.8		%	0.100	0.100	1	07/18/07 15:50	RRP	EPA 8260B	7G18042
<b>Volatile Organic Compounds by EPA Method 8260B</b>											
71-43-2	Benzene	0.0611	U	ug/kg dry	0.0611	0.167	1	07/17/07 22:40	JWT	EPA 8260B	7G17048
100-41-4	Ethylbenzene	0.177		ug/kg dry	0.0706	0.167	1	07/17/07 22:40	JWT	EPA 8260B	7G17048
91-20-3	Naphthalene	6.20		ug/kg dry	0.0922	0.167	1	07/17/07 22:40	JWT	EPA 8260B	7G17048
108-88-3	Toluene	0.144	U	ug/kg dry	0.144	0.167	1	07/17/07 22:40	JWT	EPA 8260B	7G17048
1330-20-7	Xylenes, total	0.0867	U	ug/kg dry	0.0867	0.167	1	07/17/07 22:40	JWT	EPA 8260B	7G17048
	Surrogate: 1,2-Dichloroethane-d4 (73-137%)	99 %									
	Surrogate: 4-Bromofluorobenzene (59-118%)	80 %									
	Surrogate: Dibromofluoromethane (55-145%)	102 %									
	Surrogate: Toluene-d8 (80-117%)	98 %									
<b>Polynuclear Aromatic Hydrocarbons by EPA Method 8270</b>											
83-32-9	Acenaphthene	98.9	U	ug/kg dry	98.9	223	1	07/24/07 15:42	JLS	EPA 8270C	7G19004
208-96-8	Acenaphthylene	130	U	ug/kg dry	130	223	1	07/24/07 15:42	JLS	EPA 8270C	7G19004
120-12-7	Anthracene	99.8	I	ug/kg dry	71.1	223	1	07/24/07 15:42	JLS	EPA 8270C	7G19004
56-55-3	Benzo (a) anthracene	448		ug/kg dry	24.2	223	1	07/24/07 15:42	JLS	EPA 8270C	7G19004
205-99-2	Benzo (b) fluoranthene	476		ug/kg dry	23.5	223	1	07/24/07 15:42	JLS	EPA 8270C	7G19004
207-08-9	Benzo (k) fluoranthene	156	I	ug/kg dry	23.5	223	1	07/24/07 15:42	JLS	EPA 8270C	7G19004
191-24-2	Benzo (g,h,i) perylene	130	I	ug/kg dry	23.2	223	1	07/24/07 15:42	JLS	EPA 8270C	7G19004
50-32-8	Benzo (a) pyrene	285		ug/kg dry	27.5	223	1	07/24/07 15:42	JLS	EPA 8270C	7G19004
90-12-0	1-Methylnaphthalene	112	U	ug/kg dry	112	223	1	07/24/07 15:42	JLS	EPA 8270C	7G19004
218-01-9	Chrysene	837		ug/kg dry	26.7	223	1	07/24/07 15:42	JLS	EPA 8270C	7G19004
53-70-3	Dibenz (a,h) anthracene	29.3	U	ug/kg dry	29.3	223	1	07/24/07 15:42	JLS	EPA 8270C	7G19004
206-44-0	Fluoranthene	199	I	ug/kg dry	32.1	223	1	07/24/07 15:42	JLS	EPA 8270C	7G19004
86-73-7	Fluorene	87.3	U	ug/kg dry	87.3	223	1	07/24/07 15:42	JLS	EPA 8270C	7G19004
193-39-5	Indeno (1,2,3-cd) pyrene	107	I	ug/kg dry	28.9	223	1	07/24/07 15:42	JLS	EPA 8270C	7G19004
91-57-6	2-Methylsaphthalene	95.1	U	ug/kg dry	95.1	223	1	07/24/07 15:42	JLS	EPA 8270C	7G19004
91-20-3	Naphthalene	89.6	U	ug/kg dry	89.6	223	1	07/24/07 15:42	JLS	EPA 8270C	7G19004
85-01-8	Phenanthrene	96.2	I	ug/kg dry	52.6	223	1	07/24/07 15:42	JLS	EPA 8270C	7G19004
129-00-0	Pyrene	235		ug/kg dry	45.3	223	1	07/24/07 15:42	JLS	EPA 8270C	7G19004
	Surrogate: 2-Fluorobiphenyl (24-121%)	80 %									
	Surrogate: Nitrobenzene-d5 (19-111%)	79 %									

TestAmerica - Orlando, FL  
 Shali Brown  
 Project Manager

Client: EPG, INC.  
PO BOX 1096  
MT PLEASANT, SC 29465  
Attn: JOHN MAHONEY

Work Order: OQG0325  
Project: LAUREL BAY  
Project Number: EP2362

Sampled: 07/09/07-07/11/07  
Received: 07/17/07

### LABORATORY REPORT

Sample ID: 229 CYPRESS BOTTOM 01 - Lab Number: OQG0325-09 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>Polynuclear Aromatic Hydrocarbons by EPA Method 8270 - Cont.</b>											
<i>Surrogate: Terphenyl-d14 (44-171%)</i>											
		119 %									

### LABORATORY REPORT

Sample ID: 229 CYPRESS SIDE 02 - Lab Number: OQG0325-10 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>General Chemistry Parameters</b>											
NA	% Solids	80.4		%	0.100	0.100	1	07/18/07 16:50	RRP	EPA 160.3	7G18042
<b>Volatile Organic Compounds by EPA Method 8260B</b>											
71-43-2	Benzene	2.66	RL2U	ug/kg dry	2.66	7.28	50	07/18/07 15:52	JWT	EPA 8260B	7G17048
100-41-4	Ethylbenzene	8.15		ug/kg dry	3.08	7.28	50	07/18/07 15:52	JWT	EPA 8260B	7G17048
91-20-3	Naphthalene	28.7		ug/kg dry	4.02	7.28	50	07/18/07 15:52	JWT	EPA 8260B	7G17048
108-88-3	Toluene	6.29	RL2U	ug/kg dry	6.29	7.28	50	07/18/07 15:52	JWT	EPA 8260B	7G17048
1330-20-7	Xylenes, total	5.39	V1	ug/kg dry	3.78	7.28	50	07/18/07 15:52	JWT	EPA 8260B	7G17048
<i>Surrogate: 1,2-Dichloroethane-d4 (73-137%)</i>											
		95 %									
<i>Surrogate: 4-Bromofluorobenzene (59-118%)</i>											
		103 %									
<i>Surrogate: Dibromofluoromethane (55-145%)</i>											
		99 %									
<i>Surrogate: Toluene-d8 (80-117%)</i>											
		100 %									
<b>Polynuclear Aromatic Hydrocarbons by EPA Method 8270</b>											
83-32-9	Acenaphthene	105	I	ug/kg dry	92.0	208	1	07/24/07 16:04	JLS	EPA 8270C	7G19004
208-96-8	Acenaphthylene	121	U	ug/kg dry	121	208	1	07/24/07 16:04	JLS	EPA 8270C	7G19004
120-12-7	Anthracene	108	I	ug/kg dry	66.2	208	1	07/24/07 16:04	JLS	EPA 8270C	7G19004
56-55-3	Benzo (a) anthracene	22.5	U	ug/kg dry	22.5	208	1	07/24/07 16:04	JLS	EPA 8270C	7G19004
205-99-2	Benzo (b) fluoranthene	21.9	U	ug/kg dry	21.9	208	1	07/24/07 16:04	JLS	EPA 8270C	7G19004
207-08-9	Benzo (k) fluoranthene	21.9	U	ug/kg dry	21.9	208	1	07/24/07 16:04	JLS	EPA 8270C	7G19004
191-24-2	Benzo (g,h,i) perylene	21.6	U	ug/kg dry	21.6	208	1	07/24/07 16:04	JLS	EPA 8270C	7G19004
50-32-8	Benzo (a) pyrene	25.6	U	ug/kg dry	25.6	208	1	07/24/07 16:04	JLS	EPA 8270C	7G19004
90-12-0	1-Methylnaphthalene	501		ug/kg dry	104	208	1	07/24/07 16:04	JLS	EPA 8270C	7G19004
218-01-9	Chrysene	31.5	I	ug/kg dry	24.9	208	1	07/24/07 16:04	JLS	EPA 8270C	7G19004
53-70-3	Dibenz (a,h) anthracene	27.3	U	ug/kg dry	27.3	208	1	07/24/07 16:04	JLS	EPA 8270C	7G19004
206-44-0	Fluoranthene	29.9	U	ug/kg dry	29.9	208	1	07/24/07 16:04	JLS	EPA 8270C	7G19004
86-73-7	Fluorene	81.3	U	ug/kg dry	81.3	208	1	07/24/07 16:04	JLS	EPA 8270C	7G19004
193-39-5	Indeno (1,2,3-cd) pyrene	26.9	U	ug/kg dry	26.9	208	1	07/24/07 16:04	JLS	EPA 8270C	7G19004
91-57-6	2-Methylnaphthalene	829		ug/kg dry	88.6	208	1	07/24/07 16:04	JLS	EPA 8270C	7G19004
91-20-3	Naphthalene	83.4	U	ug/kg dry	83.4	208	1	07/24/07 16:04	JLS	EPA 8270C	7G19004
85-01-8	Phenanthrene	373		ug/kg dry	49.0	208	1	07/24/07 16:04	JLS	EPA 8270C	7G19004
129-00-0	Pyrene	51.0	I	ug/kg dry	42.2	208	1	07/24/07 16:04	JLS	EPA 8270C	7G19004
<i>Surrogate: 2-Fluorobiphenyl (24-121%)</i>											
		20 %	J1								
<i>Surrogate: Nitrobenzene-d5 (19-111%)</i>											
		19 %									
<i>Surrogate: Terphenyl-d14 (44-171%)</i>											
		34 %	11								



