

**SUMMARY REPORT**  
**176 WEST ALTHEA STREET (FORMERLY 769 WEST ALTHEA STREET)**  
**LAUREL BAY MILITARY HOUSING AREA**  
**MARINE CORPS AIR STATION BEAUFORT**  
**BEAUFORT, SC**

**Revision: 0**  
**Prepared for:**

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

**and**



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

**JUNE 2021**

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Norfolk, Virginia 23511-3095**

**Prepared by:**



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

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

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### **List of Acronyms**

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

## **1.0 INTRODUCTION**

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

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

This report summarizes the results the environmental investigation activities associated with the storage of home heating oil and the potential release of petroleum constituents at the referenced property. Based on the results of the investigation, a No Further Action (NFA) determination has been made by the South Carolina Department of Health and Environmental Control (SCDHEC) for 176 West Althea Street (Formerly 769 West Althea Street). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

### **1.1 Background Information**

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

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

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

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

## **1.2 UST Removal and Assessment Process**

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

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

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

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

The results of the soil sampling at each former UST location were used to determine if a potential for groundwater contamination exists (i.e., soil results greater than RBSLs) and subsequently to select properties for follow-up initial groundwater assessment (IGWA) sampling. The results of the IGWA sampling (if necessary) are used to determine the presence or absence of the aforementioned COPCs in groundwater and identify whether former UST locations will require additional delineation of COPCs in groundwater. In order to delineate the extent of impact to groundwater, permanent wells are installed and a sampling program is established for those former UST locations where IGWA sampling has indicated the presence of COPCs in excess of the SCDHEC RBSLs for groundwater. Groundwater analytical results are also compared to the site specific groundwater vapor intrusion screening levels (VISLs) to evaluate the potential for vapor intrusion and the necessity for an investigation associated with this media. A multi-media investigation selection process tree, applicable to the LBMH UST investigations, is presented as Appendix A.

## **2.0 SAMPLING ACTIVITIES AND RESULTS**

The following section presents the sampling activities and associated results for 176 West Althea Street (Formerly 769 West Althea Street). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 769 West Althea Street* (MCAS Beaufort, 2011). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Initial Groundwater Investigation Report – November and December 2015* (Resolution Consultants, 2016). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C.

### **2.1 UST Removal and Soil Sampling**

In April 2011, two 280 gallon heating oil USTs were removed at 176 West Althea Street (Formerly 769 West Althea Street). Tank 1 was removed on April 27, 2011 from the rear grassed area adjacent to the rear of the house. Tank 2 was removed on April 28, 2011 from the rear grassed area adjacent to Tank 1. The former UST locations are indicated in Figures 2 and

3 of the UST Assessment Report (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 Report (Appendix B), the depths to the bases of the USTs were 5'8" (Tank 1) and 4'4" (Tank 2) bgs and a single soil sample was collected for each at that depth. 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 shipped to an offsite laboratory for analysis of the petroleum COPCs. Sampling was performed in accordance with applicable South Carolina regulation R.61-92, Part 280 (SCDHEC, 2017) and assessment guidelines.

## **2.2 Soil Analytical Results**

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

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST location were used by MCAS Beaufort, in consultation with SCDHEC, to determine a path forward (i.e., additional sampling or NFA) for the property. The soil results collected from 176 West Althea Street (Formerly 769 West Althea Street) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated July 1, 2015, SCDHEC requested an IGWA for 176 West Althea Street (Formerly 769 West Althea Street) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

## **2.3 Groundwater Sampling**

On November 18, 2015, a temporary monitoring well was installed at 176 West Althea Street (Formerly 769 West Althea Street), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST. The former UST locations are indicated in Figures 2 and 3 of the UST Assessment Report (Appendix B).



Further details are provided in the *Initial Groundwater Investigation Report – November and December 2015* (Resolution Consultants, 2016).

The sampling strategy for this phase of the investigation required a one-time sampling event of the temporarily installed monitoring well. Following well installation and development, groundwater samples were collected using low-flow methods and shipped to an offsite laboratory for analysis of the petroleum COPCs. Upon completion of groundwater sampling, the temporary well was abandoned in accordance with the South Carolina Well Standards and Regulations R.61-71 (SCDHEC, 2016). Field forms are provided in the *Initial Groundwater Investigation Report – November and December 2015* (Resolution Consultants, 2016).

## **2.4 Groundwater Analytical Results**

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

The groundwater results collected from 176 West Althea Street (Formerly 769 West Althea Street) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated that the groundwater was not impacted by COPCs associated with the former USTs at concentrations that present a potential risk to human health and the environment.

