

**SUMMARY REPORT  
164 BIRCH ROAD (FORMERLY 283 BIRCH ROAD)  
LAUREL BAY MILITARY HOUSING AREA  
MARINE CORPS AIR STATION BEAUFORT  
BEAUFORT, SC**

**Revision: 0  
Prepared for:**

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

**and**



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

**JUNE 2021**

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**Prepared by:**

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

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### **List of Acronyms**

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

## **1.0 INTRODUCTION**

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

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

This report summarizes the results the environmental investigation activities associated with the storage of home heating oil and the potential release of petroleum constituents at the referenced property. Based on the results of the investigation, a No Further Action (NFA) determination has been made by the South Carolina Department of Health and Environmental Control (SCDHEC) for 164 Birch Road (Formerly 283 Birch Road). 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 164 Birch Road (Formerly 283 Birch Road). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 283 Birch Road* (MCAS Beaufort, 2008) and *SCDHEC UST Assessment Report – 283 Birch Road* (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 *Initial Groundwater Investigation Report – February and March 2017* (Resolution Consultants, 2017). 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 June 2007 and October 2011, two 280 gallon heating oil USTs were removed at 164 Birch Road (Formerly 283 Birch Road). Tank 1 was removed on June 20, 2007 from the front landscaped bed area, adjacent to the driveway. Tank 2 was removed on October 13, 2011

from underneath the edge of the front concrete side walk and the front grassed area. 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 4'5" (Tank 1) and 4'8" (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 2'6" 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 in 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 are presented in Table 1. A copy of the laboratory analytical data reports are included in the UST Assessment Reports presented in Appendix B. The laboratory analytical data reports include the soil results for the additional PAHs that were analyzed, but do not have associated RBSLs.

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST locations 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 164 Birch Road (Formerly 283 Birch Road) during the removal of Tank 1 were less than the SCDHEC RBSLs, which indicated the subsurface was not impacted by COPCs associated with the former UST at concentrations that presented a potential risk to human health and the environment. The soil results collected from 164 Birch Road (Formerly 283 Birch Road) during the removal of Tank 2 were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated August 24, 2016, SCDHEC requested an IGWA for 164 Birch Road (Formerly 283 Birch Road) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.



### **2.3 Groundwater Sampling**

On March 2, 2017, a temporary monitoring well was installed at 164 Birch Road (Formerly 283 Birch Road), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST (Tank 2). The former UST location is indicated on the figures of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – February and March 2017* (Resolution Consultants, 2017).

The sampling strategy for this phase of the investigation required a one-time sampling event of the temporarily installed monitoring well. Following well installation and development, groundwater samples were collected using low-flow methods and shipped to an offsite laboratory for analysis of the petroleum COPCs. Upon completion of groundwater sampling, the temporary well was abandoned in accordance with the South Carolina Well Standards and Regulations R.61-71 (SCDHEC, 2016). Field forms are provided in the *Initial Groundwater Investigation Report – February and March 2017* (Resolution Consultants, 2017).

### **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 164 Birch Road (Formerly 283 Birch Road) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated that the groundwater was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

### **3.0 PROPERTY STATUS**

Based on the analytical results for soil (Tank 1) and groundwater (Tank 2), SCDHEC made the determination that NFA was required for 164 Birch Road (Formerly 283 Birch Road). This NFA determination was obtained in letters dated August 14, 2008 (Tank 1) and July 27, 2017 (Tank 2). 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 – 283 Birch Road, Laurel Bay Military Housing Area*, January 2008.
- Marine Corps Air Station Beaufort, 2012. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 283 Birch Road, Laurel Bay Military Housing Area*, February 2012.
- Resolution Consultants, 2017. *Initial Groundwater Investigation Report – February and March 2017 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, June 2017.
- 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**  
**164 Birch Road (Formerly 283 Birch Road)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Results Samples Collected 06/20/07 and 10/13/11		
		283 Birch Bottom 01 06/20/07	283 Birch Side 02 06/20/07	283 Birch 10/13/11
<b>Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)</b>				
Benzene	0.003	ND	ND	ND
Ethylbenzene	1.15	ND	ND	ND
Naphthalene	0.036	ND	<b>0.00465</b>	<b>0.0402</b>
Toluene	0.627	ND	ND	ND
Xylenes, Total	13.01	ND	ND	ND
<b>Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)</b>				
Benzo(a)anthracene	0.66	<b>0.0453</b>	ND	ND
Benzo(b)fluoranthene	0.66	ND	ND	ND
Benzo(k)fluoranthene	0.66	<b>0.0304</b>	ND	ND
Chrysene	0.66	<b>0.0478</b>	ND	ND
Dibenz(a,h)anthracene	0.66	ND	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).

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**  
**164 Birch Road (Formerly 283 Birch Road)**  
**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 Sample Collected 03/03/17
<b>Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)</b>			
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	<b>2.4</b>
Naphthalene	25	29.33	<b>9.3</b>
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	ND
<b>Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)</b>			
Benzo(a)anthracene	10	NA	ND
Benzo(b)fluoranthene	10	NA	ND
Benzo(k)fluoranthene	10	NA	ND
Chrysene	10	NA	ND
Dibenz(a,h)anthracene	10	NA	ND

**Notes:**

<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 Reports**



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

Date Received  
State Use Only

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

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  
283 Birch  
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					
2803 <del>2804</del>					
Steel					
53"					
N					
N					
Removed					
626-07					
W					
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 & LANDFILL - Subtitle D

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

ONE, ONE INCH HOLE ~~WAS~~ ON THE BOTTOM OF THE TANK

## 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.

MINOR PITTING & CORROSION

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## VII. BRIEF SITE DESCRIPTION AND HISTORY

Home Heating Oil TANK - RESIDENTIAL

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### 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>		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 #
1	BOTTOM	S	SAND	53"	6-20-07 1130	<del>R. HEVANDA</del> <del>X. M. M. M.</del>	ND
2	SIDE	S	SAND	30"	6-20-07 1140	<del>R. HEVANDA</del> <del>X. M. M. M.</del>	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 Polyaromatic 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: OQF0493  
 Project: LAUREL BAY  
 Project Number: EP2362

Sampled: 06/19/07-06/22/07  
 Received: 06/27/07

### LABORATORY REPORT

Sample ID: 281 BIRCH-SIDE 04 - Lab Number: OQF0493-04 - 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</b>											
13-32-9	Acenaphthene	86.5	U	ug/kg dry	86.5	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
108-96-8	Acenaphthylene	114	U	ug/kg dry	114	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
20-12-7	Anthracene	62.2	U	ug/kg dry	62.2	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
6-55-3	Benzo (a) anthracene	21.1	U	ug/kg dry	21.1	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
05-99-2	Benzo (b) fluoranthene	20.5	U	ug/kg dry	20.5	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
07-08-9	Benzo (k) fluoranthene	20.5	U	ug/kg dry	20.5	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
91-24-2	Benzo (g,h,i) perylene	20.2	U	ug/kg dry	20.2	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
0-32-8	Benzo (a) pyrene	24.0	U	ug/kg dry	24.0	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
0-12-0	1-Methylnaphthalene	97.9	U	ug/kg dry	97.9	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
18-01-9	Chrysene	23.3	U	ug/kg dry	23.3	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
3-70-3	Dibenz (a,h) anthracene	25.6	U	ug/kg dry	25.6	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
16-44-0	Fluoranthene	28.1	U	ug/kg dry	28.1	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
5-73-7	Fluorene	76.4	U	ug/kg dry	76.4	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
13-39-5	Indeno (1,2,3-cd) pyrene	25.3	U	ug/kg dry	25.3	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
15-57-6	2-Methylnaphthalene	83.2	U	ug/kg dry	83.2	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
14-20-3	Naphthalene	78.4	U	ug/kg dry	78.4	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
11-01-8	Phenanthrene	46.0	U	ug/kg dry	46.0	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
19-00-0	Pyrene	39.6	U	ug/kg dry	39.6	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
	surrogate: 2-Fluorobiphenyl (24-121%)	68 %									
	surrogate: Nitrobenzene-d5 (19-111%)	67 %									
	surrogate: Terphenyl-d14 (44-171%)	102 %									

### LABORATORY REPORT

Sample ID: 283 BIRCH-BOTTOM 01 - Lab Number: OQF0493-05 - Matrix: Solid/Soil

AS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>General Chemistry Parameters</b>											
	% Solids	82.4	Q	%	0.100	0.100	1	06/28/07 18:30	RRP	EPA 160.3	7F28049
<b>Volatile Organic Compounds by EPA Method 8260B</b>											
143-2	Benzene	0.212	U	ug/kg dry	0.212	0.580	1	06/27/07 15:06	JLS	EPA 8260B	7F27039
104-41-4	Ethylbenzene	0.246	U	ug/kg dry	0.246	0.580	1	06/27/07 15:06	JLS	EPA 8260B	7F27039
120-3	Naphthalene	0.321	U	ug/kg dry	0.321	0.580	1	06/27/07 15:06	JLS	EPA 8260B	7F27039
108-88-3	Toluene	0.501	U	ug/kg dry	0.501	0.580	1	06/27/07 15:06	JLS	EPA 8260B	7F27039
100-20-7	Xylenes, total	0.301	U	ug/kg dry	0.301	0.580	1	06/27/07 15:06	JLS	EPA 8260B	7F27039
	surrogate: 1,2-Dichloroethane-d4 (73-137%)	90 %									
	surrogate: 4-Bromofluorobenzene (59-118%)	94 %									
	surrogate: Dibromofluoromethane (55-145%)	97 %									
	surrogate: Toluene-d8 (70-130%)	100 %									
<b>Polynuclear Aromatic Hydrocarbons by EPA Method 8270</b>											
12-9	Acenaphthene	89.8	U	ug/kg dry	89.8	203	1	06/29/07 19:15	REM	EPA 8270C	7F28007
108-96-8	Acenaphthylene	119	U	ug/kg dry	119	203	1	06/29/07 19:15	REM	EPA 8270C	7F28007
20-12-7	Anthracene	64.7	U	ug/kg dry	64.7	203	1	06/29/07 19:15	REM	EPA 8270C	7F28007
15-3	Benzo (a) anthracene	45.3	I	ug/kg dry	22.0	203	1	06/29/07 19:15	REM	EPA 8270C	7F28007

TestAmerica - Orlando, FL  
 Enid Ortiz For Shali Brown  
 Project Manager

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

Work Order: OQF0493  
 Project: LAUREL BAY  
 Project Number: EP2362

Sampled: 06/19/07-06/22/07  
 Received: 06/27/07

**LABORATORY REPORT**  
 Sample ID: 283 BIRCH-BOTTOM 01 - Lab Number: OQF0493-05 - 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>											
05-99-2	Benzo (b) fluoranthene	21.3	U	ug/kg dry	21.3	203	1	06/29/07 19:15	REM	EPA 8270C	7F28007
07-08-9	Benzo (k) fluoranthene	30.4	I	ug/kg dry	21.3	203	1	06/29/07 19:15	REM	EPA 8270C	7F28007
91-24-2	Benzo (g,h,i) perylene	21.0	U	ug/kg dry	21.0	203	1	06/29/07 19:15	REM	EPA 8270C	7F28007
0-32-8	Benzo (a) pyrene	25.0	U	ug/kg dry	25.0	203	1	06/29/07 19:15	REM	EPA 8270C	7F28007
0-12-0	1-Methylnaphthalene	102	U	ug/kg dry	102	203	1	06/29/07 19:15	REM	EPA 8270C	7F28007
18-01-9	Chrysene	47.8	I	ug/kg dry	24.3	203	1	06/29/07 19:15	REM	EPA 8270C	7F28007
3-70-3	Dibenz (a,h) anthracene	26.6	U	ug/kg dry	26.6	203	1	06/29/07 19:15	REM	EPA 8270C	7F28007
06-44-0	Fluoranthene	59.5	I	ug/kg dry	29.2	203	1	06/29/07 19:15	REM	EPA 8270C	7F28007
5-73-7	Fluorene	79.4	U	ug/kg dry	79.4	203	1	06/29/07 19:15	REM	EPA 8270C	7F28007
03-39-5	Indeno (1,2,3-cd) pyrene	26.3	U	ug/kg dry	26.3	203	1	06/29/07 19:15	REM	EPA 8270C	7F28007
-57-6	2-Methylnaphthalene	86.5	U	ug/kg dry	86.5	203	1	06/29/07 19:15	REM	EPA 8270C	7F28007
-20-3	Naphthalene	81.4	U	ug/kg dry	81.4	203	1	06/29/07 19:15	REM	EPA 8270C	7F28007
-01-8	Phenanthrene	65.6	I	ug/kg dry	47.8	203	1	06/29/07 19:15	REM	EPA 8270C	7F28007
9-00-0	Pyrene	74.5	I	ug/kg dry	41.2	203	1	06/29/07 19:15	REM	EPA 8270C	7F28007
	rogate: 2-Fluorobiphenyl (24-121%)	49 %									
	rogate: Nitrobenzene-d5 (19-111%)	50 %									
	rogate: Terphenyl-d14 (44-171%)	95 %									