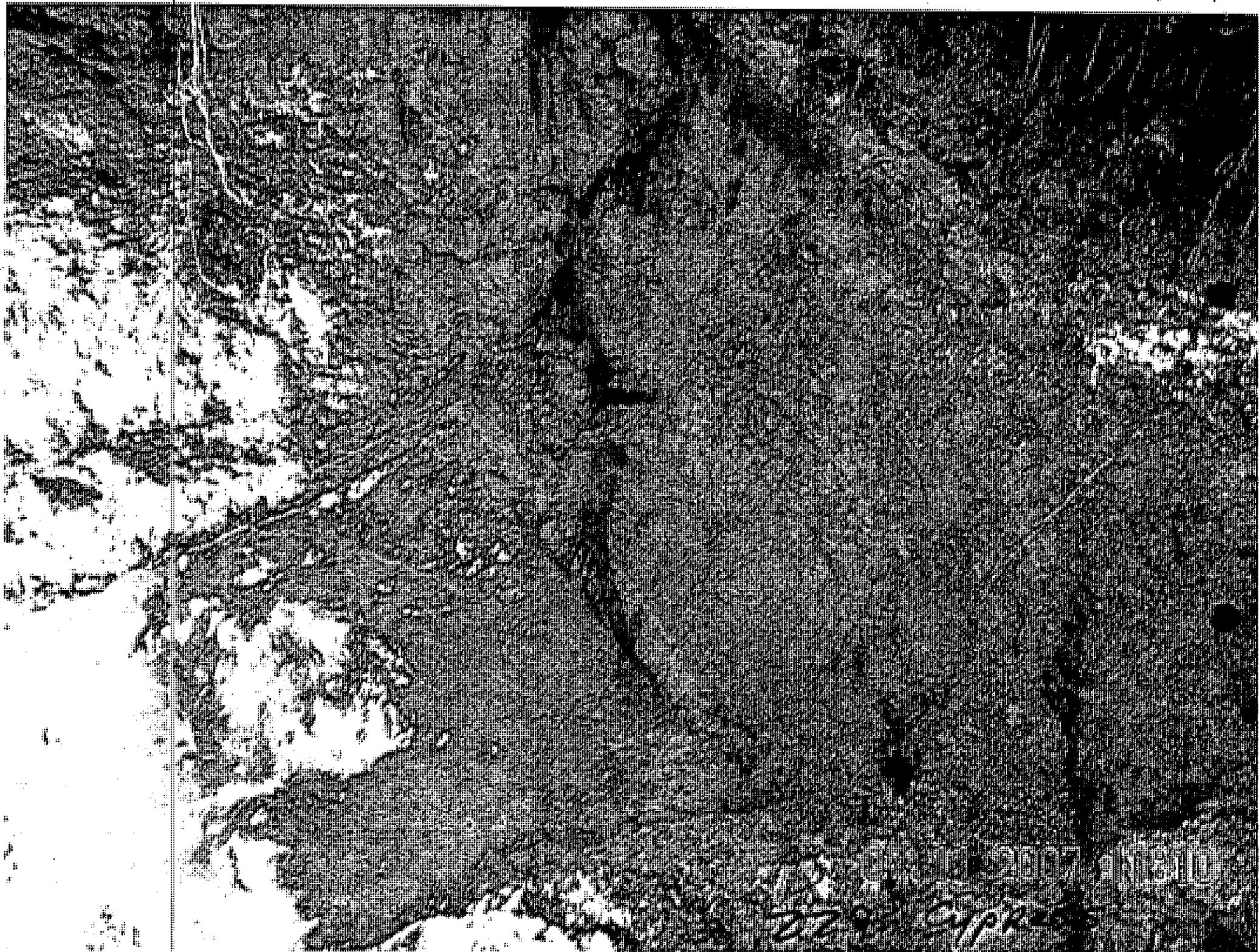


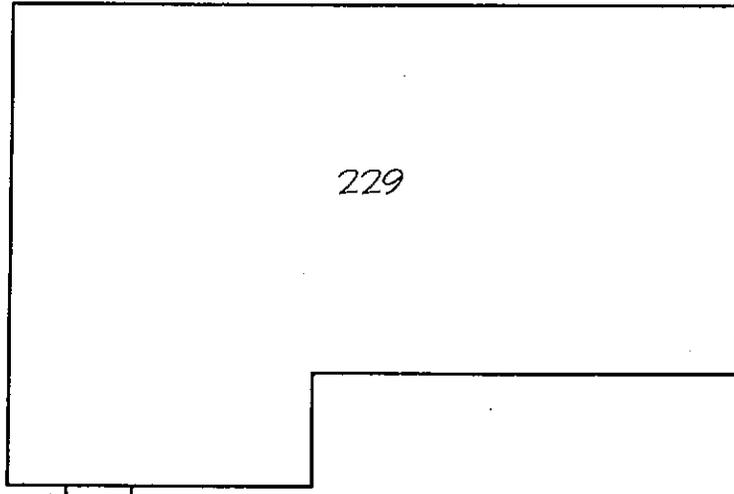
07.11.2007 11:10

229 04/10/05

229-047102

OT 11-2007-01-10





A B  
TANK I  
BASE 58"

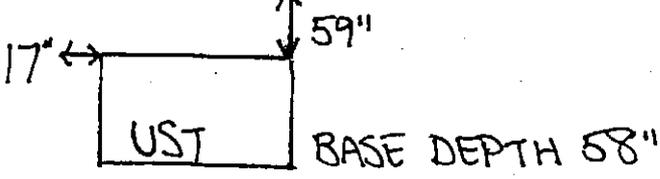
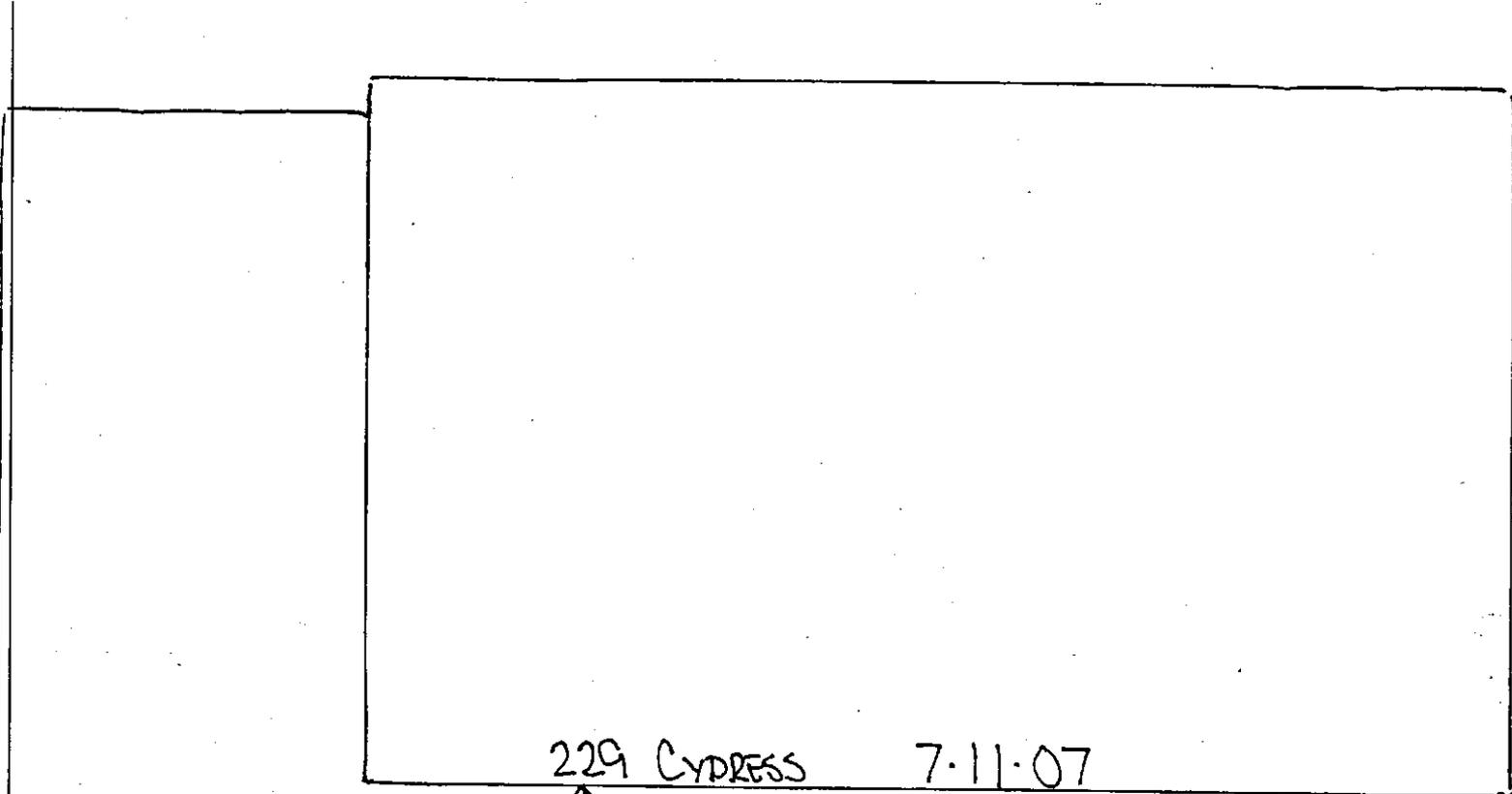
CYPRESS STREET



TANK I EXCAVATION

A-SOIL TEST SIDE SAMPLE @ 43"  
B-SOIL TEST BOTTOM SAMPLE @ 58"

<p>CUSTOMER: <b>BEAUFORT MILITARY COMPLEX FAMILY HOUSING</b></p>	<p>SCALE: 1/16"=1'-0"</p>	<p><b>EPG INC.</b> P.O. BOX 1096 MOUNT PLEASANT, SC 29465-1096</p>
<p>SITE ADDRESS: <b>229 CYPRESS STREET</b></p>	<p>SUPPLIER: <b>EPG INC.</b></p>	
<p>DATE: 9/22/2007</p>		



Attachment 1

South Carolina Department of Health and Environmental Control (SCDHEC)  
**Underground Storage Tank (UST) Assessment Report**

<b>Date Received</b>
<b>State Use Only</b>

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
229 Cypress Street, Laurel Bay Military Housing Area
Street Address or State Road (as applicable)
Beaufort,
City
Beaufort
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).....
- B. Capacity..(ex. 1k, 2k).....
- C. Age.....
- D. Construction Material..(ex. Steel, FRP).....
- E. Month/Year of Last Use.....
- F. Depth (ft.) To Base of Tank.....
- G. Spill Prevention Equipment Y/N.....
- H. Overfill Prevention Equipment Y/N.....
- I. Method of Closure Removed/Filled.....
- J. Date Tanks Removed/Filled.....
- K. Visible Corrosion or Pitting Y/N.....
- L. Visible Holes Y/N.....

229Cypress		
Heating oil		
280 gal		
Late 1950s		
Steel		
Mid 80s		
5'		
No		
No		
Removed		
10/26/2011		
Yes		
Yes		

M. Method of disposal for any USTs removed from the ground (attach disposal manifests)  
UST 229Cypress 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).....
- 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.....

229Cypress		
Steel & Copper		
N/A		
N/A		
Suction		
No		
Yes		
No		
Late 1950s		

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

Steel vent piping was corroded and pitted. Copper supply and return piping was 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
<p>A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells?</p> <p>If yes, indicate depth and location on the site map.</p>		X	
<p>B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells?</p> <p style="padding-left: 150px;">*Slight odor in excavation.</p> <p>If yes, indicate location on site map and describe the odor (strong, mild, etc.)</p>	*X		
<p>C. Was water present in the UST excavation, soil borings, or trenches?</p> <p>If yes, how far below land surface (indicate location and depth)?</p>		X	
<p>D. Did contaminated soils remain stockpiled on site after closure?</p> <p>If yes, indicate the stockpile location on the site map.</p> <p>Name of DHEC representative authorizing soil removal:</p>		X	
<p>E. Was a petroleum sheen or free product detected on any excavation or boring waters?</p> <p>If yes, indicate location and thickness.</p>		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 #
229 Cypress	Excav at fill end	Soil	Sandy-clay	5'	10/26/11 1200 hrs	P. Shaw	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

\* = Depth Below the Surrounding Land Surface



## XII. RECEPTORS

	Yes	No
<p>A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?  <span style="margin-left: 150px;">*~900' to stormwater drainage canal</span></p> <p>If yes, indicate type of receptor, distance, and direction on site map.</p>	*X	
<p>B. Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?</p> <p>If yes, indicate type of well, distance, and direction on site map.</p>		X
<p>C. Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?</p> <p>If yes, indicate type of structure, distance, and direction on site map.</p>		X
<p>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?  <span style="margin-left: 150px;">*Sewer, water, cable, electricity &amp; fiber optic</span></p> <p>If yes, indicate the type of utility, distance, and direction on the site map.</p>	*X	
<p>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?</p> <p>If yes, indicate the area of contaminated soil on the site map.</p>		X