**LABORATORY REPORT**  
 Sample ID: 283 BIRCH-SIDE 02 - Lab Number: OQF0493-06 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>General Chemistry Parameters</b>											
	% Solids	83.4	Q	%	0.100	0.100	1	06/28/07 18:30	RRP	EPA 160.3	7F28050
<b>Volatile Organic Compounds by EPA Method 8260B</b>											
03-2	Benzene	0.159	U	ug/kg dry	0.159	0.435	1	06/27/07 23:09	JLS	EPA 8260B	7F27039
41-4	Ethylbenzene	0.184	U	ug/kg dry	0.184	0.435	1	06/27/07 23:09	JLS	EPA 8260B	7F27039
0-3	Naphthalene	4.65	U	ug/kg dry	0.240	0.435	1	06/27/07 23:09	JLS	EPA 8260B	7F27039
88-3	Toluene	0.376	U	ug/kg dry	0.376	0.435	1	06/27/07 23:09	JLS	EPA 8260B	7F27039
1-20-7	Xylenes, total	0.226	U	ug/kg dry	0.226	0.435	1	06/27/07 23:09	JLS	EPA 8260B	7F27039
	rogate: 1,2-Dichloroethane-d4 (73-137%)	86 %									
	rogate: 4-Bromofluorobenzene (59-118%)	93 %									
	rogate: Dibromofluoromethane (55-145%)	98 %									
	rogate: Toluene-d8 (70-130%)	98 %									
<b>Polynuclear Aromatic Hydrocarbons by EPA Method 8270</b>											
1-9	Acenaphthene	88.7	U	ug/kg dry	88.7	200	1	06/29/07 19:37	REM	EPA 8270C	7F28007
06-8	Acenaphthylene	117	U	ug/kg dry	117	200	1	06/29/07 19:37	REM	EPA 8270C	7F28007
2-7	Anthracene	63.8	U	ug/kg dry	63.8	200	1	06/29/07 19:37	REM	EPA 8270C	7F28007
-3	Benzo (a) anthracene	21.7	U	ug/kg dry	21.7	200	1	06/29/07 19:37	REM	EPA 8270C	7F28007
9-2	Benzo (b) fluoranthene	21.1	U	ug/kg dry	21.1	200	1	06/29/07 19:37	REM	EPA 8270C	7F28007
8-9	Benzo (k) fluoranthene	21.1	U	ug/kg dry	21.1	200	1	06/29/07 19:37	REM	EPA 8270C	7F28007
4-2	Benzo (g,h,i) perylene	20.8	U	ug/kg dry	20.8	200	1	06/29/07 19:37	REM	EPA 8270C	7F28007
-8	Benzo (a) pyrene	24.6	U	ug/kg dry	24.6	200	1	06/29/07 19:37	REM	EPA 8270C	7F28007

TestAmerica - Orlando, FL  
 Enid Ortiz For Shali Brown  
 Project Manager

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

Work Order: OQF0493  
 Project: LAUREL BAY  
 Project Number: EP2362

Sampled: 06/19/07-06/22/07  
 Received: 06/27/07

**LABORATORY REPORT**  
 Sample ID: 283 BIRCH-SIDE 02 - Lab Number: OQF0493-06 - 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>											
10-12-0	1-Methylnaphthalene	101	I	ug/kg dry	101	200	1	06/29/07 19:37	REM	EPA 8270C	7F28007
118-01-9	Chrysene	24.0	U	ug/kg dry	24.0	200	1	06/29/07 19:37	REM	EPA 8270C	7F28007
3-70-3	Dibenz (a,h) anthracene	26.3	U	ug/kg dry	26.3	200	1	06/29/07 19:37	REM	EPA 8270C	7F28007
06-44-0	Fluoranthene	28.8	U	ug/kg dry	28.8	200	1	06/29/07 19:37	REM	EPA 8270C	7F28007
6-73-7	Fluorene	78.4	U	ug/kg dry	78.4	200	1	06/29/07 19:37	REM	EPA 8270C	7F28007
93-39-5	Indeno (1,2,3-cd) pyrene	25.9	U	ug/kg dry	25.9	200	1	06/29/07 19:37	REM	EPA 8270C	7F28007
1-57-6	2-Methylnaphthalene	85.4	U	ug/kg dry	85.4	200	1	06/29/07 19:37	REM	EPA 8270C	7F28007
1-20-3	Naphthalene	80.4	U	ug/kg dry	80.4	200	1	06/29/07 19:37	REM	EPA 8270C	7F28007
5-01-8	Phenanthrene	73.1	I	ug/kg dry	47.2	200	1	06/29/07 19:37	REM	EPA 8270C	7F28007
29-00-0	Pyrene	40.7	U	ug/kg dry	40.7	200	1	06/29/07 19:37	REM	EPA 8270C	7F28007
surrogate: 2-Fluorobiphenyl (24-121%)		65 %									
surrogate: Nitrobenzene-d5 (19-111%)		67 %									
surrogate: Terphenyl-d14 (44-171%)		93 %									

**LABORATORY REPORT**  
 Sample ID: 293 BIRCH-BOTTOM 01 - Lab Number: OQF0493-07 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>General Chemistry Parameters</b>											
	% Solids	75.7		%	0.100	0.100	1	06/28/07 18:30	RRP	EPA 160.3	7F28050
<b>Volatile Organic Compounds by EPA Method 8260B</b>											
74-3-2	Benzene	10.0	U	ug/kg dry	10.0	27.3	50	06/29/07 11:22	JLS	EPA 8260B	7F27039
141-4	Ethylbenzene	26.2	I	ug/kg dry	11.6	27.3	50	06/29/07 11:22	JLS	EPA 8260B	7F27039
120-3	Naphthalene	243		ug/kg dry	15.1	27.3	50	06/29/07 11:22	JLS	EPA 8260B	7F27039
138-3	Toluene	23.6	U	ug/kg dry	23.6	27.3	50	06/29/07 11:22	JLS	EPA 8260B	7F27039
10-20-7	Xylenes, total	14.2	U	ug/kg dry	14.2	27.3	50	06/29/07 11:22	JLS	EPA 8260B	7F27039
surrogate: 1,2-Dichloroethane-d4 (73-137%)		79 %									
surrogate: 4-Bromofluorobenzene (59-118%)		94 %									
surrogate: Dibromofluoromethane (55-145%)		94 %									
surrogate: Toluene-d8 (80-117%)		101 %									
<b>Polynuclear Aromatic Hydrocarbons by EPA Method 8270</b>											
12-9	Acenaphthene	2130		ug/kg dry	97.7	221	1	06/29/07 19:59	REM	EPA 8270C	7F28007
96-8	Acenaphthylene	129	U	ug/kg dry	129	221	1	06/29/07 19:59	REM	EPA 8270C	7F28007
12-7	Anthracene	1210		ug/kg dry	70.3	221	1	06/29/07 19:59	REM	EPA 8270C	7F28007
5-3	Benzo (a) anthracene	23.9	U	ug/kg dry	23.9	221	1	06/29/07 19:59	REM	EPA 8270C	7F28007
99-2	Benzo (b) fluoranthene	23.2	U	ug/kg dry	23.2	221	1	06/29/07 19:59	REM	EPA 8270C	7F28007
08-9	Benzo (k) fluoranthene	23.2	U	ug/kg dry	23.2	221	1	06/29/07 19:59	REM	EPA 8270C	7F28007
24-2	Benzo (g,h,i) perylene	22.9	U	ug/kg dry	22.9	221	1	06/29/07 19:59	REM	EPA 8270C	7F28007
2-8	Benzo (a) pyrene	27.1	U	ug/kg dry	27.1	221	1	06/29/07 19:59	REM	EPA 8270C	7F28007
2-0	1-Methylnaphthalene	24700		ug/kg dry	1110	2210	10	07/02/07 22:12	REM	EPA 8270C	7F28007
11-9	Chrysene	72.2	I	ug/kg dry	26.4	221	1	06/29/07 19:59	REM	EPA 8270C	7F28007
1-3	Dibenz (a,h) anthracene	29.0	U	ug/kg dry	29.0	221	1	06/29/07 19:59	REM	EPA 8270C	7F28007
4-0	Fluoranthene	31.7	U	ug/kg dry	31.7	221	1	06/29/07 19:59	REM	EPA 8270C	7F28007

TestAmerica - Orlando, FL  
 Enid Ortiz For Shali Brown  
 Project Manager

# Test America

ANALYTICAL TESTING CORPORATION

00f0493 page 1 of 2

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

Client Name: EPG Client #: 2411

Address: \_\_\_\_\_  
City/State/Zip Code: \_\_\_\_\_

Project Manager: JOHN MAHONEY

Telephone Number: \_\_\_\_\_ Fax: \_\_\_\_\_

Sampler Name: (Print Name) CHRIS LOPEZ

Sampler Signature: [Signature]

Project Name: LAUREL BAY

Project #: EP 2362

Site/Location ID: \_\_\_\_\_ State: \_\_\_\_\_

Report To: \_\_\_\_\_

Invoice To: \_\_\_\_\_

Quote #: \_\_\_\_\_ PO#: \_\_\_\_\_

TAT <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush (surcharges may apply)	Date Needed:	Fax Results: Y N	SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix	Preservation				# of Containers				Analyze For	QC Deliverables	REMARKS			
								SL - Sludge DW - Drinking Water GW - Groundwater S - Soil/Solid WW - Wastewater Specify Other	HNO <sub>3</sub>	HCl	NaOH	H <sub>2</sub> SO <sub>4</sub>	Methanol	None	Other (Specify)							
			281 BIRCH-BOTTOM 01	6-19-07	1400	G																
			281 BIRCH-SIDE 02	6-19-07	1400	C																
			281 BIRCH-BOTTOM 03	6-19-07	1410	G																
			281 BIRCH-SIDE 04	6-19-07	1410	C																
			283 BIRCH-BOTTOM 01	6-20-07	1130	G																
			283 BIRCH-SIDE 02	6-20-07	1140	C																
			293 BIRCH-BOTTOM 01	6-21-07	940	G																
			293 BIRCH-SIDE 02	6-21-07	940	C																
			293 BIRCH-BOTTOM 03	6-21-07	1000	G																
			293 BIRCH-SIDE 04	6-21-07	1000	C																

BTEX + NPHH-2260  
PAH 8270

- QC Deliverables
- None
  - Level 2 (Batch QC)
  - Level 3
  - Level 4
  - Other: \_\_\_\_\_

01  
02  
03  
04  
05  
06  
07  
08  
09  
0

Special Instructions:

Relinquished By: <u>[Signature]</u>	Date: <u>6/20/07</u> Time: <u>12:05</u>	Received By: <u>[Signature]</u>	Date: <u>6/20/07</u> Time: <u>12:05</u>
Relinquished By: <u>[Signature]</u>	Date: <u>6/26/07</u> Time: <u>17:30</u>	Received By: <u>[Signature]</u>	Date: <u>6/27</u> Time: <u>9:50</u>
Relinquished By: _____	Date: _____ Time: _____	Received By: _____	Date: _____ Time: _____

LABORATORY COMMENTS:

Init Lab Temp: \_\_\_\_\_  
Rec Lab Temp: 6.0

Custody Seals: Y N N/A  
Bottles Supplied by Test America: Y N

8623-2591-1107  
Method of Shipment: FedEx to TA-Delaware

# Test America

ANALYTICAL TESTING CORPORATION

0040493

page 2 of 2

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

Client Name: EPG Client #: 2411  
Address: \_\_\_\_\_  
City/State/Zip Code: \_\_\_\_\_  
Project Manager: JOHN MAHONEY  
Telephone Number: \_\_\_\_\_ Fax: \_\_\_\_\_  
Sampler Name: (Print Name) CHRIS ECHEVARRIA  
Sampler Signature: [Signature]