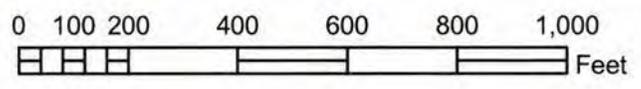
### **XIII. SITE MAP**

**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)



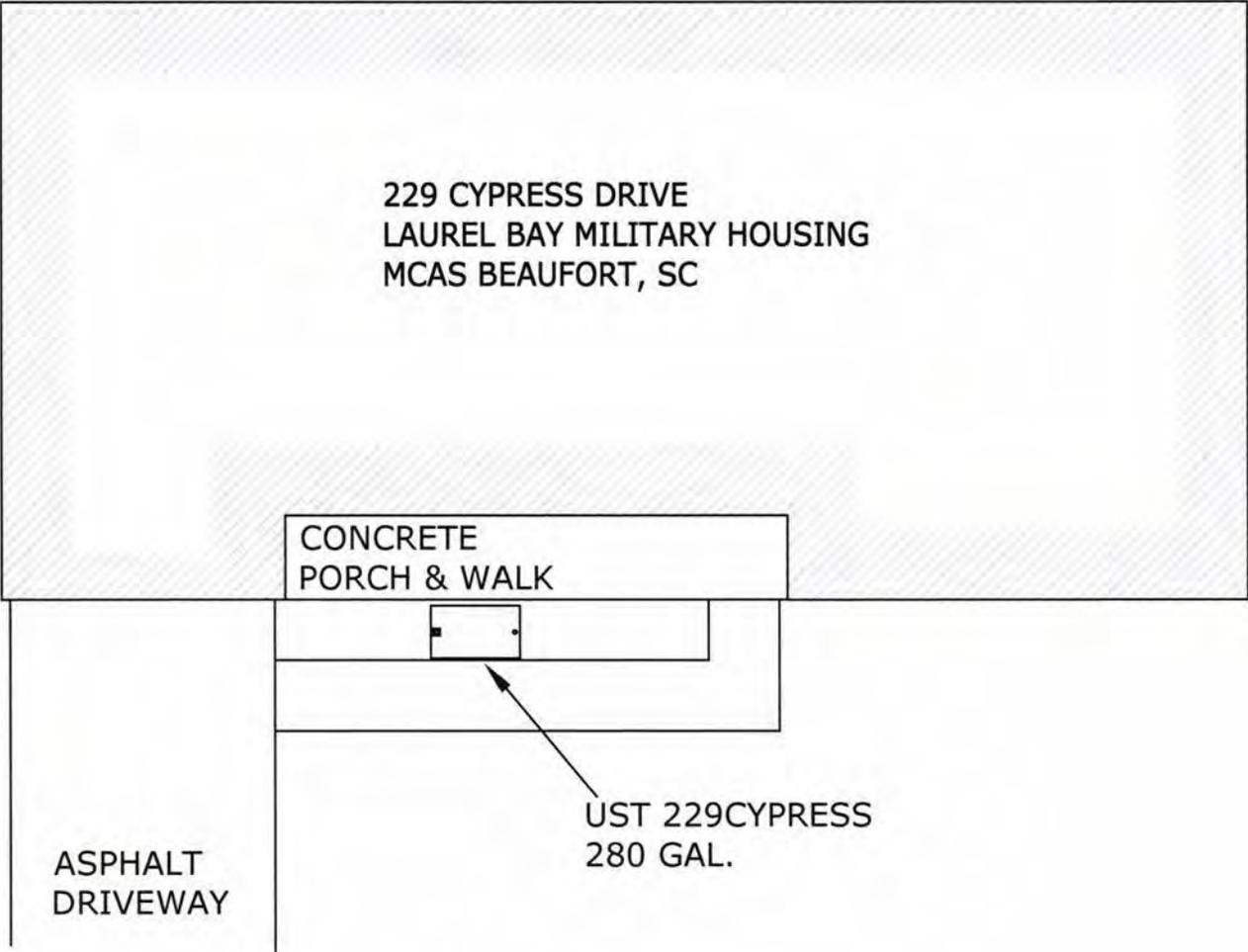
**229 CYPRESS**



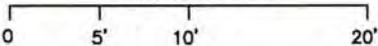
<p><b>SBG-EEG, Inc.</b>          398 E. 5th North Street, Suite C          Summerville SC 29483-6954          Ph. (843) 875-1930</p>
<p>Drawn By: L. DiAsio</p>
<p>Dwg Date: NOV 2011</p>

**FIGURE 1: LOCATION MAP  
 229 CYPRESS STREET  
 LAUREL BAY, BEAUFORT SC**

STORMWATER DRAINAGE CANAL  $\approx$  900' 



GRAPHIC SCALE



**SBG-EEG**

398 E. 5 NORTH ST., SUITE C  
SUMMERVILLE, SC  
29483-6954

FIGURE 2 SITE MAP  
229 CYPRESS ST., LAUREL BAY  
MCAS BEAUFORT SC

SCALE: GRAPHIC

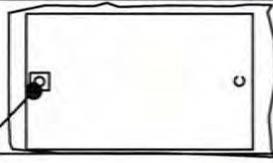
DWG DATE NOV 2011



229 CYPRESS STREET

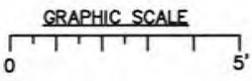
EXCAVATION

FILL END



SOIL SAMPLE  
229 CYPRESS

STORMWATER DRAINAGE CANAL  $\approx$  900' 



TANK DEPTH BELOW GRADE  
229CYPRESS = 24"

***SBG-EEG***  
398 E. 5 NORTH ST, SUITE C  
SUMMERVILLE, SC  
29483-6954

FIGURE 3 UST SAMPLE LOCATIONS  
229 CYPRESS ST., LAUREL BAY  
MCAS BEAUFORT SC

SCALE: GRAPHIC      DWG DATE NOV 2011



Picture 1: Location of UST 229Cypress.



Picture 2: UST 229Cypress tank pit.

**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.

<b>CoC</b>	UST	229Cypress					
<b>Benzene</b>		0.110 mg/kg					
<b>Toluene</b>		0.0864 mg/kg					
<b>Ethylbenzene</b>		12.3 mg/kg					
<b>Xylenes</b>		58.6 mg/kg					
<b>Naphthalene</b>		39.5 mg/kg					
<b>Benzo (a) anthracene</b>		ND					
<b>Benzo (b) fluoranthene</b>		ND					
<b>Benzo (k) fluoranthene</b>		ND					
<b>Chrysene</b>		ND					
<b>Dibenz (a, h) anthracene</b>		ND					
<b>TPH (EPA 3550)</b>							

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

**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.

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

## **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: NUJ3850

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

*Roxanne L. Connor*

Authorized for release by:

11/9/2011 2:06:15 PM

Roxanne Connor

Program Manager - Conventional Accounts

[roxanne.connor@testamericainc.com](mailto:roxanne.connor@testamericainc.com)

Designee for

Ken A. Hayes

Senior Project Manager

[ken.hayes@testamericainc.com](mailto:ken.hayes@testamericainc.com)

### LINKS

Review your project  
results through

**Total Access**

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.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.*

1

2

3

4

5

6

7

8

9

10

11



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Sample Summary . . . . .	3
Definitions . . . . .	4
Client Sample Results . . . . .	5
QC Sample Results . . . . .	10
QC Association . . . . .	16
Chronicle . . . . .	18
Method Summary . . . . .	19
Certification Summary . . . . .	20
Chain of Custody . . . . .	21

# Sample Summary

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

TestAmerica Job ID: NUJ3850

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
NUJ3850-01	314 Ash-1	Soil	10/24/11 11:45	10/29/11 08:20
NUJ3850-02	314 Ash-2	Soil	10/24/11 14:45	10/29/11 08:20
NUJ3850-03	229 Cypress	Soil	10/26/11 12:00	10/29/11 08:20



## Definitions/Glossary

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

TestAmerica Job ID: NUJ3850

### Qualifiers

#### GCMS Volatiles

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.
M8	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.
RL1	Reporting limit raised due to sample matrix effects.

#### 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 Sample Results

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

TestAmerica Job ID: NUJ3850

**Client Sample ID: 314 Ash-1**

**Lab Sample ID: NUJ3850-01**

**Date Collected: 10/24/11 11:45**

**Matrix: Soil**

**Date Received: 10/29/11 08:20**

**Percent Solids: 79.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00705		0.00225	0.00124	mg/kg dry	☐	10/24/11 11:45	11/05/11 02:40	1.00
Toluene	0.0127		0.00225	0.00124	mg/kg dry	☐	10/24/11 11:45	11/05/11 02:40	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	119		70 - 130				10/24/11 11:45	11/05/11 02:40	1.00
Dibromofluoromethane	113		70 - 130				10/24/11 11:45	11/05/11 02:40	1.00
Toluene-d8	219	ZX	70 - 130				10/24/11 11:45	11/05/11 02:40	1.00
4-Bromofluorobenzene	430	ZX	70 - 130				10/24/11 11:45	11/05/11 02:40	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	0.426		0.116	0.0636	mg/kg dry	☐	10/24/11 11:45	11/07/11 12:42	50.0
Naphthalene	2.92		0.289	0.145	mg/kg dry	☐	10/24/11 11:45	11/07/11 12:42	50.0
Xylenes, total	1.30		0.289	0.145	mg/kg dry	☐	10/24/11 11:45	11/07/11 12:42	50.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	102		70 - 130				10/24/11 11:45	11/07/11 12:42	50.0
Dibromofluoromethane	100		70 - 130				10/24/11 11:45	11/07/11 12:42	50.0
Toluene-d8	100		70 - 130				10/24/11 11:45	11/07/11 12:42	50.0
4-Bromofluorobenzene	114		70 - 130				10/24/11 11:45	11/07/11 12:42	50.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	2.12		0.831	0.422	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:33	10.0
Acenaphthylene	ND		0.831	0.422	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:33	10.0
Anthracene	1.07		0.831	0.422	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:33	10.0
Benzo (a) anthracene	1.10		0.831	0.422	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:33	10.0
Benzo (a) pyrene	0.546	J	0.831	0.422	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:33	10.0
Benzo (b) fluoranthene	0.488	J	0.831	0.422	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:33	10.0
Benzo (g,h,i) perylene	ND		0.831	0.422	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:33	10.0
Benzo (k) fluoranthene	0.649	J	0.831	0.422	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:33	10.0
Chrysene	1.05		0.831	0.422	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:33	10.0
Dibenz (a,h) anthracene	ND		0.831	0.422	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:33	10.0
Fluoranthene	3.26		0.831	0.422	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:33	10.0
Fluorene	5.56		0.831	0.422	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:33	10.0
Indeno (1,2,3-cd) pyrene	ND		0.831	0.422	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:33	10.0
Naphthalene	4.24		0.831	0.422	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:33	10.0
Phenanthrene	10.1		0.831	0.422	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:33	10.0
Pyrene	2.90		0.831	0.422	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:33	10.0
1-Methylnaphthalene	19.0		0.831	0.422	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:33	10.0
2-Methylnaphthalene	37.6		0.831	0.422	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:33	10.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	117		18 - 120				11/04/11 08:50	11/06/11 05:33	10.0
2-Fluorobiphenyl	98		14 - 120				11/04/11 08:50	11/06/11 05:33	10.0
Nitrobenzene-d5	46		17 - 120				11/04/11 08:50	11/06/11 05:33	10.0

**Method: SW-846 - General Chemistry Parameters**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	79.4		0.500	0.500	%		11/07/11 13:04	11/08/11 11:04	1.00

# Client Sample Results

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

TestAmerica Job ID: NUJ3850

**Client Sample ID: 314 Ash-2**

**Lab Sample ID: NUJ3850-02**

Date Collected: 10/24/11 14:45

Matrix: Soil

Date Received: 10/29/11 08:20

Percent Solids: 81.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00192	J	0.00232	0.00128	mg/kg dry	☼	10/24/11 14:45	11/05/11 03:09	1.00
Ethylbenzene	0.0976		0.00232	0.00128	mg/kg dry	☼	10/24/11 14:45	11/05/11 03:09	1.00
Toluene	0.00207	J	0.00232	0.00128	mg/kg dry	☼	10/24/11 14:45	11/05/11 03:09	1.00
Xylenes, total	0.0464		0.00580	0.00290	mg/kg dry	☼	10/24/11 14:45	11/05/11 03:09	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	110		70 - 130	10/24/11 14:45	11/05/11 03:09	1.00
Dibromofluoromethane	101		70 - 130	10/24/11 14:45	11/05/11 03:09	1.00
Toluene-d8	108		70 - 130	10/24/11 14:45	11/05/11 03:09	1.00
4-Bromofluorobenzene	84		70 - 130	10/24/11 14:45	11/05/11 03:09	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	3.33		0.290	0.145	mg/kg dry	☼	10/24/11 14:45	11/07/11 13:11	50.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	100		70 - 130	10/24/11 14:45	11/07/11 13:11	50.0
Dibromofluoromethane	97		70 - 130	10/24/11 14:45	11/07/11 13:11	50.0
Toluene-d8	98		70 - 130	10/24/11 14:45	11/07/11 13:11	50.0
4-Bromofluorobenzene	109		70 - 130	10/24/11 14:45	11/07/11 13:11	50.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.424		0.0817	0.0415	mg/kg dry	☼	11/04/11 08:50	11/04/11 19:59	1.00
Acenaphthylene	ND		0.0817	0.0415	mg/kg dry	☼	11/04/11 08:50	11/04/11 19:59	1.00
Anthracene	0.220		0.0817	0.0415	mg/kg dry	☼	11/04/11 08:50	11/04/11 19:59	1.00
Benzo (a) anthracene	0.110		0.0817	0.0415	mg/kg dry	☼	11/04/11 08:50	11/04/11 19:59	1.00
Benzo (a) pyrene	0.0484	J	0.0817	0.0415	mg/kg dry	☼	11/04/11 08:50	11/04/11 19:59	1.00
Benzo (b) fluoranthene	0.0585	J	0.0817	0.0415	mg/kg dry	☼	11/04/11 08:50	11/04/11 19:59	1.00
Benzo (g,h,i) perylene	ND		0.0817	0.0415	mg/kg dry	☼	11/04/11 08:50	11/04/11 19:59	1.00
Benzo (k) fluoranthene	0.0459	J	0.0817	0.0415	mg/kg dry	☼	11/04/11 08:50	11/04/11 19:59	1.00
Chrysene	0.111		0.0817	0.0415	mg/kg dry	☼	11/04/11 08:50	11/04/11 19:59	1.00
Dibenz (a,h) anthracene	ND		0.0817	0.0415	mg/kg dry	☼	11/04/11 08:50	11/04/11 19:59	1.00
Fluoranthene	0.243		0.0817	0.0415	mg/kg dry	☼	11/04/11 08:50	11/04/11 19:59	1.00
Fluorene	1.27		0.0817	0.0415	mg/kg dry	☼	11/04/11 08:50	11/04/11 19:59	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0817	0.0415	mg/kg dry	☼	11/04/11 08:50	11/04/11 19:59	1.00
Naphthalene	1.07		0.0817	0.0415	mg/kg dry	☼	11/04/11 08:50	11/04/11 19:59	1.00
Phenanthrene	2.79		0.0817	0.0415	mg/kg dry	☼	11/04/11 08:50	11/04/11 19:59	1.00
Pyrene	0.395		0.0817	0.0415	mg/kg dry	☼	11/04/11 08:50	11/04/11 19:59	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	80		18 - 120	11/04/11 08:50	11/04/11 19:59	1.00
2-Fluorobiphenyl	57		14 - 120	11/04/11 08:50	11/04/11 19:59	1.00
Nitrobenzene-d5	69		17 - 120	11/04/11 08:50	11/04/11 19:59	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	5.28		0.409	0.207	mg/kg dry	☼	11/04/11 08:50	11/06/11 04:46	5.00
2-Methylnaphthalene	9.12		0.409	0.207	mg/kg dry	☼	11/04/11 08:50	11/06/11 04:46	5.00



# Client Sample Results

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

TestAmerica Job ID: NUJ3850

**Client Sample ID: 314 Ash-2**

**Lab Sample ID: NUJ3850-02**

**Date Collected: 10/24/11 14:45**

**Matrix: Soil**

**Date Received: 10/29/11 08:20**

**Percent Solids: 81.3**

## Method: SW-846 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	81.3		0.500	0.500	%		11/07/11 13:04	11/08/11 11:04	1.00



# Client Sample Results

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

TestAmerica Job ID: NUJ3850

**Client Sample ID: 229 Cypress**

**Lab Sample ID: NUJ3850-03**

Date Collected: 10/26/11 12:00

Matrix: Soil

Date Received: 10/29/11 08:20

Percent Solids: 77.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.110		0.00226	0.00124	mg/kg dry	☐	10/26/11 12:00	11/05/11 03:39	1.00
<b>Surrogate</b>									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	130		70 - 130				10/26/11 12:00	11/05/11 03:39	1.00
Dibromofluoromethane	121		70 - 130				10/26/11 12:00	11/05/11 03:39	1.00
Toluene-d8	1480	ZX	70 - 130				10/26/11 12:00	11/05/11 03:39	1.00
4-Bromofluorobenzene	458	ZX	70 - 130				10/26/11 12:00	11/05/11 03:39	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	12.3		0.124	0.0684	mg/kg dry	☐	10/26/11 12:00	11/07/11 13:41	50.0
Toluene	0.0864	J RL1	0.124	0.0684	mg/kg dry	☐	10/26/11 12:00	11/07/11 13:41	50.0
<b>Surrogate</b>									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	98		70 - 130				10/26/11 12:00	11/07/11 13:41	50.0
Dibromofluoromethane	99		70 - 130				10/26/11 12:00	11/07/11 13:41	50.0
Toluene-d8	113		70 - 130				10/26/11 12:00	11/07/11 13:41	50.0
4-Bromofluorobenzene	107		70 - 130				10/26/11 12:00	11/07/11 13:41	50.0

**Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B - RE2**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	39.5		3.11	1.55	mg/kg dry	☐	10/26/11 12:00	11/07/11 14:11	500
Xylenes, total	58.6		3.11	1.55	mg/kg dry	☐	10/26/11 12:00	11/07/11 14:11	500
<b>Surrogate</b>									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	96		70 - 130				10/26/11 12:00	11/07/11 14:11	500
Dibromofluoromethane	96		70 - 130				10/26/11 12:00	11/07/11 14:11	500
Toluene-d8	99		70 - 130				10/26/11 12:00	11/07/11 14:11	500
4-Bromofluorobenzene	95		70 - 130				10/26/11 12:00	11/07/11 14:11	500

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.749		0.0863	0.0438	mg/kg dry	☐	11/04/11 08:50	11/04/11 20:22	1.00
Acenaphthylene	ND		0.0863	0.0438	mg/kg dry	☐	11/04/11 08:50	11/04/11 20:22	1.00
Anthracene	0.331		0.0863	0.0438	mg/kg dry	☐	11/04/11 08:50	11/04/11 20:22	1.00
Benzo (a) anthracene	ND		0.0863	0.0438	mg/kg dry	☐	11/04/11 08:50	11/04/11 20:22	1.00
Benzo (a) pyrene	ND		0.0863	0.0438	mg/kg dry	☐	11/04/11 08:50	11/04/11 20:22	1.00
Benzo (b) fluoranthene	ND		0.0863	0.0438	mg/kg dry	☐	11/04/11 08:50	11/04/11 20:22	1.00
Benzo (g,h,i) perylene	ND		0.0863	0.0438	mg/kg dry	☐	11/04/11 08:50	11/04/11 20:22	1.00
Benzo (k) fluoranthene	ND		0.0863	0.0438	mg/kg dry	☐	11/04/11 08:50	11/04/11 20:22	1.00
Chrysene	ND		0.0863	0.0438	mg/kg dry	☐	11/04/11 08:50	11/04/11 20:22	1.00
Dibenz (a,h) anthracene	ND		0.0863	0.0438	mg/kg dry	☐	11/04/11 08:50	11/04/11 20:22	1.00
Fluoranthene	0.0773	J	0.0863	0.0438	mg/kg dry	☐	11/04/11 08:50	11/04/11 20:22	1.00
Fluorene	1.86		0.0863	0.0438	mg/kg dry	☐	11/04/11 08:50	11/04/11 20:22	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0863	0.0438	mg/kg dry	☐	11/04/11 08:50	11/04/11 20:22	1.00
Naphthalene	2.68		0.0863	0.0438	mg/kg dry	☐	11/04/11 08:50	11/04/11 20:22	1.00
Phenanthrene	3.07		0.0863	0.0438	mg/kg dry	☐	11/04/11 08:50	11/04/11 20:22	1.00
Pyrene	0.332		0.0863	0.0438	mg/kg dry	☐	11/04/11 08:50	11/04/11 20:22	1.00
<b>Surrogate</b>									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	85		18 - 120				11/04/11 08:50	11/04/11 20:22	1.00
2-Fluorobiphenyl	50		14 - 120				11/04/11 08:50	11/04/11 20:22	1.00

# Client Sample Results

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

TestAmerica Job ID: NUJ3850

**Client Sample ID: 229 Cypress**

**Lab Sample ID: NUJ3850-03**

**Date Collected: 10/26/11 12:00**

**Matrix: Soil**

**Date Received: 10/29/11 08:20**

**Percent Solids: 77.2**

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	76		17 - 120	11/04/11 08:50	11/04/11 20:22	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	8.96		0.432	0.219	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:09	5.00
2-Methylnaphthalene	15.0		0.432	0.219	mg/kg dry	☐	11/04/11 08:50	11/06/11 05:09	5.00

**Method: SW-846 - General Chemistry Parameters**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	77.2		0.500	0.500	%		11/07/11 13:04	11/08/11 11:04	1.00



## QC Sample Results

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

TestAmerica Job ID: NUJ3850

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

Lab Sample ID: 11J7344-BLK1

Matrix: Soil

Analysis Batch: U019634

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 11J7344\_P

Analyte	Blank		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.00200	0.00110	mg/kg wet		10/31/11 13:27	11/04/11 20:41	1.00
Ethylbenzene	ND		0.00200	0.00110	mg/kg wet		10/31/11 13:27	11/04/11 20:41	1.00
Naphthalene	ND		0.00500	0.00250	mg/kg wet		10/31/11 13:27	11/04/11 20:41	1.00
Toluene	ND		0.00200	0.00110	mg/kg wet		10/31/11 13:27	11/04/11 20:41	1.00
Xylenes, total	ND		0.00500	0.00250	mg/kg wet		10/31/11 13:27	11/04/11 20:41	1.00

Surrogate	Blank		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4	118		70 - 130	10/31/11 13:27	11/04/11 20:41	1.00
Dibromofluoromethane	107		70 - 130	10/31/11 13:27	11/04/11 20:41	1.00
Toluene-d8	99		70 - 130	10/31/11 13:27	11/04/11 20:41	1.00
4-Bromofluorobenzene	96		70 - 130	10/31/11 13:27	11/04/11 20:41	1.00