Project Name: LAUREL BAY  
Project #: EP 2362  
Site/Location ID: \_\_\_\_\_ State: \_\_\_\_\_  
Report To: \_\_\_\_\_  
Invoice To: \_\_\_\_\_  
Quote #: \_\_\_\_\_ PO#: \_\_\_\_\_

TAT <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush (surcharges may apply)	Date Needed:	Fax Results: Y N	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix SL - Sludge DW - Drinking Water GW - Groundwater S - Soil/Solid WW - Wastewater Specify Other	Preservation & # of Containers							Analyze For:	QC Deliverables <input type="checkbox"/> None <input checked="" type="checkbox"/> Level 2 (Batch QC) <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 Other: _____
								HNO <sub>3</sub>	HCl	NaOH	H <sub>2</sub> SO <sub>4</sub>	Methanol	None	Other (Specify)		
SAMPLE ID																
299 BIRCH BOTTOM 01	6-22-07		9:30		G											
299 BIRCH SIDE 02	6-22-07		9:40		C						1	2	2		X	X
299 BIRCH BOTTOM 03	6-22-07		10:40		G						1	2	2		X	X
299 BIRCH SIDE 04	6-22-07		11:00		C						1	2	2		X	X
392 ACORN BOTTOM 01	6-22-07		14:30		G						1	2	2		X	X
392 ACORN SIDE 02	6-22-07		14:40		C						1	2	2		X	X

Special Instructions: \_\_\_\_\_

Relinquished By: [Signature] Date: 6/27/07 Time: 12:05 Received By: [Signature] Date: 6/27/07 Time: 12:05

Relinquished By: [Signature] Date: 6/27/07 Time: 12:30 Received By: [Signature] Date: 6/27 Time: 9:50

Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

LABORATORY COMMENTS:

Init Lab Temp: \_\_\_\_\_  
Rec Lab Temp: 6.0

Custody Seals: Y N N/A  
Bottles Supplied by Test America: Y N

Method of Shipment: 06:23 2591 1107  
FedEx to TA - Orlando

11  
12  
13  
14  
15

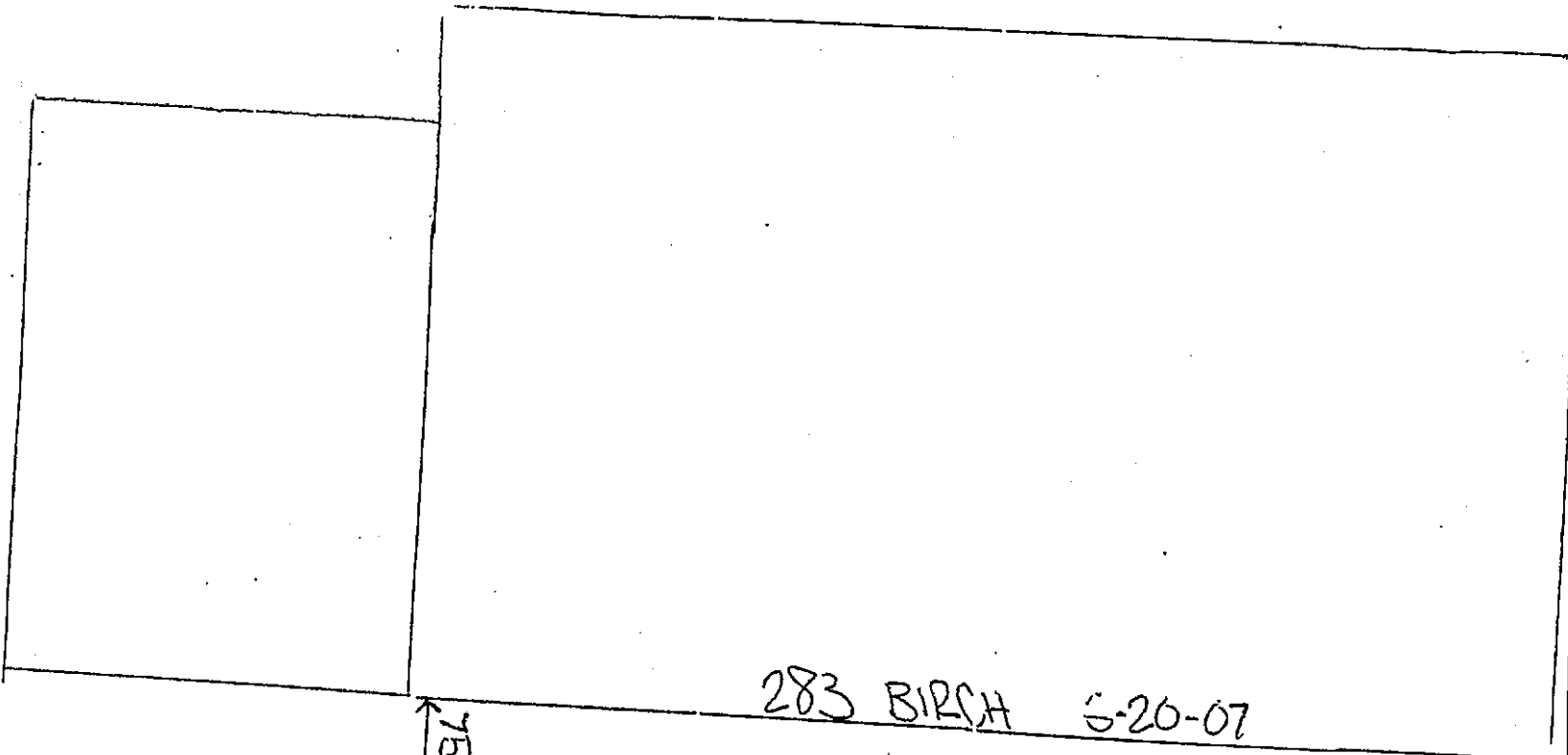


06-21-2007 10:09:24



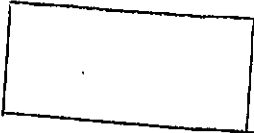
06.21.2007 09:31

283 B947

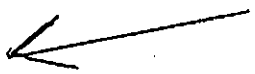


283 BIRCH 5-20-07

7 1/2"

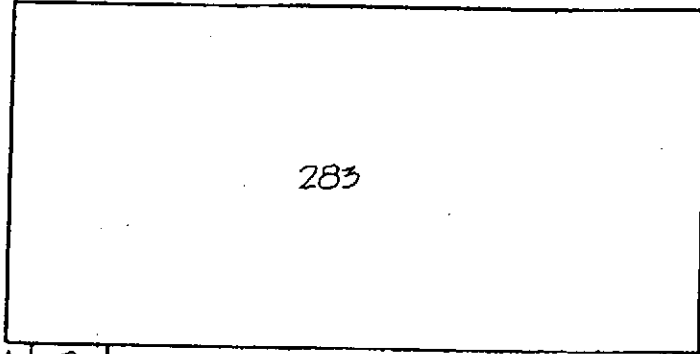


BASE DEPTH 53"



2

(FULL ODDR @ Bottom of EXCAVATION)



TANK I BASE 53"

BIRCH DRIVE

TANK I EXCAVATION

A-SOIL TEST SIDE SAMPLE @ 40"

B-SOIL TEST BOTTOM SAMPLE @ 53"

X-MILD DIESEL ODOR @ BOTTOM OF EXCAVATION



CUSTOMER : <b>BEAUFORT MILITARY COMPLEX FAMILY HOUSING</b>	SCALE : 1/16" = 1'-0"	<b>EPG INC.</b> P.O. BOX 1096 MOUNT PLEASANT, SC 29465-1096
SITE ADDRESS : <b>283 BIRCH DRIVE</b>	SUPPLIER : <b>EPG INC.</b>	
	DATE : <b>9/27/2007</b>	

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	
283 Birch Drive, Laurel Bay Military Housing Area	
Street Address or State Road (as applicable)	
Beaufort,	Beaufort
City	County

### 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.....

283Birch		
Heating oil		
280 gal		
Late 1950s		
Steel		
Mid 80s		
4'8"		
No		
No		
Removed		
10/13/2011		
Yes		
Yes		

- M. Method of disposal for any USTs removed from the ground (attach disposal manifests)  
UST 283Birch was removed from the ground and disposed at a Subtitle "D" landfill. See Attachment "A."
- 
- N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)  
UST 283Birch had been previously filled with sand by others.
- 
- O. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST  
Corrosion and pitting were found throughout the tank.

## VII. PIPING INFORMATION

A.	Construction Material..(ex. Steel, FRP).....	283Birch		
B.	Distance from UST to Dispenser.....	Steel & Copper		
C.	Number of Dispensers:.....	N/A		
D.	Type of System Pressure or Suction.....	N/A		
E.	Was Piping Removed from the Ground? Y/N	Suction		
F.	Visible Corrosion or Pitting Y/N.....	No		
G.	Visible Holes Y/N.....	Yes		
H.	Age.....	No		
I.	Age.....	Late 1950s		

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

The steel vent piping was corroded and pitted. The 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>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 #
283 Birch	Excav at fill end	Soil	Sandy	4'8"	10/13/11 1200 hrs	P. Shaw	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

\* = Depth Below the Surrounding Land Surface

**XI. SAMPLING METHODOLOGY**

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

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

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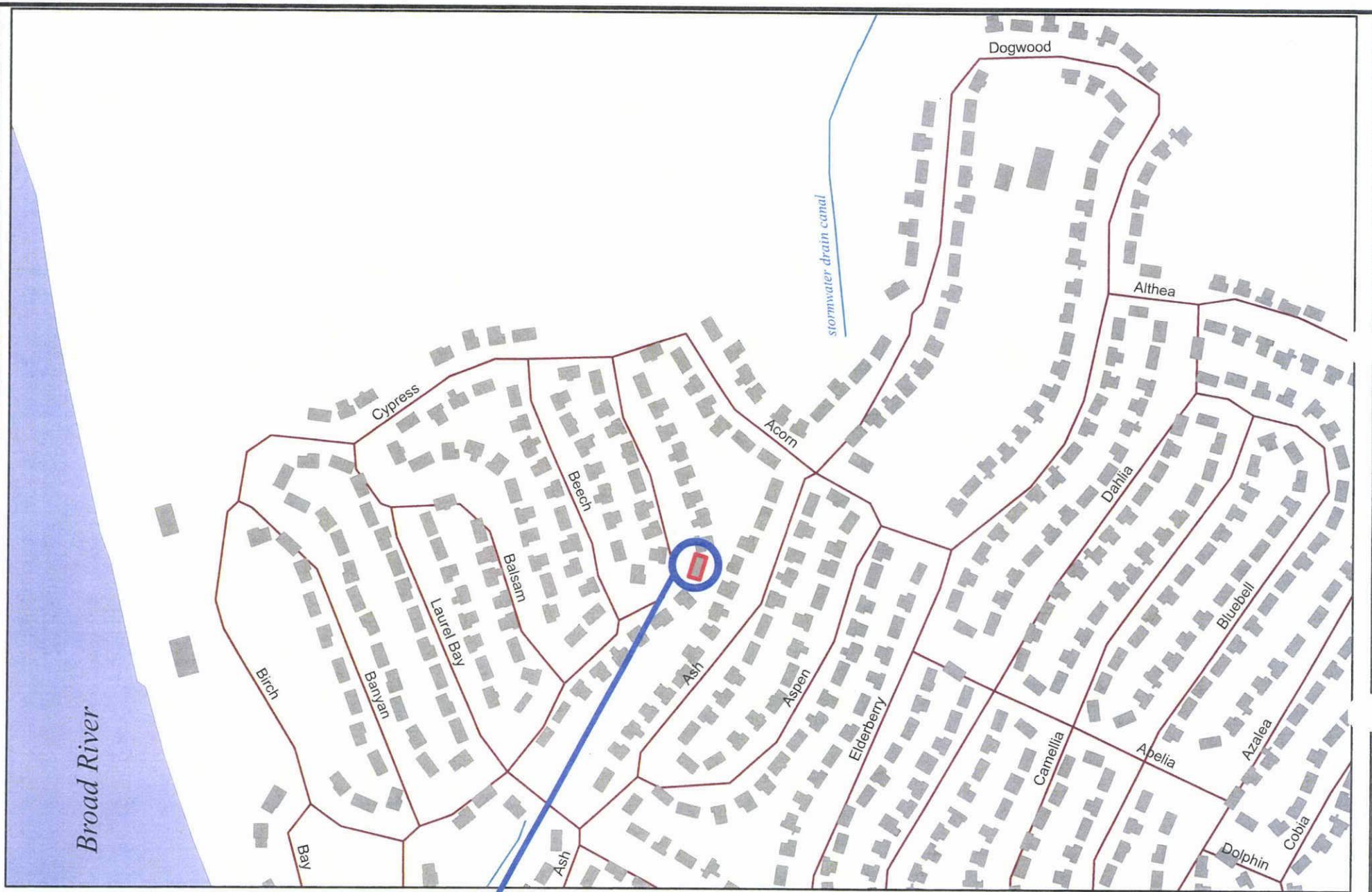
## XII. RECEPTORS