Lab Sample ID: 11J7344-BS1

Matrix: Soil

Analysis Batch: U019634

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 11J7344\_P

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	
Benzene	50.0	50.0		ug/kg		100	75 - 127	
Ethylbenzene	50.0	48.7		ug/kg		97	80 - 134	
Naphthalene	50.0	40.3		ug/kg		81	69 - 150	
Toluene	50.0	49.3		ug/kg		99	80 - 132	
Xylenes, total	150	149		ug/kg		100	80 - 137	

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4	123		70 - 130
Dibromofluoromethane	109		70 - 130
Toluene-d8	99		70 - 130
4-Bromofluorobenzene	98		70 - 130

Lab Sample ID: 11J7344-MS1

Matrix: Soil

Analysis Batch: U019634

Client Sample ID: Matrix Spike

Prep Type: Total

Prep Batch: 11J7344\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike		Unit	D	%Rec	Limits
				Result	Qualifier				
Benzene	0.00167		0.0466	0.0448		mg/kg wet		93	31 - 143
Ethylbenzene	ND		0.0466	0.0427		mg/kg wet		92	23 - 161
Naphthalene	ND		0.0466	0.0283		mg/kg wet		61	10 - 176
Toluene	0.00109		0.0466	0.0431		mg/kg wet		90	30 - 155
Xylenes, total	ND		0.140	0.128		mg/kg wet		92	25 - 162

Surrogate	Matrix Spike		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4	128		70 - 130
Dibromofluoromethane	107		70 - 130
Toluene-d8	97		70 - 130
4-Bromofluorobenzene	91		70 - 130

## QC Sample Results

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

TestAmerica Job ID: NUJ3850

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

Lab Sample ID: 11J7344-MSD1

Matrix: Soil

Analysis Batch: U019634

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total

Prep Batch: 11J7344\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.00167		0.0462	0.0375		mg/kg wet		77	31 - 143	18	50
Ethylbenzene	ND		0.0462	0.0360		mg/kg wet		78	23 - 161	17	50
Naphthalene	ND		0.0462	0.0202		mg/kg wet		44	10 - 176	33	50
Toluene	0.00109		0.0462	0.0368		mg/kg wet		77	30 - 155	16	50
Xylenes, total	ND		0.139	0.108		mg/kg wet		78	25 - 162	17	50

Surrogate	Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier	Matrix Spike Dup Limits
1,2-Dichloroethane-d4	120		70 - 130
Dibromofluoromethane	107		70 - 130
Toluene-d8	96		70 - 130
4-Bromofluorobenzene	91		70 - 130

Lab Sample ID: 11K1275-BLK1

Matrix: Soil

Analysis Batch: U019682

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 11K1275\_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		11/05/11 06:55	11/07/11 12:09	1.00
Ethylbenzene	ND		0.00200	0.00110	mg/kg wet		11/05/11 06:55	11/07/11 12:09	1.00
Naphthalene	ND		0.00500	0.00250	mg/kg wet		11/05/11 06:55	11/07/11 12:09	1.00
Toluene	ND		0.00200	0.00110	mg/kg wet		11/05/11 06:55	11/07/11 12:09	1.00
Xylenes, total	ND		0.00500	0.00250	mg/kg wet		11/05/11 06:55	11/07/11 12:09	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Blank Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	105		70 - 130	11/05/11 06:55	11/07/11 12:09	1.00
Dibromofluoromethane	103		70 - 130	11/05/11 06:55	11/07/11 12:09	1.00
Toluene-d8	96		70 - 130	11/05/11 06:55	11/07/11 12:09	1.00
4-Bromofluorobenzene	95		70 - 130	11/05/11 06:55	11/07/11 12:09	1.00

Lab Sample ID: 11K1275-BLK2

Matrix: Soil

Analysis Batch: U019682

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 11K1275\_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0550	mg/kg wet		11/05/11 06:55	11/07/11 11:40	50.0
Ethylbenzene	ND		0.100	0.0550	mg/kg wet		11/05/11 06:55	11/07/11 11:40	50.0
Naphthalene	ND		0.250	0.125	mg/kg wet		11/05/11 06:55	11/07/11 11:40	50.0
Toluene	ND		0.100	0.0550	mg/kg wet		11/05/11 06:55	11/07/11 11:40	50.0
Xylenes, total	ND		0.250	0.125	mg/kg wet		11/05/11 06:55	11/07/11 11:40	50.0

Surrogate	Blank %Recovery	Blank Qualifier	Blank Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	100		70 - 130	11/05/11 06:55	11/07/11 11:40	50.0
Dibromofluoromethane	101		70 - 130	11/05/11 06:55	11/07/11 11:40	50.0
Toluene-d8	98		70 - 130	11/05/11 06:55	11/07/11 11:40	50.0
4-Bromofluorobenzene	94		70 - 130	11/05/11 06:55	11/07/11 11:40	50.0

# QC Sample Results

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

TestAmerica Job ID: NUJ3850



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

Lab Sample ID: 11K1275-BS1				Client Sample ID: Lab Control Sample			
Matrix: Soil				Prep Type: Total			
Analysis Batch: U019682				Prep Batch: 11K1275_P			
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Benzene	50.0	50.7		ug/kg		101	75 - 127
Ethylbenzene	50.0	49.6		ug/kg		99	80 - 134
Naphthalene	50.0	49.3		ug/kg		99	69 - 150
Toluene	50.0	49.5		ug/kg		99	80 - 132
Xylenes, total	150	154		ug/kg		103	80 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4	115		70 - 130
Dibromofluoromethane	105		70 - 130
Toluene-d8	98		70 - 130
4-Bromofluorobenzene	95		70 - 130

Lab Sample ID: 11K1275-BSD1				Client Sample ID: Lab Control Sample Dup					
Matrix: Soil				Prep Type: Total					
Analysis Batch: U019682				Prep Batch: 11K1275_P					
Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	50.0	52.2		ug/kg		104	75 - 127	3	50
Ethylbenzene	50.0	50.9		ug/kg		102	80 - 134	3	50
Naphthalene	50.0	50.0		ug/kg		100	69 - 150	2	50
Toluene	50.0	51.3		ug/kg		103	80 - 132	4	50
Xylenes, total	150	156		ug/kg		104	80 - 137	1	50

Surrogate	LCS Dup %Recovery	LCS Dup Qualifier	Limits
1,2-Dichloroethane-d4	115		70 - 130
Dibromofluoromethane	104		70 - 130
Toluene-d8	100		70 - 130
4-Bromofluorobenzene	95		70 - 130

Lab Sample ID: 11K1275-MS1				Client Sample ID: Matrix Spike					
Matrix: Soil				Prep Type: Total					
Analysis Batch: U019682				Prep Batch: 11K1275_P					
Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	Limits
Benzene	ND		0.0487	0.0424		mg/kg dry	☼	87	31 - 143
Ethylbenzene	ND		0.0487	0.0376		mg/kg dry	☼	77	23 - 161
Naphthalene	ND		0.0487	0.00430	M8 J	mg/kg dry	☼	9	10 - 176
Toluene	ND		0.0487	0.0394		mg/kg dry	☼	81	30 - 155
Xylenes, total	ND		0.146	0.108		mg/kg dry	☼	74	25 - 162

Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits
1,2-Dichloroethane-d4	112		70 - 130
Dibromofluoromethane	107		70 - 130
Toluene-d8	99		70 - 130
4-Bromofluorobenzene	99		70 - 130

# QC Sample Results

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

TestAmerica Job ID: NUJ3850

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

Lab Sample ID: 11K1275-MSD1			Client Sample ID: Matrix Spike Duplicate									
Matrix: Soil			Prep Type: Total									
Analysis Batch: U019682			Prep Batch: 11K1275_P									
Analyte	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spike Dup	Unit	D	%Rec	Limits	RPD	Limit	
	Result	Qualifier	Added	Result	Qualifier							
Benzene	ND		0.0475	0.0388		mg/kg dry	10	82	31 - 143	9	50	
Ethylbenzene	ND		0.0475	0.0322		mg/kg dry	10	68	23 - 161	16	50	
Naphthalene	ND		0.0475	0.00365	M8 J	mg/kg dry	10	8	10 - 176	16	50	
Toluene	ND		0.0475	0.0347		mg/kg dry	10	73	30 - 155	13	50	
Xylenes, total	ND		0.142	0.0921		mg/kg dry	10	65	25 - 162	16	50	
<b>Surrogate</b>			<b>Matrix Spike Dup</b>	<b>Matrix Spike Dup</b>								
	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>									
1,2-Dichloroethane-d4	114		70 - 130									
Dibromofluoromethane	106		70 - 130									
Toluene-d8	98		70 - 130									
4-Bromofluorobenzene	98		70 - 130									

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

Lab Sample ID: 11J7299-BLK1			Client Sample ID: Method Blank									
Matrix: Soil			Prep Type: Total									
Analysis Batch: 11J7299			Prep Batch: 11J7299_P									
Analyte	Blank	Blank	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac			
	Result	Qualifier										
Acenaphthene	ND		0.0670	0.0340	mg/kg wet		11/04/11 08:50	11/04/11 16:51	1.00			
Acenaphthylene	ND		0.0670	0.0340	mg/kg wet		11/04/11 08:50	11/04/11 16:51	1.00			
Anthracene	ND		0.0670	0.0340	mg/kg wet		11/04/11 08:50	11/04/11 16:51	1.00			
Benzo (a) anthracene	ND		0.0670	0.0340	mg/kg wet		11/04/11 08:50	11/04/11 16:51	1.00			
Benzo (a) pyrene	ND		0.0670	0.0340	mg/kg wet		11/04/11 08:50	11/04/11 16:51	1.00			
Benzo (b) fluoranthene	ND		0.0670	0.0340	mg/kg wet		11/04/11 08:50	11/04/11 16:51	1.00			
Benzo (g,h,i) perylene	ND		0.0670	0.0340	mg/kg wet		11/04/11 08:50	11/04/11 16:51	1.00			
Benzo (k) fluoranthene	ND		0.0670	0.0340	mg/kg wet		11/04/11 08:50	11/04/11 16:51	1.00			
Chrysene	ND		0.0670	0.0340	mg/kg wet		11/04/11 08:50	11/04/11 16:51	1.00			
Dibenz (a,h) anthracene	ND		0.0670	0.0340	mg/kg wet		11/04/11 08:50	11/04/11 16:51	1.00			
Fluoranthene	ND		0.0670	0.0340	mg/kg wet		11/04/11 08:50	11/04/11 16:51	1.00			
Fluorene	ND		0.0670	0.0340	mg/kg wet		11/04/11 08:50	11/04/11 16:51	1.00			
Indeno (1,2,3-cd) pyrene	ND		0.0670	0.0340	mg/kg wet		11/04/11 08:50	11/04/11 16:51	1.00			
Naphthalene	ND		0.0670	0.0340	mg/kg wet		11/04/11 08:50	11/04/11 16:51	1.00			
Phenanthrene	ND		0.0670	0.0340	mg/kg wet		11/04/11 08:50	11/04/11 16:51	1.00			
Pyrene	ND		0.0670	0.0340	mg/kg wet		11/04/11 08:50	11/04/11 16:51	1.00			
1-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		11/04/11 08:50	11/04/11 16:51	1.00			
2-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		11/04/11 08:50	11/04/11 16:51	1.00			
<b>Surrogate</b>			<b>Blank</b>	<b>Blank</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>			
	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>									
Terphenyl-d14	83		18 - 120				11/04/11 08:50	11/04/11 16:51	1.00			
2-Fluorobiphenyl	57		14 - 120				11/04/11 08:50	11/04/11 16:51	1.00			
Nitrobenzene-d5	64		17 - 120				11/04/11 08:50	11/04/11 16:51	1.00			