	Yes	No
<p>A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?                      *~ 760' to stormwater drainage canal                      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?                      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?                      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?                      *Sewer, water, cable, electricity &amp; fiber optic                      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?                      If yes, indicate the area of contaminated soil on the site map.</p>		X

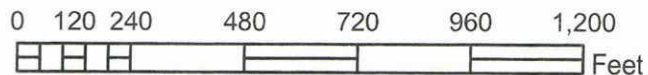
### **XIII. SITE MAP**

**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)



**283 BIRCH**



**SBG-EEG, Inc.**

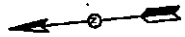
7301 Rivers Ave., Suite 245  
N. Charleston SC 29406-9643

Ph. (843) 573-7140

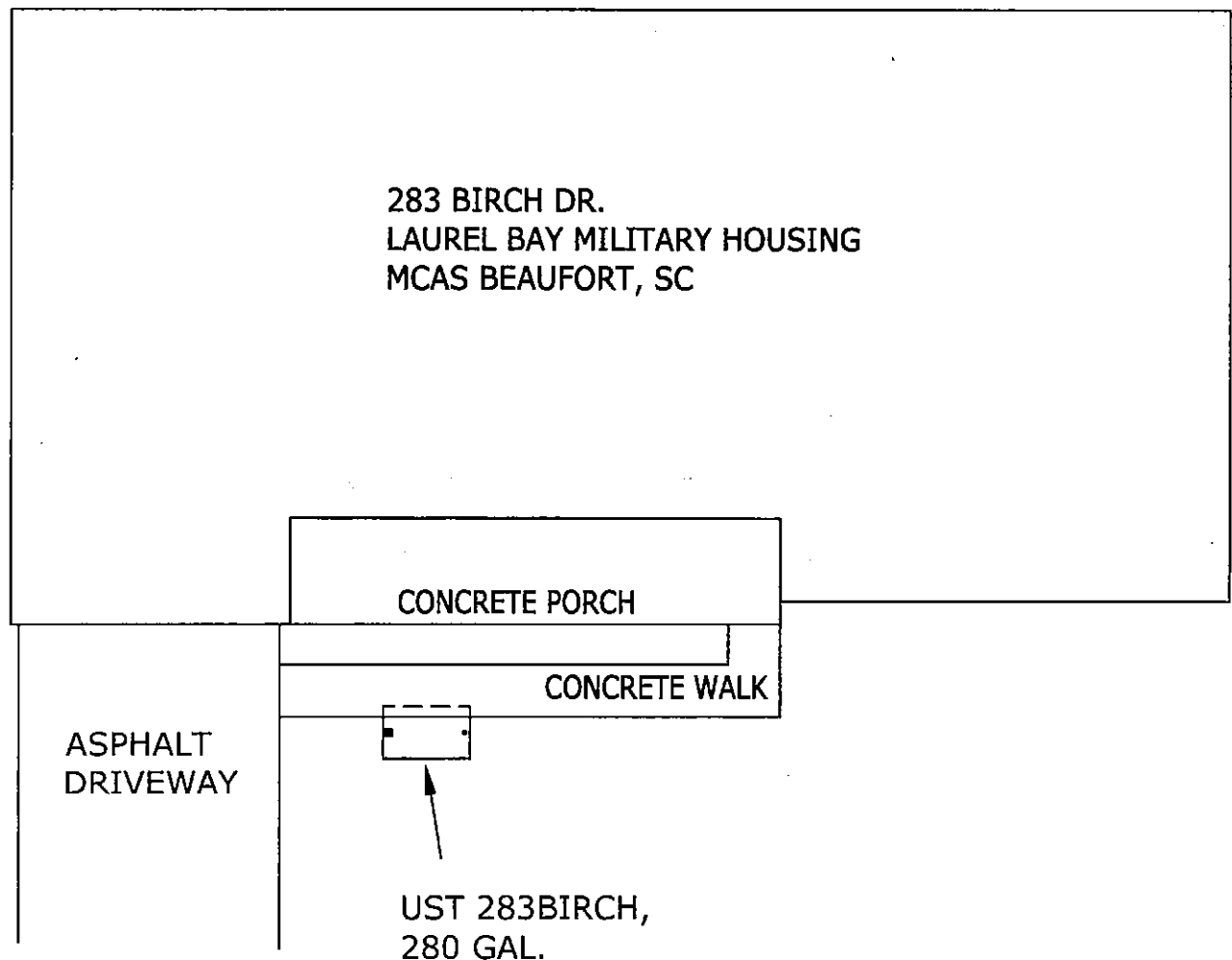
Drawn By: L. DiAsio

Dwg Date: DEC 2011

**FIGURE 1: LOCATION MAP  
283 BIRCH DRIVE  
LAUREL BAY, BEAUFORT SC**



← STORMWATER CANAL ≈ 765'



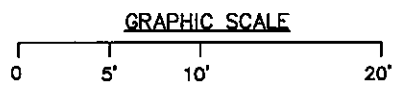
283 BIRCH DR.  
LAUREL BAY MILITARY HOUSING  
MCAS BEAUFORT, SC

CONCRETE PORCH

CONCRETE WALK

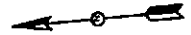
ASPHALT  
DRIVEWAY

UST 283BIRCH,  
280 GAL.



<b>SBG-EEG</b> 7301 RIVERS AVE., SUITE 245 N. CHARLESTON SC 29406-9643 (843) 573-7140	<b>FIGURE 2 SITE MAP</b> 283 BIRCH DR., LAUREL BAY MCAS BEAUFORT SC	
	SCALE: GRAPHIC	DWG DATE DEC 2011

283 BIRCH DR.



FILL END \*EXCAVATION

SOIL SAMPLE  
283 BIRCH

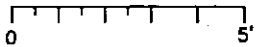
UST 283BIRCH  
280 GAL.

\*A PORTION OF THE SIDEWALK WAS REMOVED TO FACILITATE EXTRACTION OF THE TANK.



STORMWATER CANAL ≈ 765'

GRAPHIC SCALE



TANK WAS 20" BELOW GRADE

***SBG-EEG***

7301 RIVERS AVE., SUITE 245  
N. CHARLESTON SC 29406-9643  
(843) 573-7140

FIGURE 3 UST SAMPLE LOCATIONS  
283 BIRCH DR., LAUREL BAY  
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE DEC 2011





Picture 1: Location of UST 283Birch.



Picture 2: UST 283Birch excavation.

**XIV. SUMMARY OF ANALYSIS RESULTS**

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

CoC	UST	283 Birch					
Benzene		ND					
Toluene		ND					
Ethylbenzene		ND					
Xylenes		ND					
Naphthalene		0.0402 mg/kg					
Benzo (a) anthracene		ND					
Benzo (b) fluoranthene		ND					
Benzo (k) fluoranthene		ND					
Chrysene		ND					
Dibenz (a, h) anthracene		ND					
TPH (EPA 3550)							

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

**SUMMARY OF ANALYSIS RESULTS (cont'd)**

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

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

## **XV. ANALYTICAL RESULTS**

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

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

October 31, 2011 2:21:48PM

Client: EEG - Small Business Group, Inc. (2449)  
10179 Highway 78  
Ladson, SC 29456  
Attn: Tom McElwee

Work Order: NUJ2184  
Project Name: Laurel Bay Housing Project  
Project Nbr: [none]  
P/O Nbr: 1035  
Date Received: 10/15/11

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
392 Acorn	NUJ2184-01	10/12/11 12:15
283 Birch	NUJ2184-02	10/13/11 12:00

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

South Carolina Certification Number: 84009

The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.

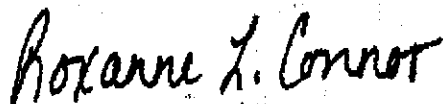
These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Roxanne Connor

Program Manager - Conventional Accounts

Client EEG - Small Business Group, Inc. (2449)  
 10179 Highway 78  
 Ladson, SC 29456  
 Attn Tom McElwee

Work Order: NUJ2184  
 Project Name: Laurel Bay Housing Project  
 Project Number: [none]  
 Received: 10/15/11 08:40

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
<b>Sample ID: NUJ2184-01 (392 Acorn - Soil) Sampled: 10/12/11 12:15</b>										
<b>General Chemistry Parameters</b>										
% Dry Solids	78.3		%	0.500	0.500	1	10/26/11 12:50	SW-846	RRS	11J5741
<b>Volatile Organic Compounds by EPA Method 8260B</b>										
Benzene	ND		mg/kg dry	0.00126	0.00230	1	10/21/11 20:57	SW846 8260B	KKK	11J5081
Ethylbenzene	0.0321		mg/kg dry	0.00126	0.00230	1	10/21/11 20:57	SW846 8260B	KKK	11J5081
Naphthalene	1.04		mg/kg dry	0.136	0.273	50	10/22/11 14:24	SW846 8260B	KKK	11J5196
Toluene	0.00136	J	mg/kg dry	0.00126	0.00230	1	10/21/11 20:57	SW846 8260B	KKK	11J5081
Xylenes, total	0.00316	J	mg/kg dry	0.00287	0.00574	1	10/21/11 20:57	SW846 8260B	KKK	11J5081
Surr: 1,2-Dichloroethane-d4 (70-130%)	106 %					1	10/21/11 20:57	SW846 8260B	KKK	11J5081
Surr: 1,2-Dichloroethane-d4 (70-130%)	110 %					50	10/22/11 14:24	SW846 8260B	KKK	11J5196
Surr: Dibromofluoromethane (70-130%)	105 %					1	10/21/11 20:57	SW846 8260B	KKK	11J5081
Surr: Dibromofluoromethane (70-130%)	101 %					50	10/22/11 14:24	SW846 8260B	KKK	11J5196
Surr: Toluene-d8 (70-130%)	106 %					1	10/21/11 20:57	SW846 8260B	KKK	11J5081
Surr: Toluene-d8 (70-130%)	98 %					50	10/22/11 14:24	SW846 8260B	KKK	11J5196
Surr: 4-Bromofluorobenzene (70-130%)	111 %					1	10/21/11 20:57	SW846 8260B	KKK	11J5081
Surr: 4-Bromofluorobenzene (70-130%)	96 %					50	10/22/11 14:24	SW846 8260B	KKK	11J5196
<b>Polyaromatic Hydrocarbons by EPA 8270D</b>										
Acenaphthene	ND		mg/kg dry	0.0427	0.0841	1	10/18/11 18:23	SW846 8270D	BES	11J3932
Acenaphthylene	ND		mg/kg dry	0.0427	0.0841	1	10/18/11 18:23	SW846 8270D	BES	11J3932
Anthracene	ND		mg/kg dry	0.0427	0.0841	1	10/18/11 18:23	SW846 8270D	BES	11J3932
Benzo (a) anthracene	ND		mg/kg dry	0.0427	0.0841	1	10/18/11 18:23	SW846 8270D	BES	11J3932
Benzo (a) pyrene	ND		mg/kg dry	0.0427	0.0841	1	10/18/11 18:23	SW846 8270D	BES	11J3932
Benzo (b) fluoranthene	ND		mg/kg dry	0.0427	0.0841	1	10/18/11 18:23	SW846 8270D	BES	11J3932
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0427	0.0841	1	10/18/11 18:23	SW846 8270D	BES	11J3932
Benzo (k) fluoranthene	ND		mg/kg dry	0.0427	0.0841	1	10/18/11 18:23	SW846 8270D	BES	11J3932
Chrysene	ND		mg/kg dry	0.0427	0.0841	1	10/18/11 18:23	SW846 8270D	BES	11J3932
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0427	0.0841	1	10/18/11 18:23	SW846 8270D	BES	11J3932
Fluoranthene	ND		mg/kg dry	0.0427	0.0841	1	10/18/11 18:23	SW846 8270D	BES	11J3932
Fluorene	ND		mg/kg dry	0.0427	0.0841	1	10/18/11 18:23	SW846 8270D	BES	11J3932
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0427	0.0841	1	10/18/11 18:23	SW846 8270D	BES	11J3932
Naphthalene	0.111		mg/kg dry	0.0427	0.0841	1	10/18/11 18:23	SW846 8270D	BES	11J3932
Phenanthrene	0.0795	J	mg/kg dry	0.0427	0.0841	1	10/18/11 18:23	SW846 8270D	BES	11J3932
Pyrene	ND		mg/kg dry	0.0427	0.0841	1	10/18/11 18:23	SW846 8270D	BES	11J3932
1-Methylnaphthalene	0.220		mg/kg dry	0.0427	0.0841	1	10/18/11 18:23	SW846 8270D	BES	11J3932
2-Methylnaphthalene	0.411		mg/kg dry	0.0427	0.0841	1	10/18/11 18:23	SW846 8270D	BES	11J3932
Surr: Terphenyl-d14 (18-120%)	80 %					1	10/18/11 18:23	SW846 8270D	BES	11J3932
Surr: 2-Fluorobiphenyl (14-120%)	62 %					1	10/18/11 18:23	SW846 8270D	BES	11J3932
Surr: Nitrobenzene-d5 (17-120%)	57 %					1	10/18/11 18:23	SW846 8270D	BES	11J3932