Lab Sample ID: 11J7299-BS1			Client Sample ID: Lab Control Sample									
Matrix: Soil			Prep Type: Total									
Analysis Batch: 11J7299			Prep Batch: 11J7299_P									
Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits					
	Added	Result	Qualifier									
Acenaphthene	1.67	1.29		mg/kg wet		77	36 - 120					

# QC Sample Results

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

TestAmerica Job ID: NUJ3850

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

Lab Sample ID: 11J7299-BS1		Client Sample ID: Lab Control Sample							
Matrix: Soil		Prep Type: Total							
Analysis Batch: 11J7299		Prep Batch: 11J7299_P							
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acenaphthylene	1.67	1.17		mg/kg wet		70	38 - 120		
Anthracene	1.67	1.34		mg/kg wet		81	46 - 124		
Benzo (a) anthracene	1.67	1.33		mg/kg wet		80	45 - 120		
Benzo (a) pyrene	1.67	1.49		mg/kg wet		89	45 - 120		
Benzo (b) fluoranthene	1.67	1.32		mg/kg wet		79	42 - 120		
Benzo (g,h,i) perylene	1.67	1.32		mg/kg wet		79	38 - 120		
Benzo (k) fluoranthene	1.67	1.50		mg/kg wet		90	42 - 120		
Chrysene	1.67	1.31		mg/kg wet		79	43 - 120		
Dibenz (a,h) anthracene	1.67	1.29		mg/kg wet		77	32 - 128		
Fluoranthene	1.67	1.35		mg/kg wet		81	46 - 120		
Fluorene	1.67	1.29		mg/kg wet		78	42 - 120		
Indeno (1,2,3-cd) pyrene	1.67	1.31		mg/kg wet		78	41 - 121		
Naphthalene	1.67	1.21		mg/kg wet		73	32 - 120		
Phenanthrene	1.67	1.32		mg/kg wet		79	45 - 120		
Pyrene	1.67	1.37		mg/kg wet		82	43 - 120		
1-Methylnaphthalene	1.67	0.928		mg/kg wet		56	32 - 120		
2-Methylnaphthalene	1.67	1.14		mg/kg wet		68	28 - 120		

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Terphenyl-d14	84		18 - 120
2-Fluorobiphenyl	63		14 - 120
Nitrobenzene-d5	56		17 - 120

Lab Sample ID: 11J7299-MS1		Client Sample ID: Matrix Spike								
Matrix: Soil		Prep Type: Total								
Analysis Batch: 11J7299		Prep Batch: 11J7299_P								
Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits	
Acenaphthene	ND		2.04	1.57		mg/kg dry	☐	77	19 - 120	
Acenaphthylene	ND		2.04	1.35		mg/kg dry	☐	67	25 - 120	
Anthracene	ND		2.04	1.62		mg/kg dry	☐	79	28 - 125	
Benzo (a) anthracene	ND		2.04	1.58		mg/kg dry	☐	78	23 - 120	
Benzo (a) pyrene	ND		2.04	1.81		mg/kg dry	☐	89	15 - 128	
Benzo (b) fluoranthene	ND		2.04	1.51		mg/kg dry	☐	74	12 - 133	
Benzo (g,h,i) perylene	ND		2.04	1.60		mg/kg dry	☐	78	22 - 120	
Benzo (k) fluoranthene	ND		2.04	1.44		mg/kg dry	☐	71	28 - 120	
Chrysene	ND		2.04	1.49		mg/kg dry	☐	73	20 - 120	
Dibenz (a,h) anthracene	ND		2.04	1.58		mg/kg dry	☐	78	12 - 128	
Fluoranthene	ND		2.04	1.60		mg/kg dry	☐	79	10 - 143	
Fluorene	ND		2.04	1.60		mg/kg dry	☐	79	20 - 120	
Indeno (1,2,3-cd) pyrene	ND		2.04	1.61		mg/kg dry	☐	79	22 - 121	
Naphthalene	0.242		2.04	1.57		mg/kg dry	☐	65	10 - 120	
Phenanthrene	ND		2.04	1.58		mg/kg dry	☐	78	21 - 122	
Pyrene	ND		2.04	1.63		mg/kg dry	☐	80	20 - 123	
1-Methylnaphthalene	0.365		2.04	1.23		mg/kg dry	☐	42	10 - 120	
2-Methylnaphthalene	0.800		2.04	1.62		mg/kg dry	☐	40	13 - 120	

Surrogate	Matrix Spike Matrix Spike		Limits
	%Recovery	Qualifier	
Terphenyl-d14	82		18 - 120



## QC Sample Results

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

TestAmerica Job ID: NUJ3850



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

Lab Sample ID: 11J7299-MS1  
Matrix: Soil  
Analysis Batch: 11J7299

Client Sample ID: Matrix Spike  
Prep Type: Total  
Prep Batch: 11J7299\_P

Surrogate	Matrix Spike	Matrix Spike	Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	63		14 - 120
Nitrobenzene-d5	55		17 - 120

Lab Sample ID: 11J7299-MSD1  
Matrix: Soil  
Analysis Batch: 11J7299

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total  
Prep Batch: 11J7299\_P

Analyte	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spike Dup	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits		
Acenaphthene	ND		2.06	1.73		mg/kg dry	*	84	19 - 120	10	50	
Acenaphthylene	ND		2.06	1.55		mg/kg dry	*	75	25 - 120	13	50	
Anthracene	ND		2.06	1.76		mg/kg dry	*	85	28 - 125	8	49	
Benzo (a) anthracene	ND		2.06	1.67		mg/kg dry	*	81	23 - 120	6	50	
Benzo (a) pyrene	ND		2.06	1.84		mg/kg dry	*	89	15 - 128	1	50	
Benzo (b) fluoranthene	ND		2.06	1.77		mg/kg dry	*	86	12 - 133	15	50	
Benzo (g,h,i) perylene	ND		2.06	1.65		mg/kg dry	*	80	22 - 120	3	50	
Benzo (k) fluoranthene	ND		2.06	1.82		mg/kg dry	*	89	28 - 120	23	45	
Chrysene	ND		2.06	1.64		mg/kg dry	*	80	20 - 120	9	49	
Dibenz (a,h) anthracene	ND		2.06	1.59		mg/kg dry	*	78	12 - 128	0.8	50	
Fluoranthene	ND		2.06	1.76		mg/kg dry	*	86	10 - 143	9	50	
Fluorene	ND		2.06	1.74		mg/kg dry	*	84	20 - 120	8	50	
Indeno (1,2,3-cd) pyrene	ND		2.06	1.63		mg/kg dry	*	79	22 - 121	1	50	
Naphthalene	0.242		2.06	1.60		mg/kg dry	*	66	10 - 120	2	50	
Phenanthrene	ND		2.06	1.74		mg/kg dry	*	84	21 - 122	9	50	
Pyrene	ND		2.06	1.71		mg/kg dry	*	83	20 - 123	5	50	
1-Methylnaphthalene	0.365		2.06	1.26		mg/kg dry	*	44	10 - 120	2	50	
2-Methylnaphthalene	0.800		2.06	1.68		mg/kg dry	*	43	13 - 120	3	50	

Surrogate	Matrix Spike Dup	Matrix Spike Dup	Limits
	%Recovery	Qualifier	
Terphenyl-d14	81		18 - 120
2-Fluorobiphenyl	62		14 - 120
Nitrobenzene-d5	57		17 - 120

### Method: SW-846 - General Chemistry Parameters

Lab Sample ID: 11K1587-DUP1  
Matrix: Soil  
Analysis Batch: 11K1587

Client Sample ID: Duplicate  
Prep Type: Total  
Prep Batch: 11K1587\_P

Analyte	Sample	Sample	Duplicate	Duplicate	Unit	D	RPD	RPD	Limit
	Result	Qualifier	Result	Qualifier				Limits	
% Dry Solids	79.9		81.8		%		2	20	

## QC Association Summary

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

TestAmerica Job ID: NUJ3850

### GCMS Volatiles

#### Analysis Batch: U019634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7344-BLK1	Method Blank	Total	Soil	SW846 8260B	11J7344_P
11J7344-BS1	Lab Control Sample	Total	Soil	SW846 8260B	11J7344_P
11J7344-MS1	Matrix Spike	Total	Soil	SW846 8260B	11J7344_P
11J7344-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8260B	11J7344_P
NUJ3850-01	314 Ash-1	Total	Soil	SW846 8260B	11J7344_P
NUJ3850-02	314 Ash-2	Total	Soil	SW846 8260B	11J7344_P
NUJ3850-03	229 Cypress	Total	Soil	SW846 8260B	11J7344_P

#### Analysis Batch: U019682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K1275-BLK1	Method Blank	Total	Soil	SW846 8260B	11K1275_P
11K1275-BLK2	Method Blank	Total	Soil	SW846 8260B	11K1275_P
11K1275-BS1	Lab Control Sample	Total	Soil	SW846 8260B	11K1275_P
11K1275-BSD1	Lab Control Sample Dup	Total	Soil	SW846 8260B	11K1275_P
11K1275-MS1	Matrix Spike	Total	Soil	SW846 8260B	11K1275_P
11K1275-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8260B	11K1275_P
NUJ3850-01 - RE1	314 Ash-1	Total	Soil	SW846 8260B	11K1275_P
NUJ3850-02 - RE1	314 Ash-2	Total	Soil	SW846 8260B	11K1275_P
NUJ3850-03 - RE1	229 Cypress	Total	Soil	SW846 8260B	11K1275_P
NUJ3850-03 - RE2	229 Cypress	Total	Soil	SW846 8260B	11K1275_P

#### Prep Batch: 11J7344\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7344-BLK1	Method Blank	Total	Soil	EPA 5035	
11J7344-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11J7344-MS1	Matrix Spike	Total	Soil	EPA 5035	
11J7344-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 5035	
NUJ3850-01	314 Ash-1	Total	Soil	EPA 5035	
NUJ3850-02	314 Ash-2	Total	Soil	EPA 5035	
NUJ3850-03	229 Cypress	Total	Soil	EPA 5035	

#### Prep Batch: 11K1275\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K1275-BLK1	Method Blank	Total	Soil	EPA 5035	
11K1275-BLK2	Method Blank	Total	Soil	EPA 5035	
11K1275-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11K1275-BSD1	Lab Control Sample Dup	Total	Soil	EPA 5035	
11K1275-MS1	Matrix Spike	Total	Soil	EPA 5035	
11K1275-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 5035	
NUJ3850-01 - RE1	314 Ash-1	Total	Soil	EPA 5035	
NUJ3850-02 - RE1	314 Ash-2	Total	Soil	EPA 5035	
NUJ3850-03 - RE1	229 Cypress	Total	Soil	EPA 5035	
NUJ3850-03 - RE2	229 Cypress	Total	Soil	EPA 5035	

### GCMS Semivolatiles

#### Analysis Batch: 11J7299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7299-BLK1	Method Blank	Total	Soil	SW846 8270D	11J7299_P
11J7299-BS1	Lab Control Sample	Total	Soil	SW846 8270D	11J7299_P
11J7299-MS1	Matrix Spike	Total	Soil	SW846 8270D	11J7299_P
11J7299-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8270D	11J7299_P



## QC Association Summary

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

TestAmerica Job ID: NUJ3850



### GCMS Semivolatiles (Continued)

#### Analysis Batch: 11J7299 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
NUJ3850-02	314 Ash-2	Total	Soil	SW846 8270D	11J7299_P
NUJ3850-03	229 Cypress	Total	Soil	SW846 8270D	11J7299_P

#### Analysis Batch: U019507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
NUJ3850-01 - RE1	314 Ash-1	Total	Soil	SW846 8270D	11J7299_P
NUJ3850-02 - RE1	314 Ash-2	Total	Soil	SW846 8270D	11J7299_P
NUJ3850-03 - RE1	229 Cypress	Total	Soil	SW846 8270D	11J7299_P

#### Prep Batch: 11J7299\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7299-BLK1	Method Blank	Total	Soil	EPA 3550B	
11J7299-BS1	Lab Control Sample	Total	Soil	EPA 3550B	
11J7299-MS1	Matrix Spike	Total	Soil	EPA 3550B	
11J7299-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 3550B	
NUJ3850-01 - RE1	314 Ash-1	Total	Soil	EPA 3550B	
NUJ3850-02	314 Ash-2	Total	Soil	EPA 3550B	
NUJ3850-02 - RE1	314 Ash-2	Total	Soil	EPA 3550B	
NUJ3850-03	229 Cypress	Total	Soil	EPA 3550B	
NUJ3850-03 - RE1	229 Cypress	Total	Soil	EPA 3550B	

### Extractions

#### Analysis Batch: 11K1587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K1587-DUP1	Duplicate	Total	Soil	SW-846	11K1587_P
NUJ3850-01	314 Ash-1	Total	Soil	SW-846	11K1587_P
NUJ3850-02	314 Ash-2	Total	Soil	SW-846	11K1587_P
NUJ3850-03	229 Cypress	Total	Soil	SW-846	11K1587_P

#### Prep Batch: 11K1587\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K1587-DUP1	Duplicate	Total	Soil	% Solids	
NUJ3850-01	314 Ash-1	Total	Soil	% Solids	
NUJ3850-02	314 Ash-2	Total	Soil	% Solids	
NUJ3850-03	229 Cypress	Total	Soil	% Solids	

# Lab Chronicle

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

TestAmerica Job ID: NUJ3850

## Client Sample ID: 314 Ash-1

Lab Sample ID: NUJ3850-01

Date Collected: 10/24/11 11:45

Matrix: Soil

Date Received: 10/29/11 08:20

Percent Solids: 79.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.893	11J7344_P	10/24/11 11:45	AAN	TAL NSH
Total	Analysis	SW846 8260B		1.00	U019634	11/05/11 02:40	KXC	TAL NSH
Total	Prep	EPA 5035	RE1	0.919	11K1275_P	10/24/11 11:45	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE1	50.0	U019682	11/07/11 12:42	KXC	TAL NSH
Total	Prep	EPA 3550B	RE1	0.985	11J7299_P	11/04/11 08:50	JJR	TAL NSH
Total	Analysis	SW846 8270D	RE1	10.0	U019507	11/06/11 05:33	JLS	TAL NSH
Total	Prep	% Solids		1.00	11K1587_P	11/07/11 13:04	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11K1587	11/08/11 11:04	RRS	TAL NSH

## Client Sample ID: 314 Ash-2

Lab Sample ID: NUJ3850-02

Date Collected: 10/24/11 14:45

Matrix: Soil

Date Received: 10/29/11 08:20

Percent Solids: 81.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.943	11J7344_P	10/24/11 14:45	AAN	TAL NSH
Total	Analysis	SW846 8260B		1.00	U019634	11/05/11 03:09	KXC	TAL NSH
Total	Prep	EPA 5035	RE1	0.942	11K1275_P	10/24/11 14:45	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE1	50.0	U019682	11/07/11 13:11	KXC	TAL NSH
Total	Prep	EPA 3550B		0.991	11J7299_P	11/04/11 08:50	JJR	TAL NSH
Total	Analysis	SW846 8270D		1.00	11J7299	11/04/11 19:59	JLS	TAL NSH
Total	Prep	EPA 3550B	RE1	0.991	11J7299_P	11/04/11 08:50	JJR	TAL NSH
Total	Analysis	SW846 8270D	RE1	5.00	U019507	11/06/11 04:46	JLS	TAL NSH
Total	Prep	% Solids		1.00	11K1587_P	11/07/11 13:04	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11K1587	11/08/11 11:04	RRS	TAL NSH

## Client Sample ID: 229 Cypress

Lab Sample ID: NUJ3850-03

Date Collected: 10/26/11 12:00

Matrix: Soil

Date Received: 10/29/11 08:20

Percent Solids: 77.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.873	11J7344_P	10/26/11 12:00	AAN	TAL NSH
Total	Analysis	SW846 8260B		1.00	U019634	11/05/11 03:39	KXC	TAL NSH
Total	Prep	EPA 5035	RE1	0.960	11K1275_P	10/26/11 12:00	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE1	50.0	U019682	11/07/11 13:41	KXC	TAL NSH
Total	Prep	EPA 5035	RE2	0.960	11K1275_P	10/26/11 12:00	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE2	500	U019682	11/07/11 14:11	KXC	TAL NSH
Total	Prep	EPA 3550B		0.995	11J7299_P	11/04/11 08:50	JJR	TAL NSH
Total	Analysis	SW846 8270D		1.00	11J7299	11/04/11 20:22	JLS	TAL NSH
Total	Prep	EPA 3550B	RE1	0.995	11J7299_P	11/04/11 08:50	JJR	TAL NSH
Total	Analysis	SW846 8270D	RE1	5.00	U019507	11/06/11 05:09	JLS	TAL NSH
Total	Prep	% Solids		1.00	11K1587_P	11/07/11 13:04	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11K1587	11/08/11 11:04	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: NUJ3850

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: NUJ3850



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.



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 229Cypress; 229 Cypress 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. Wilcox, 5/17/12  
(Name) (Date)

**Appendix C**  
**Laboratory Analytical Report - Groundwater**

### ANALYTICAL RESULTS

Project: LAUREL BAY 7/30/08

Pace Project No.: 9224584

<b>Sample: 229 CYPRESS A</b>	<b>Lab ID: 9224584001</b>	Collected: 07/30/08 08:30	Received: 08/01/08 07:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

**8270 MSSV PAH by SIM SPE**

Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3535

Acenaphthene	ND ug/L		2.0	1	08/04/08 00:00	08/13/08 07:34	83-32-9	
Acenaphthylene	ND ug/L		1.5	1	08/04/08 00:00	08/13/08 07:34	208-96-8	
Anthracene	ND ug/L		0.050	1	08/04/08 00:00	08/13/08 07:34	120-12-7	
Benzo(a)anthracene	ND ug/L		0.10	1	08/04/08 00:00	08/13/08 07:34	56-55-3	
Benzo(a)pyrene	ND ug/L		0.20	1	08/04/08 00:00	08/13/08 07:34	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.30	1	08/04/08 00:00	08/13/08 07:34	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.20	1	08/04/08 00:00	08/13/08 07:34	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.20	1	08/04/08 00:00	08/13/08 07:34	207-08-9	
Chrysene	ND ug/L		0.10	1	08/04/08 00:00	08/13/08 07:34	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.20	1	08/04/08 00:00	08/13/08 07:34	53-70-3	
Fluoranthene	ND ug/L		0.30	1	08/04/08 00:00	08/13/08 07:34	206-44-0	
Fluorene	ND ug/L		0.31	1	08/04/08 00:00	08/13/08 07:34	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.20	1	08/04/08 00:00	08/13/08 07:34	193-39-5	
1-Methylnaphthalene	ND ug/L		2.0	1	08/04/08 00:00	08/13/08 07:34	90-12-0	
2-Methylnaphthalene	ND ug/L		2.0	1	08/04/08 00:00	08/13/08 07:34	91-57-6	
Naphthalene	ND ug/L		1.5	1	08/04/08 00:00	08/13/08 07:34	91-20-3	
Phenanthrene	ND ug/L		0.20	1	08/04/08 00:00	08/13/08 07:34	85-01-8	
Pyrene	ND ug/L		0.10	1	08/04/08 00:00	08/13/08 07:34	129-00-0	
Nitrobenzene-d5 (S)	55 %		50-150	1	08/04/08 00:00	08/13/08 07:34	4165-60-0	
2-Fluorobiphenyl (S)	65 %		50-150	1	08/04/08 00:00	08/13/08 07:34	321-60-8	
Terphenyl-d14 (S)	73 %		50-150	1	08/04/08 00:00	08/13/08 07:34	1718-51-0	

**8260 MSV Low Level**

Analytical Method: EPA 8260

Benzene	ND ug/L		1.0	1	08/05/08 15:34	08/05/08 15:34	71-43-2	
Ethylbenzene	ND ug/L		1.0	1	08/05/08 15:34	08/05/08 15:34	100-41-4	
Naphthalene	ND ug/L		2.0	1	08/05/08 15:34	08/05/08 15:34	91-20-3	
Toluene	ND ug/L		1.0	1	08/05/08 15:34	08/05/08 15:34	108-88-3	
m&p-Xylene	ND ug/L		2.0	1	08/05/08 15:34	08/05/08 15:34	1330-20-7	
o-Xylene	ND ug/L		1.0	1	08/05/08 15:34	08/05/08 15:34	95-47-6	
4-Bromofluorobenzene (S)	99 %		87-109	1	08/05/08 15:34	08/05/08 15:34	460-00-4	
Dibromofluoromethane (S)	95 %		85-115	1	08/05/08 15:34	08/05/08 15:34	1868-53-7	
1,2-Dichloroethane-d4 (S)	98 %		79-120	1	08/05/08 15:34	08/05/08 15:34	17060-07-0	
Toluene-d8 (S)	101 %		70-120	1	08/05/08 15:34	08/05/08 15:34	2037-26-5	

<b>Sample: 225 CYPRESS A</b>	<b>Lab ID: 9224584002</b>	Collected: 07/30/08 08:55	Received: 08/01/08 07:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

**8270 MSSV PAH by SIM SPE**

Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3535

Acenaphthene	ND ug/L		2.0	1	08/04/08 00:00	08/13/08 07:57	83-32-9	
Acenaphthylene	ND ug/L		1.5	1	08/04/08 00:00	08/13/08 07:57	208-96-8	
Anthracene	0.051 ug/L		0.050	1	08/04/08 00:00	08/13/08 07:57	120-12-7	
Benzo(a)anthracene	ND ug/L		0.10	1	08/04/08 00:00	08/13/08 07:57	56-55-3	
Benzo(a)pyrene	ND ug/L		0.20	1	08/04/08 00:00	08/13/08 07:57	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.30	1	08/04/08 00:00	08/13/08 07:57	205-99-2	

Date: 08/14/2008 04:21 PM

### REPORT OF LABORATORY ANALYSIS

Page 4 of 29

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# Volatile Organic Compounds by GC/MS

Client: <b>AECOM - Resolution Consultants</b>	Laboratory ID: <b>QE21004-022</b>
Description: <b>BEALB229TW02WG20150521</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>05/21/2015 1340</b>	
Date Received: <b>05/22/2015</b>	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	05/27/2015 1556	EH1		75865

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.17	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	0.32	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.16	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.19	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		105	75-120
1,2-Dichloroethane-d4		104	70-120
Toluene-d8		111	85-120
Dibromofluoromethane		102	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

# Semivolatile Organic Compounds by GC/MS (SIM)

Client: **AECOM - Resolution Consultants**

Laboratory ID: **QE21004-022**

Description: **BEALB229TW02WG20150521**

Matrix: **Aqueous**

Date Sampled: **05/21/2015 1340**

Date Received: **05/22/2015**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D (SIM)	1	05/28/2015 0121	RBH	05/26/2015 1543	75778

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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Methylnaphthalene-d10		65	15-139
Fluoranthene-d10		75	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

Level 1 Report v2.1

**Appendix D**  
**Regulatory Correspondence**

BOARD:  
Paul C. Aughtry, III  
Chairman  
Edwin H. Cooper, III  
Vice Chairman  
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Secretary



C. Earl Hunter, Commissioner

*Promoting and protecting the health of the public and the environment*

BOARD:  
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M. David Mitchell, MD  
Glenn A. McCall  
Coleman F. Buckhouse, MD

3 September 2008

Beaufort Military Complex Family Housing  
ATTN: Kyle Broadfoot  
1510 Laurel Bay Blvd.  
Beaufort, SC 29906

Re: MCAS – Laurel Bay Housing – 229 Cypress  
Site ID # 04032  
UST Closure Reports received 31 January 2008  
Beaufort County

Dear Mr. Broadfoot:

The purpose of this letter is to verify a release of fuel oil at the referenced residence. According to information received by the Department, the source of the release is from past onsite use of fuel oil USTs. To date, initial activities by the facility have included tank removal and soil sampling. Based on the information contained in the closure report, a potential violation of the South Carolina Pollution Control Act has occurred in that there has been an unauthorized release of petroleum to the environment.