Client EEG - Small Business Group, Inc. (2449)  
 10179 Highway 78  
 Ladson, SC 29456  
 Attn Tom McElwee

Work Order: NUJ2184  
 Project Name: Laurel Bay Housing Project  
 Project Number: [none]  
 Received: 10/15/11 08:40

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
<b>Sample ID: NUJ2184-02 (283 Birch - Soil) Sampled: 10/13/11 12:00</b>										
<b>General Chemistry Parameters</b>										
% Dry Solids	78.7		%	0.500	0.500	1	10/26/11 12:50	SW-846	RRS	11J5741
<b>Volatile Organic Compounds by EPA Method 8260B</b>										
Benzene	ND		mg/kg dry	0.00115	0.00208	1	10/21/11 21:27	SW846 8260B	KKK	11J5081
Ethylbenzene	ND		mg/kg dry	0.00115	0.00208	1	10/21/11 21:27	SW846 8260B	KKK	11J5081
Naphthalene	0.0402		mg/kg dry	0.00260	0.00521	1	10/21/11 21:27	SW846 8260B	KKK	11J5081
Toluene	ND		mg/kg dry	0.00115	0.00208	1	10/21/11 21:27	SW846 8260B	KKK	11J5081
Xylenes, total	ND		mg/kg dry	0.00260	0.00521	1	10/21/11 21:27	SW846 8260B	KKK	11J5081
Surr: 1,2-Dichloroethane-d4 (70-130%)	104 %					1	10/21/11 21:27	SW846 8260B	KKK	11J5081
Surr: Dibromofluoromethane (70-130%)	103 %					1	10/21/11 21:27	SW846 8260B	KKK	11J5081
Surr: Toluene-d8 (70-130%)	102 %					1	10/21/11 21:27	SW846 8260B	KKK	11J5081
Surr: 4-Bromofluorobenzene (70-130%)	105 %					1	10/21/11 21:27	SW846 8260B	KKK	11J5081
<b>Polyaromatic Hydrocarbons by EPA 8270D</b>										
Acenaphthene	ND		mg/kg dry	0.0428	0.0843	1	10/18/11 18:45	SW846 8270D	BES	11J3932
Acenaphthylene	ND		mg/kg dry	0.0428	0.0843	1	10/18/11 18:45	SW846 8270D	BES	11J3932
Anthracene	ND		mg/kg dry	0.0428	0.0843	1	10/18/11 18:45	SW846 8270D	BES	11J3932
Benzo (a) anthracene	ND		mg/kg dry	0.0428	0.0843	1	10/18/11 18:45	SW846 8270D	BES	11J3932
Benzo (a) pyrene	ND		mg/kg dry	0.0428	0.0843	1	10/18/11 18:45	SW846 8270D	BES	11J3932
Benzo (b) fluoranthene	ND		mg/kg dry	0.0428	0.0843	1	10/18/11 18:45	SW846 8270D	BES	11J3932
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0428	0.0843	1	10/18/11 18:45	SW846 8270D	BES	11J3932
Benzo (k) fluoranthene	ND		mg/kg dry	0.0428	0.0843	1	10/18/11 18:45	SW846 8270D	BES	11J3932
Chrysene	ND		mg/kg dry	0.0428	0.0843	1	10/18/11 18:45	SW846 8270D	BES	11J3932
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0428	0.0843	1	10/18/11 18:45	SW846 8270D	BES	11J3932
Fluoranthene	ND		mg/kg dry	0.0428	0.0843	1	10/18/11 18:45	SW846 8270D	BES	11J3932
Fluorene	0.0553	J	mg/kg dry	0.0428	0.0843	1	10/18/11 18:45	SW846 8270D	BES	11J3932
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0428	0.0843	1	10/18/11 18:45	SW846 8270D	BES	11J3932
Naphthalene	0.250		mg/kg dry	0.0428	0.0843	1	10/18/11 18:45	SW846 8270D	BES	11J3932
Phenanthrene	ND		mg/kg dry	0.0428	0.0843	1	10/18/11 18:45	SW846 8270D	BES	11J3932
Pyrene	ND		mg/kg dry	0.0428	0.0843	1	10/18/11 18:45	SW846 8270D	BES	11J3932
1-Methylnaphthalene	0.480		mg/kg dry	0.0428	0.0843	1	10/18/11 18:45	SW846 8270D	BES	11J3932
2-Methylnaphthalene	0.832		mg/kg dry	0.0428	0.0843	1	10/18/11 18:45	SW846 8270D	BES	11J3932
Surr: Terphenyl-d14 (18-120%)	74 %					1	10/18/11 18:45	SW846 8270D	BES	11J3932
Surr: 2-Fluorobiphenyl (14-120%)	57 %					1	10/18/11 18:45	SW846 8270D	BES	11J3932
Surr: Nitrobenzene-d5 (17-120%)	55 %					1	10/18/11 18:45	SW846 8270D	BES	11J3932

Client EEG - Small Business Group, Inc. (2449)  
10179 Highway 78  
Ladson, SC 29456  
Attn Tom McElwee

Work Order: NUJ2184  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 10/15/11 08:40

### SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extract Vol	Date	Analyst	Extraction Method
Polyaromatic Hydrocarbons by EPA 8270D							
SW846 8270D	11J3932	NUJ2184-01	30.52	1.00	10/17/11 14:27	KDJ	EPA 3550C
SW846 8270D	11J3932	NUJ2184-02	30.32	1.00	10/17/11 14:27	KDJ	EPA 3550C
Volatile Organic Compounds by EPA Method 8260B							
SW846 8260B	11J5081	NUJ2184-01	5.56	5.00	10/12/11 12:15	AAN	EPA 5035
SW846 8260B	11J5196	NUJ2184-01RE1	5.85	5.00	10/12/11 12:15	AAN	EPA 5035
SW846 8260B	11J5081	NUJ2184-02	6.10	5.00	10/13/11 12:00	AAN	EPA 5035



Client EEG - Small Business Group, Inc. (2449)  
 10179 Highway 78  
 Ladson, SC 29456  
 Attn Tom McElwee

Work Order: NUJ2184  
 Project Name: Laurel Bay Housing Project  
 Project Number: [none]  
 Received: 10/15/11 08:40

**PROJECT QUALITY CONTROL DATA**  
**Blank**

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
<b>Volatile Organic Compounds by EPA Method 8260B</b>						
<b>11J5081-BLK1</b>						
Benzene	<0.00110		mg/kg wet	11J5081	11J5081-BLK1	10/21/11 12:53
Ethylbenzene	<0.00110		mg/kg wet	11J5081	11J5081-BLK1	10/21/11 12:53
Naphthalene	<0.00250		mg/kg wet	11J5081	11J5081-BLK1	10/21/11 12:53
Toluene	<0.00110		mg/kg wet	11J5081	11J5081-BLK1	10/21/11 12:53
Xylenes, total	<0.00250		mg/kg wet	11J5081	11J5081-BLK1	10/21/11 12:53
Surrogate: 1,2-Dichloroethane-d4	108%			11J5081	11J5081-BLK1	10/21/11 12:53
Surrogate: Dibromofluoromethane	109%			11J5081	11J5081-BLK1	10/21/11 12:53
Surrogate: Toluene-d8	100%			11J5081	11J5081-BLK1	10/21/11 12:53
Surrogate: 4-Bromofluorobenzene	99%			11J5081	11J5081-BLK1	10/21/11 12:53
<b>11J5081-BLK2</b>						
Benzene	<0.0550		mg/kg wet	11J5081	11J5081-BLK2	10/21/11 13:23
Ethylbenzene	<0.0550		mg/kg wet	11J5081	11J5081-BLK2	10/21/11 13:23
Naphthalene	<0.125		mg/kg wet	11J5081	11J5081-BLK2	10/21/11 13:23
Toluene	<0.0550		mg/kg wet	11J5081	11J5081-BLK2	10/21/11 13:23
Xylenes, total	<0.125		mg/kg wet	11J5081	11J5081-BLK2	10/21/11 13:23
Surrogate: 1,2-Dichloroethane-d4	109%			11J5081	11J5081-BLK2	10/21/11 13:23
Surrogate: Dibromofluoromethane	110%			11J5081	11J5081-BLK2	10/21/11 13:23
Surrogate: Toluene-d8	100%			11J5081	11J5081-BLK2	10/21/11 13:23
Surrogate: 4-Bromofluorobenzene	101%			11J5081	11J5081-BLK2	10/21/11 13:23
<b>11J5196-BLK1</b>						
Benzene	<0.00110		mg/kg wet	11J5196	11J5196-BLK1	10/22/11 13:53
Ethylbenzene	<0.00110		mg/kg wet	11J5196	11J5196-BLK1	10/22/11 13:53
Naphthalene	<0.00250		mg/kg wet	11J5196	11J5196-BLK1	10/22/11 13:53
Toluene	<0.00110		mg/kg wet	11J5196	11J5196-BLK1	10/22/11 13:53
Xylenes, total	<0.00250		mg/kg wet	11J5196	11J5196-BLK1	10/22/11 13:53
Surrogate: 1,2-Dichloroethane-d4	110%			11J5196	11J5196-BLK1	10/22/11 13:53
Surrogate: Dibromofluoromethane	106%			11J5196	11J5196-BLK1	10/22/11 13:53
Surrogate: Toluene-d8	98%			11J5196	11J5196-BLK1	10/22/11 13:53
Surrogate: 4-Bromofluorobenzene	97%			11J5196	11J5196-BLK1	10/22/11 13:53
<b>11J5196-BLK2</b>						
Benzene	<0.0550		mg/kg wet	11J5196	11J5196-BLK2	10/22/11 13:23
Ethylbenzene	<0.0550		mg/kg wet	11J5196	11J5196-BLK2	10/22/11 13:23
Naphthalene	<0.125		mg/kg wet	11J5196	11J5196-BLK2	10/22/11 13:23
Toluene	<0.0550		mg/kg wet	11J5196	11J5196-BLK2	10/22/11 13:23
Xylenes, total	<0.125		mg/kg wet	11J5196	11J5196-BLK2	10/22/11 13:23
Surrogate: 1,2-Dichloroethane-d4	108%			11J5196	11J5196-BLK2	10/22/11 13:23
Surrogate: Dibromofluoromethane	105%			11J5196	11J5196-BLK2	10/22/11 13:23
Surrogate: Toluene-d8	80%			11J5196	11J5196-BLK2	10/22/11 13:23
Surrogate: 4-Bromofluorobenzene	97%			11J5196	11J5196-BLK2	10/22/11 13:23

Client EEG - Small Business Group, Inc. (2449)  
 10179 Highway 78  
 Ladson, SC 29456  
 Attn Tom McElwee

Work Order: NUJ2184  
 Project Name: Laurel Bay Housing Project  
 Project Number: [none]  
 Received: 10/15/11 08:40

**PROJECT QUALITY CONTROL DATA**  
**Blank - Cont.**

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
<b>Volatile Organic Compounds by EPA Method 8260B</b>						
<b>Polyaromatic Hydrocarbons by EPA 8270D</b>						
<b>11J3932-BLK1</b>						
Acenaphthene	<0.0340		mg/kg wet	11J3932	11J3932-BLK1	10/18/11 14:46
Acenaphthylene	<0.0340		mg/kg wet	11J3932	11J3932-BLK1	10/18/11 14:46
Anthracene	<0.0340		mg/kg wet	11J3932	11J3932-BLK1	10/18/11 14:46
Benzo (a) anthracene	<0.0340		mg/kg wet	11J3932	11J3932-BLK1	10/18/11 14:46
Benzo (a) pyrene	<0.0340		mg/kg wet	11J3932	11J3932-BLK1	10/18/11 14:46
Benzo (b) fluoranthene	<0.0340		mg/kg wet	11J3932	11J3932-BLK1	10/18/11 14:46
Benzo (g,h,i) perylene	<0.0340		mg/kg wet	11J3932	11J3932-BLK1	10/18/11 14:46
Benzo (k) fluoranthene	<0.0340		mg/kg wet	11J3932	11J3932-BLK1	10/18/11 14:46
Chrysene	<0.0340		mg/kg wet	11J3932	11J3932-BLK1	10/18/11 14:46
Dibenz (a,h) anthracene	<0.0340		mg/kg wet	11J3932	11J3932-BLK1	10/18/11 14:46
Fluoranthene	<0.0340		mg/kg wet	11J3932	11J3932-BLK1	10/18/11 14:46
Fluorene	<0.0340		mg/kg wet	11J3932	11J3932-BLK1	10/18/11 14:46
Indeno (1,2,3-cd) pyrene	<0.0340		mg/kg wet	11J3932	11J3932-BLK1	10/18/11 14:46
Naphthalene	<0.0340		mg/kg wet	11J3932	11J3932-BLK1	10/18/11 14:46
Phenanthrene	<0.0340		mg/kg wet	11J3932	11J3932-BLK1	10/18/11 14:46
Pyrene	<0.0340		mg/kg wet	11J3932	11J3932-BLK1	10/18/11 14:46
1-Methylnaphthalene	<0.0340		mg/kg wet	11J3932	11J3932-BLK1	10/18/11 14:46
2-Methylnaphthalene	<0.0340		mg/kg wet	11J3932	11J3932-BLK1	10/18/11 14:46
Surrogate: Terphenyl-d14	87%			11J3932	11J3932-BLK1	10/18/11 14:46
Surrogate: 2-Fluorobiphenyl	66%			11J3932	11J3932-BLK1	10/18/11 14:46
Surrogate: Nitrobenzene-d5	64%			11J3932	11J3932-BLK1	10/18/11 14:46

Client EEG - Small Business Group, Inc. (2449)  
10179 Highway 78  
Ladson, SC 29456  
Attn Tom McElwee

Work Order: NUJ2184  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 10/15/11 08:40

### PROJECT QUALITY CONTROL DATA

#### Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
<b>General Chemistry Parameters</b>										
<b>11J5741-DUP1</b>										
% Dry Solids	82.9	84.1		%	1	20	11J5741	NUJ1976-38		10/26/11 12:50

Client EEG - Small Business Group, Inc. (2449)  
 10179 Highway 78  
 Ladson, SC 29456  
 Attn Tom McElwee

Work Order: NUJ2184  
 Project Name: Laurel Bay Housing Project  
 Project Number: [none]  
 Received: 10/15/11 08:40

**PROJECT QUALITY CONTROL DATA**  
**LCS**

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
<b>Volatile Organic Compounds by EPA Method 8260B</b>								
<b>11J5081-BS1</b>								
Benzene	50.0	47.8		ug/kg	96%	75 - 127	11J5081	10/21/11 11:22
Ethylbenzene	50.0	49.2		ug/kg	98%	80 - 134	11J5081	10/21/11 11:22
Naphthalene	50.0	43.2		ug/kg	86%	69 - 150	11J5081	10/21/11 11:22
Toluene	50.0	50.2		ug/kg	100%	80 - 132	11J5081	10/21/11 11:22
Xylenes, total	150	149		ug/kg	99%	80 - 137	11J5081	10/21/11 11:22
Surrogate: 1,2-Dichloroethane-d4	50.0	54.8			110%	70 - 130	11J5081	10/21/11 11:22
Surrogate: Dibromofluoromethane	50.0	54.2			108%	70 - 130	11J5081	10/21/11 11:22
Surrogate: Toluene-d8	50.0	50.0			100%	70 - 130	11J5081	10/21/11 11:22
Surrogate: 4-Bromofluorobenzene	50.0	45.6			91%	70 - 130	11J5081	10/21/11 11:22
<b>11J5196-BS1</b>								
Benzene	50.0	44.0		ug/kg	88%	75 - 127	11J5196	10/22/11 12:22
Ethylbenzene	50.0	46.2		ug/kg	92%	80 - 134	11J5196	10/22/11 12:22
Naphthalene	50.0	45.9		ug/kg	92%	69 - 150	11J5196	10/22/11 12:22
Toluene	50.0	45.6		ug/kg	91%	80 - 132	11J5196	10/22/11 12:22
Xylenes, total	150	140		ug/kg	93%	80 - 137	11J5196	10/22/11 12:22
Surrogate: 1,2-Dichloroethane-d4	50.0	54.1			108%	70 - 130	11J5196	10/22/11 12:22
Surrogate: Dibromofluoromethane	50.0	52.5			105%	70 - 130	11J5196	10/22/11 12:22
Surrogate: Toluene-d8	50.0	49.6			99%	70 - 130	11J5196	10/22/11 12:22
Surrogate: 4-Bromofluorobenzene	50.0	48.0			96%	70 - 130	11J5196	10/22/11 12:22
<b>Polyaromatic Hydrocarbons by EPA 8270D</b>								
<b>11J3932-BS1</b>								
Acenaphthene	1.67	1.23		mg/kg wet	74%	36 - 120	11J3932	10/18/11 15:08
Acenaphthylene	1.67	1.16		mg/kg wet	69%	38 - 120	11J3932	10/18/11 15:08
Anthracene	1.67	1.35		mg/kg wet	81%	46 - 124	11J3932	10/18/11 15:08
Benzo (a) anthracene	1.67	1.37		mg/kg wet	82%	45 - 120	11J3932	10/18/11 15:08
Benzo (a) pyrene	1.67	1.43		mg/kg wet	86%	45 - 120	11J3932	10/18/11 15:08
Benzo (b) fluoranthene	1.67	1.41		mg/kg wet	85%	42 - 120	11J3932	10/18/11 15:08
Benzo (g,h,i) perylene	1.67	1.35		mg/kg wet	81%	38 - 120	11J3932	10/18/11 15:08
Benzo (k) fluoranthene	1.67	1.20		mg/kg wet	72%	42 - 120	11J3932	10/18/11 15:08
Chrysene	1.67	1.33		mg/kg wet	80%	43 - 120	11J3932	10/18/11 15:08
Dibenz (a,h) anthracene	1.67	1.34		mg/kg wet	80%	32 - 128	11J3932	10/18/11 15:08
Fluoranthene	1.67	1.38		mg/kg wet	83%	46 - 120	11J3932	10/18/11 15:08
Fluorene	1.67	1.28		mg/kg wet	77%	42 - 120	11J3932	10/18/11 15:08
Indeno (1,2,3-cd) pyrene	1.67	1.34		mg/kg wet	80%	41 - 121	11J3932	10/18/11 15:08
Naphthalene	1.67	1.22		mg/kg wet	73%	32 - 120	11J3932	10/18/11 15:08
Phenanthrene	1.67	1.31		mg/kg wet	79%	45 - 120	11J3932	10/18/11 15:08
Pyrene	1.67	1.32		mg/kg wet	79%	43 - 120	11J3932	10/18/11 15:08
1-Methylnaphthalene	1.67	0.957		mg/kg wet	57%	32 - 120	11J3932	10/18/11 15:08
2-Methylnaphthalene	1.67	1.14		mg/kg wet	68%	28 - 120	11J3932	10/18/11 15:08

Client EEG - Small Business Group, Inc. (2449)  
10179 Highway 78  
Ladson, SC 29456  
Attn Tom McElwee

Work Order: NUJ2184  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 10/15/11 08:40

**PROJECT QUALITY CONTROL DATA**  
**LCS - Cont.**

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
<b>Polyaromatic Hydrocarbons by EPA 8270D</b>								
<b>11J3932-BS1</b>								
Surrogate: Terphenyl-d14	1.67	1.41			85%	18 - 120	11J3932	10/18/11 15:08
Surrogate: 2-Fluorobiphenyl	1.67	1.07			64%	14 - 120	11J3932	10/18/11 15:08
Surrogate: Nitrobenzene-d5	1.67	0.980			59%	17 - 120	11J3932	10/18/11 15:08

Client EEG - Small Business Group, Inc. (2449)  
 10179 Highway 78  
 Ladson, SC 29456  
 Attn Tom McElwee

Work Order: NUJ2184  
 Project Name: Laurel Bay Housing Project  
 Project Number: [none]  
 Received: 10/15/11 08:40

**PROJECT QUALITY CONTROL DATA**  
**LCS Dup**

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
<b>Volatile Organic Compounds by EPA Method 8260B</b>												
<b>11J5081-BSD1</b>												
Benzene		48.4		ug/kg	50.0	97%	75 - 127	1	50	11J5081		10/21/11 11:52
Ethylbenzene		50.2		ug/kg	50.0	100%	80 - 134	2	50	11J5081		10/21/11 11:52
Naphthalene		42.3		ug/kg	50.0	85%	69 - 150	2	50	11J5081		10/21/11 11:52
Toluene		50.7		ug/kg	50.0	101%	80 - 132	1	50	11J5081		10/21/11 11:52
Xylenes, total		154		ug/kg	150	103%	80 - 137	3	50	11J5081		10/21/11 11:52
Surrogate: 1,2-Dichloroethane-d4		55.2		ug/kg	50.0	110%	70 - 130			11J5081		10/21/11 11:52
Surrogate: Dibromofluoromethane		54.6		ug/kg	50.0	109%	70 - 130			11J5081		10/21/11 11:52
Surrogate: Toluene-d8		50.4		ug/kg	50.0	101%	70 - 130			11J5081		10/21/11 11:52
Surrogate: 4-Bromofluorobenzene		45.8		ug/kg	50.0	92%	70 - 130			11J5081		10/21/11 11:52
<b>11J5196-BSD1</b>												
Benzene		45.1		ug/kg	50.0	90%	75 - 127	2	50	11J5196		10/22/11 12:52
Ethylbenzene		47.7		ug/kg	50.0	95%	80 - 134	3	50	11J5196		10/22/11 12:52
Naphthalene		47.3		ug/kg	50.0	95%	69 - 150	3	50	11J5196		10/22/11 12:52
Toluene		47.6		ug/kg	50.0	95%	80 - 132	4	50	11J5196		10/22/11 12:52
Xylenes, total		144		ug/kg	150	96%	80 - 137	3	50	11J5196		10/22/11 12:52
Surrogate: 1,2-Dichloroethane-d4		53.2		ug/kg	50.0	106%	70 - 130			11J5196		10/22/11 12:52
Surrogate: Dibromofluoromethane		52.8		ug/kg	50.0	106%	70 - 130			11J5196		10/22/11 12:52
Surrogate: Toluene-d8		49.7		ug/kg	50.0	99%	70 - 130			11J5196		10/22/11 12:52
Surrogate: 4-Bromofluorobenzene		47.8		ug/kg	50.0	96%	70 - 130			11J5196		10/22/11 12:52

Client EEG - Small Business Group, Inc. (2449)  
 10179 Highway 78  
 Ladson, SC 29456  
 Attn Tom McElwee

Work Order: NUJ2184  
 Project Name: Laurel Bay Housing Project  
 Project Number: [none]  
 Received: 10/15/11 08:40