Additional assessment activities are required for this site. Specifically the Department requests that a groundwater sample be collected from this site. Please note, the Department approved a groundwater sampling proposal for Laurel Bay submitted by MCAS under separate cover dated 16 June 2008.

Should you have any questions, please contact me at 803-898-3553 (office phone), 803-898-2893 (fax) or [bishopma@dhec.sc.gov](mailto:bishopma@dhec.sc.gov).

Sincerely,

Michael Bishop, Hydrogeologist  
Groundwater Quality Section  
Bureau of Water

cc: Region 8 District EQC (via pdf)  
MCAS, Commanding Officer, Attention: S-4 NREAO (William Drawdy) (via pdf)  
Technical File (via pdf)

# D H E C

PROMOTE PROTECT PROSPER

Catherine B. Templeton, Director

May 15, 2014

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,

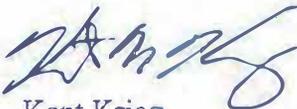
The South Carolina Department of Health and Environmental Control (the Department) received the above referenced Underground Storage Tank Assessment Reports for the addresses listed above. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina 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](mailto: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)

# D H E C

PROMOTE PROTECT PROSPER

Catherine B. Templeton, Director

**Attachment to:** Krieg to Drawdy  
**Subject:** IGWA  
**Dated:** 5/15/2014

**Laurel Bay Underground Storage Tank Assessment Reports for: (121 addresses/139 tanks)**

137 Laurel Bay Tank 2	387 Acorn
139 Laurel Bay	392 Acorn Tank 2
229 Cypress Tank 2	396 Acorn Tank 1
261 Beech Tank 1	396 Acorn Tank 2
261 Beech Tank 3	430 Elderberry
273 Birch Tank 1	433 Elderberry
273 Birch Tank 2	439 Elderberry
273 Birch Tank 3	440 Elderberry
276 Birch Tank 2	442 Elderberry
278 Birch Tank 2	443 Elderberry
291 Birch Tank 2	444 Elderberry Tank 1
300 Ash	445 Elderberry
304 Ash	446 Elderberry
314 Ash Tank 1	448 Elderberry
314 Ash Tank 2	449 Elderberry
322 Ash Tank 2	451 Elderberry
323 Ash	453 Elderberry
324 Ash	456 Elderberry Tank 1
325 Ash Tank 1	456 Elderberry Tank 2
325 Ash Tank 2	458 Elderberry Tank 1
326 Ash	458 Elderberry Tank 3
336 Ash	464 Dogwood
339 Ash	466 Dogwood
343 Ash Tank 1	467 Dogwood
344 Ash Tank 1	468 Dogwood
348 Ash	469 Dogwood
349 Ash Tank 1	471 Dogwood Tank 2
353 Ash Tank 1	471 Dogwood Tank 3
362 Aspen	475 Dogwood Tank 1
376 Aspen	475 Dogwood Tank 2
380 Aspen	516 Laurel Bay Tank 1 (UST#03747)
383 Aspen Tank 2	518 Laurel Bay

Laurel Bay Underground Storage Tank Assessment Reports for: (121 addresses/139 tanks) cont.

531 Laurel Bay	1219 Cardinal
532 Laurel Bay	1272 Albatross
635 Dahlia Tank 2	1305 Eagle
638 Dahlia	1353 Cardinal
640 Dahlia Tank 1	1356 Cardinal
640 Dahlia Tank 2	1357 Cardinal
645 Dahlia	1359 Cardinal
647 Dahlia	1360 Cardinal
648 Dahlia Tank 2	1361 Cardinal
650 Dahlia Tank 1	1368 Cardinal
650 Dahlia Tank 2	1370 Cardinal Tank 1
652 Dahlia Tank 1	1377 Dove
652 Dahlia Tank 2	1381 Dove
760 Althea	1382 Dove
763 Althea	1384 Dove
771 Althea	1385 Dove
927 Albacore	1389 Dove
1015 Foxglove	1391 Dove
1046 Gardenia	1392 Dove
1062 Gardenia Tank 2	1393 Dove Tank 1
1070 Heather	1393 Dove Tank 2
1072 Heather	1406 Eagle
1102 Iris Tank 1	1407 Eagle Tank 1
1107 Iris	1411 Eagle Tank 1
1126 Iris	1411 Eagle Tank 2
1129 Iris	1412 Eagle
1132 Iris	1413 Albatross
1133 Iris Tank 1	1414 Albatross
1138 Iris	1422 Albatross
1144 Iris Tank 1	1425 Albatross
1144 Iris Tank 2	1426 Albatross
1148 Iris Tank 1	1432 Dove
1148 Iris Tank 2	1434 Dove
1161 Jasmine	1436 Dove
1167 Jasmine	1438 Dove Tank 1
1170 Jasmine	1440 Dove
1190 Bobwhite	1442 Dove Tank 1
1192 Bobwhite	



C. Earl Hunter, Commissioner

*Promoting and protecting the health of the public and the environment.*

20 November 2008

Beaufort Military Complex Family Housing  
ATTN: Kyle Broadfoot  
1510 Laurel Bay Blvd.  
Beaufort, SC 29906

Re: MCAS – Laurel Bay Housing – 229 Cypress  
**Site ID # 04032**  
Groundwater Sampling Results received 6 November 2008  
Beaufort County

Dear Mr. Broadfoot:

Per the Department's request, a groundwater sample was collected from the referenced site. The groundwater results were reported as non-detect. Based on the information and analytical data submitted, the Department recognizes that MCAS has adequately addressed the known environmental contamination identified on the property to date in accordance with the approved scope of work. Consequently, no further investigation is required at this time. Please note, this statement pertains only to the portion of the site addressed in the referenced report and does not apply to other areas of the site and/or any other potential regulatory violations. Further, the Department retains the right to request further investigation if deemed necessary.

Should you have any questions, please contact me at 803-896-4179 (office phone), 803-896-6245 (fax) or [cookejt@dhec.sc.gov](mailto:cookejt@dhec.sc.gov).

Sincerely,  
AST Petroleum Restoration  
& Site Environmental Investigations Section  
Land Revitalization Division  
Bureau of Land and Waste Management  
SC Dept. of Health & Environmental Control

Jan T. Cooke, Hydrogeologist

B. Thomas Knight, Manager

cc: Region 8 District EQC  
MCAS, Commanding Officer, Attention: S-4 NREAO (Craig Ehde),  
P.O. Box 55001, Beaufort, SC 29904-5001  
Technical File



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

February 22, 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-May and June 2015  
Laurel Bay Military Housing Area Multiple Properties  
Dated October 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 addresses attached. 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 52 stated addresses. For the remaining 91 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](mailto: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-May and June 2015  
 Specific Property Recommendations  
 Dated February 22, 2016

**Draft Final Initial Groundwater Investigation Report for (143 addresses)**

**Permanent Monitoring Well Investigation recommendation (52 addresses)**

273 Birch Drive	1192 Bobwhite Drive
325 Ash Street	1194 Bobwhite Drive
326 Ash Street	1272 Albatross Drive
336 Ash Street	1352 Cardinal Lane
343 Ash Street	1356 Cardinal Lane
353 Ash Street	1359 Cardinal Lane
430 Elderberry Drive	1360 Cardinal Lane
440 Elderberry Drive	1362 Cardinal Lane
456 Elderberry Drive	1370 Cardinal Lane
458 Elderberry Drive	1382 Dove Lane
468 Dogwood Drive	1384 Dove lane
518 Laurel Bay Blvd	1385 Dove Lane
635 Dahlia Drive	1389 Dove Lane
638 Dahlia Drive	1392 Dove Lane
640 Dahlia Drive	1393 Dove Lane
647 Dahlia Drive	1407 Eagle Lane
648 Dahlia Drive	1411 Eagle Lane
650 Dahlia Drive	1418 Albatross Drive
652 Dahlia Drive	1420 Albatross Drive
760 Althea Street	1426 Albatross Drive
1102 Iris Lane	1429 Albatross Drive
1132 Iris Lane	1434 Dove Lane
1133 Iris Lane	1436 Dove Lane
1144 Iris Lane	1440 Dove Lane
1148 Iris Lane	1442 Dove Lane
1186 Bobwhite Drive	1444 Dove Lane

**No Further Action recommendation (91 addresses):**

137 Laurel Bay Blvd	771 Althea Street
139 Laurel Bay Blvd	927 Albacore Street
229 Cypress Street	1015 Foxglove Street
261 Beech Street	1046 Gardenia Drive
276 Birch Drive	1062 Gardenia Drive
278 Birch Drive	1070 Heather Street
291 Birch Drive	1072 Heather Street

300 Ash Street	1107 Iris Lane
304 Ash Street	1126 Iris Lane
314 Ash Street	1129 Iris Lane
322 Ash Street	1138 Iris Lane
323 Ash Street	1161 Jasmine Street
324 Ash Street	1167 Jasmine Street
339 Ash Street	1170 Jasmine Street
344 Ash Street	1190 Bobwhite Drive
348 Ash Street	1219 Cardinal Lane
349 Ash Street	1305 Eagle Lane
362 Aspen Street	1353 Cardinal Lane
376 Aspen Street	1354 Cardinal Lane
380 Aspen Street	1357 Cardinal Lane
383 Aspen Street	1361 Cardinal Lane
387 Acorn Drive	1364 Cardinal Lane
392 Acorn Drive	1368 Cardinal Lane
396 Acorn Drive	1377 Dove Lane
433 Elderberry Drive	1381 Dove Lane
439 Elderberry Drive	1391 Dove Lane
442 Elderberry Drive	1403 Eagle Lane
443 Elderberry Drive	1404 Eagle Lane
444 Elderberry Drive	1405 Eagle Lane
445 Elderberry Drive	1406 Eagle Lane
446 Elderberry Drive	1408 Eagle Lane
448 Elderberry Drive	1410 Eagle Lane
449 Elderberry Drive	1412 Eagle Lane
451 Elderberry Drive	1413 Albatross Drive
453 Elderberry Drive	1414 Albatross Drive
464 Dogwood Drive	1417 Albatross Drive
466 Dogwood Drive	1421 Albatross Drive
467 Dogwood Drive	1422 Albatross Drive
469 Dogwood Drive	1425 Albatross Drive
471 Dogwood Drive	1427 Albatross Drive
475 Dogwood Drive	1430 Dove Lane
516 Laurel Bay Blvd	1432 Dove Lane
531 Laurel Bay Blvd	1438 Dove Lane
532 Laurel Bay Blvd	1453 Cardinal Lane
645 Dahlia Drive	1455 Cardinal Lane
763 Althea Street	