**PROJECT QUALITY CONTROL DATA**  
**Matrix Spike**

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
<b>Volatile Organic Compounds by EPA Method 8260B</b>										
<b>11J5081-MS1</b>										
Benzene	ND	0.0638		mg/kg dry	0.0602	106%	31 - 143	11J5081	NUJ2184-02	10/21/11 21:58
Ethylbenzene	ND	0.0749		mg/kg dry	0.0602	125%	23 - 161	11J5081	NUJ2184-02	10/21/11 21:58
Toluene	ND	0.0792		mg/kg dry	0.0602	132%	30 - 155	11J5081	NUJ2184-02	10/21/11 21:58
Xylenes, total	ND	0.215		mg/kg dry	0.181	119%	25 - 162	11J5081	NUJ2184-02	10/21/11 21:58
Surrogate: 1,2-Dichloroethane-d4		51.4		ug/kg	50.0	103%	70 - 130	11J5081	NUJ2184-02	10/21/11 21:58
Surrogate: Dibromofluoromethane		52.4		ug/kg	50.0	105%	70 - 130	11J5081	NUJ2184-02	10/21/11 21:58
Surrogate: Toluene-d8		57.2		ug/kg	50.0	114%	70 - 130	11J5081	NUJ2184-02	10/21/11 21:58
Surrogate: 4-Bromofluorobenzene		69.2	ZX	ug/kg	50.0	138%	70 - 130	11J5081	NUJ2184-02	10/21/11 21:58
<b>11J5196-MS1</b>										
Benzene	ND	3.21		mg/kg dry	2.73	118%	31 - 143	11J5196	NUJ2184-01RE 1	10/22/11 22:33
Ethylbenzene	ND	3.32		mg/kg dry	2.73	122%	23 - 161	11J5196	NUJ2184-01RE 1	10/22/11 22:33
Naphthalene	1.04	4.06		mg/kg dry	2.73	111%	10 - 176	11J5196	NUJ2184-01RE 1	10/22/11 22:33
Toluene	ND	3.28		mg/kg dry	2.73	120%	30 - 155	11J5196	NUJ2184-01RE 1	10/22/11 22:33
Xylenes, total	ND	9.92		mg/kg dry	8.19	121%	25 - 162	11J5196	NUJ2184-01RE 1	10/22/11 22:33
Surrogate: 1,2-Dichloroethane-d4		53.3		ug/kg	50.0	107%	70 - 130	11J5196	NUJ2184-01RE 1	10/22/11 22:33
Surrogate: Dibromofluoromethane		52.7		ug/kg	50.0	105%	70 - 130	11J5196	NUJ2184-01RE 1	10/22/11 22:33
Surrogate: Toluene-d8		49.8		ug/kg	50.0	100%	70 - 130	11J5196	NUJ2184-01RE 1	10/22/11 22:33
Surrogate: 4-Bromofluorobenzene		47.4		ug/kg	50.0	95%	70 - 130	11J5196	NUJ2184-01RE 1	10/22/11 22:33
<b>Polyaromatic Hydrocarbons by EPA 8270D</b>										
<b>11J3932-MS1</b>										
Acenaphthene	ND	0.990		mg/kg dry	1.86	53%	19 - 120	11J3932	NUJ1811-01	10/18/11 15:29
Acenaphthylene	ND	0.980		mg/kg dry	1.86	53%	25 - 120	11J3932	NUJ1811-01	10/18/11 15:29
Anthracene	ND	1.15		mg/kg dry	1.86	62%	28 - 125	11J3932	NUJ1811-01	10/18/11 15:29
Benzo (a) anthracene	0.0707	1.19		mg/kg dry	1.86	60%	23 - 120	11J3932	NUJ1811-01	10/18/11 15:29
Benzo (a) pyrene	0.0925	1.24		mg/kg dry	1.86	62%	15 - 128	11J3932	NUJ1811-01	10/18/11 15:29
Benzo (b) fluoranthene	0.0944	1.14		mg/kg dry	1.86	56%	12 - 133	11J3932	NUJ1811-01	10/18/11 15:29
Benzo (g,h,i) perylene	0.0751	1.14		mg/kg dry	1.86	57%	22 - 120	11J3932	NUJ1811-01	10/18/11 15:29
Benzo (k) fluoranthene	0.0992	1.21		mg/kg dry	1.86	60%	28 - 120	11J3932	NUJ1811-01	10/18/11 15:29
Chrysene	0.0984	1.21		mg/kg dry	1.86	60%	20 - 120	11J3932	NUJ1811-01	10/18/11 15:29
Dibenz (a,h) anthracene	ND	1.12		mg/kg dry	1.86	60%	12 - 128	11J3932	NUJ1811-01	10/18/11 15:29
Fluoranthene	0.185	1.31		mg/kg dry	1.86	61%	10 - 143	11J3932	NUJ1811-01	10/18/11 15:29

Client EEG - Small Business Group, Inc. (2449)  
 10179 Highway 78  
 Ladson, SC 29456  
 Attn Tom McElwee

Work Order: NUJ2184  
 Project Name: Laurel Bay Housing Project  
 Project Number: [none]  
 Received: 10/15/11 08:40

**PROJECT QUALITY CONTROL DATA**  
**Matrix Spike - Cont.**

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
<b>Polyaromatic Hydrocarbons by EPA 8270D</b>										
<b>11J3932-MS1</b>										
Fluorene	ND	1.09		mg/kg dry	1.86	59%	20 - 120	11J3932	NUJ1811-01	10/18/11 15:29
Indeno (1,2,3-cd) pyrene	0.0648	1.14		mg/kg dry	1.86	58%	22 - 121	11J3932	NUJ1811-01	10/18/11 15:29
Naphthalene	ND	1.09		mg/kg dry	1.86	58%	10 - 120	11J3932	NUJ1811-01	10/18/11 15:29
Phenanthrene	0.0492	1.16		mg/kg dry	1.86	60%	21 - 122	11J3932	NUJ1811-01	10/18/11 15:29
Pyrene	0.141	1.18		mg/kg dry	1.86	56%	20 - 123	11J3932	NUJ1811-01	10/18/11 15:29
1-Methylnaphthalene	ND	0.838		mg/kg dry	1.86	45%	10 - 120	11J3932	NUJ1811-01	10/18/11 15:29
2-Methylnaphthalene	ND	0.993		mg/kg dry	1.86	53%	13 - 120	11J3932	NUJ1811-01	10/18/11 15:29
Surrogate: Terphenyl-d14		1.15		mg/kg dry	1.86	62%	18 - 120	11J3932	NUJ1811-01	10/18/11 15:29
Surrogate: 2-Fluorobiphenyl		0.901		mg/kg dry	1.86	48%	14 - 120	11J3932	NUJ1811-01	10/18/11 15:29
Surrogate: Nitrobenzene-d5		0.855		mg/kg dry	1.86	46%	17 - 120	11J3932	NUJ1811-01	10/18/11 15:29



Client EEG - Small Business Group, Inc. (2449)  
 10179 Highway 78  
 Ladson, SC 29456  
 Attn Tom McElwee

Work Order: NUJ2184  
 Project Name: Laurel Bay Housing Project  
 Project Number: [none]  
 Received: 10/15/11 08:40

**PROJECT QUALITY CONTROL DATA**  
**Matrix Spike Dup**

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
<b>Volatile Organic Compounds by EPA Method 8260B</b>												
<b>11J5081-MSD1</b>												
Benzene	ND	0.0618		mg/kg dry	0.0563	110%	31 - 143	3	50	11J5081	NUJ2184-02	10/21/11 22:28
Ethylbenzene	ND	0.0714		mg/kg dry	0.0563	127%	23 - 161	5	50	11J5081	NUJ2184-02	10/21/11 22:28
Toluene	ND	0.0769		mg/kg dry	0.0563	136%	30 - 155	3	50	11J5081	NUJ2184-02	10/21/11 22:28
Xylenes, total	ND	0.210		mg/kg dry	0.169	124%	25 - 162	2	50	11J5081	NUJ2184-02	10/21/11 22:28
Surrogate: 1,2-Dichloroethane-d4		51.7		ug/kg	50.0	103%	70 - 130			11J5081	NUJ2184-02	10/21/11 22:28
Surrogate: Dibromofluoromethane		52.8		ug/kg	50.0	106%	70 - 130			11J5081	NUJ2184-02	10/21/11 22:28
Surrogate: Toluene-d8		59.7		ug/kg	50.0	119%	70 - 130			11J5081	NUJ2184-02	10/21/11 22:28
Surrogate: 4-Bromofluorobenzene		71.6	ZX	ug/kg	50.0	143%	70 - 130			11J5081	NUJ2184-02	10/21/11 22:28
<b>11J5196-MSD1</b>												
Benzene	ND	3.07		mg/kg dry	2.73	112%	31 - 143	5	50	11J5196	NUJ2184-01RE	10/22/11 23:03
Ethylbenzene	ND	3.23		mg/kg dry	2.73	118%	23 - 161	3	50	11J5196	NUJ2184-01RE	10/22/11 23:03
Naphthalene	1.04	3.97		mg/kg dry	2.73	107%	10 - 176	2	50	11J5196	NUJ2184-01RE	10/22/11 23:03
Toluene	ND	3.25		mg/kg dry	2.73	119%	30 - 155	0.9	50	11J5196	NUJ2184-01RE	10/22/11 23:03
Xylenes, total	ND	9.63		mg/kg dry	8.19	118%	25 - 162	3	50	11J5196	NUJ2184-01RE	10/22/11 23:03
Surrogate: 1,2-Dichloroethane-d4		52.0		ug/kg	50.0	104%	70 - 130			11J5196	NUJ2184-01RE	10/22/11 23:03
Surrogate: Dibromofluoromethane		51.9		ug/kg	50.0	104%	70 - 130			11J5196	NUJ2184-01RE	10/22/11 23:03
Surrogate: Toluene-d8		50.5		ug/kg	50.0	101%	70 - 130			11J5196	NUJ2184-01RE	10/22/11 23:03
Surrogate: 4-Bromofluorobenzene		47.0		ug/kg	50.0	94%	70 - 130			11J5196	NUJ2184-01RE	10/22/11 23:03
<b>Polyaromatic Hydrocarbons by EPA 8270D</b>												
<b>11J3932-MSD1</b>												
Acenaphthene	ND	1.24		mg/kg dry	1.87	66%	19 - 120	22	50	11J3932	NUJ1811-01	10/18/11 15:51
Acenaphthylene	ND	1.22		mg/kg dry	1.87	65%	25 - 120	22	50	11J3932	NUJ1811-01	10/18/11 15:51
Anthracene	ND	1.46		mg/kg dry	1.87	78%	28 - 125	24	49	11J3932	NUJ1811-01	10/18/11 15:51
Benzo (a) anthracene	0.0707	1.54		mg/kg dry	1.87	79%	23 - 120	26	50	11J3932	NUJ1811-01	10/18/11 15:51
Benzo (a) pyrene	0.0925	1.58		mg/kg dry	1.87	79%	15 - 128	24	50	11J3932	NUJ1811-01	10/18/11 15:51
Benzo (b) fluoranthene	0.0944	1.46		mg/kg dry	1.87	73%	12 - 133	25	50	11J3932	NUJ1811-01	10/18/11 15:51
Benzo (g,h,i) perylene	0.0751	1.44		mg/kg dry	1.87	73%	22 - 120	23	50	11J3932	NUJ1811-01	10/18/11 15:51
Benzo (k) fluoranthene	0.0992	1.59		mg/kg dry	1.87	80%	28 - 120	27	45	11J3932	NUJ1811-01	10/18/11 15:51
Chrysene	0.0984	1.48		mg/kg dry	1.87	74%	20 - 120	21	49	11J3932	NUJ1811-01	10/18/11 15:51
Dibenz (a,h) anthracene	ND	1.41		mg/kg dry	1.87	76%	12 - 128	23	50	11J3932	NUJ1811-01	10/18/11 15:51
Fluoranthene	0.185	1.67		mg/kg dry	1.87	79%	10 - 143	24	50	11J3932	NUJ1811-01	10/18/11 15:51
Fluorene	ND	1.39		mg/kg dry	1.87	75%	20 - 120	24	50	11J3932	NUJ1811-01	10/18/11 15:51
Indeno (1,2,3-cd) pyrene	0.0648	1.44		mg/kg dry	1.87	73%	22 - 121	23	50	11J3932	NUJ1811-01	10/18/11 15:51
Naphthalene	ND	1.29		mg/kg dry	1.87	69%	10 - 120	17	50	11J3932	NUJ1811-01	10/18/11 15:51

Client EEG - Small Business Group, Inc. (2449)  
 10179 Highway 78  
 Ladson, SC 29456  
 Attn Tom McElwee

Work Order: NUJ2184  
 Project Name: Laurel Bay Housing Project  
 Project Number: [none]  
 Received: 10/15/11 08:40

**PROJECT QUALITY CONTROL DATA**  
**Matrix Spike Dup - Cont.**

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
<b>Polyaromatic Hydrocarbons by EPA 8270D</b>												
<b>11J3932-MSD1</b>												
Phenanthrene	0.0492	1.46		mg/kg dry	1.87	75%	21 - 122	23	50	11J3932	NUJ1811-01	10/18/11 15:51
Pyrene	0.141	1.55		mg/kg dry	1.87	75%	20 - 123	27	50	11J3932	NUJ1811-01	10/18/11 15:51
1-Methylnaphthalene	ND	1.00		mg/kg dry	1.87	54%	10 - 120	18	50	11J3932	NUJ1811-01	10/18/11 15:51
2-Methylnaphthalene	ND	1.18		mg/kg dry	1.87	63%	13 - 120	18	50	11J3932	NUJ1811-01	10/18/11 15:51
Surrogate: Terphenyl-d14		1.53		mg/kg dry	1.87	82%	18 - 120			11J3932	NUJ1811-01	10/18/11 15:51
Surrogate: 2-Fluorobiphenyl		1.09		mg/kg dry	1.87	58%	14 - 120			11J3932	NUJ1811-01	10/18/11 15:51
Surrogate: Nitrobenzene-d5		0.993		mg/kg dry	1.87	53%	17 - 120			11J3932	NUJ1811-01	10/18/11 15:51

Client EEG - Small Business Group, Inc. (2449)  
10179 Highway 78  
Ladson, SC 29456  
Attn Tom McElwee

Work Order: NUJ2184  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 10/15/11 08:40

## CERTIFICATION SUMMARY

### TestAmerica Nashville

Method	Matrix	AIHA	Nelac	South Carolina
SW846 8260B	Soil	N/A	X	X
SW846 8270D	Soil		X	X
SW-846	Soil			

Client EEG - Small Business Group, Inc. (2449)  
10179 Highway 78  
Ladson, SC 29456  
Attn Tom McElwee

Work Order: NUJ2184  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 10/15/11 08:40

### DATA QUALIFIERS AND DEFINITIONS

**J** Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.  
**ZX** Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.  
**ND** Not detected at the reporting limit (or method detection limit if shown)

### METHOD MODIFICATION NOTES

NUJ2184

10/31/11 23 59

TestAmerica

Nashville Division  
2960 Foster Creighton  
Nashville, TN 37204

Phone: 615.257.1111  
Toll Free: 800.451.1111  
Fax: 615.257.1111

Client Name/Account #: EEG - SBG # 2449

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29456

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

Telephone Number: 843.412.2097

Fax No.: 843.879.0401

Sampler Name: (Print) *Patrick Shaw*

Sampler Signature: *[Signature]*

For Agency Use Only? Yes  No   
Yes  No

10-35

Sample ID / Description	Date Sampled	Time Sampled	No of Containers Shipped	Grab	Composite	Field Filtered	Preservatives												
							Ice	HNO <sub>3</sub> (Red Label)	H <sub>2</sub> SO <sub>4</sub> (Orange Label)	NH <sub>4</sub> OH (Orange Label)									
392 Accorn	10/12/11	1215	5	X															
283 B. Rch	10/13/11	1200	5	X															

*McElwee*

21  
21

X X X  
X X X

NUJ2184  
02

Special Instructions:

Relinquished by: <i>[Signature]</i>	Date: 10/14/11	Time: 1000	Method of Shipment: FedEx
Relinquished by:	Date:	Time:	Received by TestAmerica: <i>[Signature]</i>

10/15/11 00:10

33c

ATTACHMENT A



# NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST		1. Generator's US EPA ID No.		Manifest Doc No.		2. Page 1 of		1			
3. Generator's Mailing Address: MCAS, BEAUFORT LAUREL BAY HOUSING BEAUFORT, SC 29907				Generator's Site Address (if different than mailing):		A. Manifest Number <b>WMNA</b>		00316818			
4. Generator's Phone 843-228-6461						B. State Generator's ID					
5. Transporter 1 Company Name EEG, INC.				6. US EPA ID Number		C. State Transporter's ID					
						D. Transporter's Phone 843-879-0411					
7. Transporter 2 Company Name				8. US EPA ID Number		E. State Transporter's ID					
						F. Transporter's Phone					
9. Designated Facility Name and Site Address HICKORY HILL LANDFILL 2621 LOW COUNTRY ROAD RIDGELAND, SC 29936				10. US EPA ID Number		G. State Facility ID					
						H. State Facility Phone 843-987-4643					
GENERATOR	11. Description of Waste Materials					12. Containers		13. Total	14. Unit	I. Misc. Comments	
						No.	Type	Quantity	Wt./Vol.		
	a. HEATING OIL TANKS FILLED WITH SAND  WM Profile # 102655SC										
	b.  WM Profile #										
	c.  WM Profile #										
d.  WM Profile #											
J. Additional Descriptions for Materials Listed Above					K. Disposal Location						
					Cell				Level		
					Grid						
15. Special Handling Instructions and Additional Information UST's from: 1) 212 Balsam ✓ 3) 392 Acorn ✓ 2) 219 Balsam ✓ 4) 283 Birch ✓											
Purchase Order #					EMERGENCY CONTACT / PHONE NO.:						
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.											
Printed Name <i>Timothy Whaley</i>				Signature "On behalf of" <i>Timothy Whaley</i>				Month	Day	Year	
								10	18	11	
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials										
	Printed Name <i>James Baldwin</i>				Signature <i>James Baldwin</i>				Month	Day	Year
									10	18	11
18. Transporter 2 Acknowledgement of Receipt of Materials											
Printed Name				Signature				Month	Day	Year	
FACILITY	19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.										
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.										
Printed Name <i>Tom Cofield</i>				Signature <i>Tom Cofield</i>				Month	Day	Year	
								10	18	11	

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY

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



# Volatile Organic Compounds by GC/MS

Client: <b>AECOM - Resolution Consultants</b>	Laboratory ID: <b>SC04007-007</b>
Description: <b>BEALB283TW01WG20170303</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>03/03/2017 1430</b>	
Date Received: <b>03/04/2017</b>	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/07/2017 1637	PMV		36403

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>8260B</b>	<b>2.4</b>		<b>1.0</b>	0.80	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8260B</b>	<b>9.3</b>		<b>1.0</b>	0.80	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Toluene	108-88-3	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	0.80	U	1.0	0.80	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		111	85-114
Dibromofluoromethane		108	80-119
1,2-Dichloroethane-d4		101	81-118
Toluene-d8		99	89-112

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

Client: <b>AECOM - Resolution Consultants</b>	Laboratory ID: <b>SC04007-007</b>
Description: <b>BEALB283TW01WG20170303</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>03/03/2017 1430</b>	
Date Received: <b>03/04/2017</b>	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	03/15/2017 1556	RBH	03/07/2017 1304	36374

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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Nitrobenzene-d5		65	44-120
2-Fluorobiphenyl		60	44-119
Terphenyl-d14		79	50-134

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

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

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



August 24, 2016

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 Tank Assessment Reports

Dear Mr. Drawdy:

The South Carolina Department of Health and Environmental Control (the Department) received the Underground Storage Tanks (USTs) Assessment Reports for the addresses listed in the attachment. 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 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 these sites.

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,

A handwritten signature in blue ink, appearing to read "L Petrus", is written above the typed name.

Laurel Petrus, Environmental Engineer Associate  
RCRA Federal Facilities Section

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, August 24, 2016  
Subject: IGWA, Laurel Bay Underground Tank Assessment Reports

Draft Final Initial Groundwater Investigation Report for (41 addresses)

Monitoring Well Investigation Recommendation	
122 Banyan	905 Barracuda
159 Cypress Tank 2	921 Barracuda
221 Cypress	935 Albacore
283 Birch Tank 2	946 Albacore
328 Ash Tank 2	1037 Iris
346 Ash	1039 Iris
359 Aspen	1110 Iris
370 Aspen	1134 Iris
377 Aspen	1143 Iris
409 Elderberry	1202 Cardinal
486 Laurel Bay	1212 Cardinal
515 Laurel Bay	1222 Cardinal
542 Laurel Bay	1224 Cardinal
593 Aster	1226 Dove
630 Dahlia	1236 Dove
693 Camellia	1245 Dove
723 Blue Bell	1247 Dove
774 Althea	1274 Albatross
860 Dolphin	1319 Albatross
873 Cobia	1337 Albatross
883 Cobia	

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14 August 2008

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

Re: MCAS – Laurel Bay Housing – 283 Birch  
Site ID # 04001  
UST Closure Reports received 31 January 2008  
No Further Action  
Beaufort County

Dear Mr. Broadfoot:

The Department has reviewed the referenced closure report. Based upon the geotechnical data in the referenced report, the soil samples are below risk based screening levels.

As the Department did not specifically request this data, and the work conducted at this site received no prior review by the Department, we cannot provide any comments on the completeness of the work performed or the overall environmental conditions of the site. Based on the information and analytical data submitted, there is no evidence to indicate that a violation of the Pollution Control Act has occurred. Consequently, no investigation will be required at this time. Please note, this statement pertains only to the data submitted 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 803-898-3553 (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

B. Thomas Knight, Manager  
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 (pdf)



July 27, 2017

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

RE: Draft Final Initial Groundwater Investigation Report, February and March 2017

Dear Mr. Drawdy:

The South Carolina Department of Health and Environmental Control (DHEC) received groundwater data from temporary monitoring well installations in the Draft Final Groundwater Investigation Report, Laurel Bay Military Housing Area for the fifty two (52) addresses shown in the attachment. 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 DHEC's request, groundwater samples were collected from the attached referenced addresses. DHEC 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 groundwater monitoring wells should be installed at the three (3) stated addresses. For the remaining forty nine (49) addresses, there is no indication of contamination on the property and therefore no further investigation is required at this time.

Please note that DHEC's decision is based on information provided by the Marine Corps Air Station (MCAS) to date. Any information found to be contradictory to this decision may require additional action. Furthermore, DHEC 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, Environmental Engineer Associate  
Bureau of Land and Waste Management

Cc: Russell Berry, EQC Region 8  
Shawn Dolan, Resolution Consultants  
Bryan Beck, NAVFAC MIDLANT

Attachment to: Petrus to Drawdy Dated July 27, 2017

Draft Final Initial Groundwater Investigation Report for (52 addresses)

Permanent Well Installation recommendation (3 Addresses):

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- o 254 Beech Street (110 ug/L)
- o 268 Beech Street (28 ug/L)
- o 774 Althea Street (35 ug/L)

No Further Action recommendation (49 addresses):

- o 113 Birch Drive
- o 121 Banyan Drive
- o 122 Banyan Drive
- o 159 Cypress Street
- o 221 Cypress Street
- o 274 Birch Drive
- o 279 Birch Drive
- o 283 Birch Drive
- o 328 Ash Street
- o 346 Ash Street
- o 359 Aspen Street
- o 370 Aspen Street
- o 377 Aspen Street
- o 409 Elderberry Drive
- o 465 Dogwood Drive
- o 480 Laurel Bay Boulevard
- o 486 Laurel Bay Boulevard
- o 515 Laurel Bay Boulevard
- o 542 Laurel Bay Boulevard
- o 593 Aster Street
- o 630 Dahlia Drive
- o 641 Dahlia Drive
- o 693 Camelia Drive
- o 723 Bluebell Lane
- o 860 Dolphin Street
- o 873 Cobia Drive
- o 883 Cobia Drive
- o 905 Barracuda Drive
- o 921 Barracuda Drive
- o 935 Albacore Street
- o 946 Albacore Street
- o 1037 Iris Lane
- o 1039 Iris Lane
- o 1110 Iris Lane
- o 1134 Iris Lane
- o 1143 Iris Lane
- o 1177 Bobwhite Drive
- o 1202 Cardinal Lane
- o 1212 Cardinal Lane
- o 1222 Cardinal Lane
- o 1224 Cardinal Lane
- o 1226 Dove Lane
- o 1236 Dove Lane
- o 1245 Dove Lane
- o 1247 Dove Lane
- o 1274 Albatross Drive
- o 1319 Albatross Drive
- o 1337 Albatross Drive
- o 1346 Cardinal Lane