## **3.0 PROPERTY STATUS**

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 176 West Althea Street (Formerly 769 West Althea Street). This NFA determination was obtained in a letter dated June 8, 2016. SCDHEC's NFA letter is provided in Appendix D.

## **4.0 REFERENCES**

Marine Corps Air Station Beaufort, 2011. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 769 West Althea Street, Laurel Bay Military Housing Area*, September 2011.

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

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

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

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

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

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

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

## Tables

**Table 1**  
**Laboratory Analytical Results - Soil**  
**176 West Althea Street (Formerly 769 West Althea Street)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Results Samples Collected 04/27/11 to 04/28/11	
		769 Althea - 1 4/27/11	769 Althea - 2 4/28/11
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)			
Benzene	0.003	ND	ND
Ethylbenzene	1.15	ND	0.378
Naphthalene	0.036	ND	5.86
Toluene	0.627	ND	0.00125
Xylenes, Total	13.01	ND	0.0437
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)			
Benzo(a)anthracene	0.66	ND	ND
Benzo(b)fluoranthene	0.66	ND	ND
Benzo(k)fluoranthene	0.66	ND	ND
Chrysene	0.66	ND	ND
Dibenz(a,h)anthracene	0.66	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 3.0 and 3.1 (SCDHEC, May 2015 and SCDHEC, February 2016) and the Underground Storage Tank Assessment Guidelines (SCDHEC, February 2006).

Bold font indicates the analyte was detected.

Bold font and shading indicates the concentration exceeds the SCDHEC RBSL.

EPA - United States Environmental Protection Agency

mg/kg - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

**Table 2**  
**Laboratory Analytical Results - Groundwater**  
**176 West Althea Street (Formerly 769 West Althea Street)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Site-Specific Groundwater VISLs (µg/L) <sup>(2)</sup>	Results Sample Collected 11/18/15
<b>Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)</b>			
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	<b>1.3</b>
Naphthalene	25	29.33	<b>11</b>
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	<b>4</b>
<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 Report**



Rec'd 9/30/11

Attachment 1

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

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

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

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

MCAS Beaufort, Commanding Officer Attn: NREAO (Craig Ehde)		
Owner Name (Corporation, Individual, Public Agency, Other)		
P.O. Box 55001		
Mailing Address		
Beaufort,	South Carolina	29904-5001
City	State	Zip Code
843	228-7317	Craig Ehde
Area Code	Telephone Number	Contact Person

**II. SITE IDENTIFICATION AND LOCATION**

Permit I.D. #	
Laurel Bay Military Housing Area, Marine Corps Air Station, Beaufort, SC	
Facility Name or Company Site Identifier	
769 Althea Street, Laurel Bay Military Housing Area	
Street Address or State Road (as applicable)	
Beaufort,	Beaufort
City	County

Attachment 2

### III. INSURANCE INFORMATION

#### Insurance Statement

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

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

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

My policy provider is: \_\_\_\_\_

The policy deductible is: \_\_\_\_\_

The policy limit is: \_\_\_\_\_

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

### IV. REQUEST FOR SUPERB FUNDING

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

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

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

\_\_\_\_\_  
Name (Type or print.)

\_\_\_\_\_  
Signature

#### To be completed by Notary Public:

Sworn before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
(Name)

Notary Public for the state of \_\_\_\_\_  
*Please affix State seal if you are commissioned outside South Carolina*

## VI. UST INFORMATION

- A. Product...(ex. Gas, Kerosene).....
- 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.....

769Althea-1	769Althea-2	
Heating oil	Heating oil	
280 gal	280 gal	
Late 1950s	Late 1950s	
Steel	Steel	
Mid 80s	Mid 80s	
5'8"	4'4"	
No	No	
No	No	
Removed	Removed	
4/27/11	4/28/11	
Yes	Yes	
Yes	Yes	

- M. Method of disposal for any USTs removed from the ground (attach disposal manifests)  
UST 769Althea-1 was removed from the ground, cleaned and recycled.  
UST 769Althea-2 was removed from the ground and disposed  
of at a Subtitle "D" landfill. See Attachment "A".
- N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)  
Contaminated water was pumped from UST 769Althea-1 and disposed  
of by MCAS.  
UST 769Althea-2 was previously filled with sand by others.
- O. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST  
Corrosion, pitting and holes were found in both tanks.

## VII. PIPING INFORMATION

- A. Construction Material..(ex. Steel, FRP).....
- B. Distance from UST to Dispenser.....
- C. Number of Dispensers.....
- D. Type of System Pressure or Suction.....
- E. Was Piping Removed from the Ground? Y/N
- F. Visible Corrosion or Pitting Y/N.....
- G. Visible Holes Y/N.....
- H. Age.....
- I. If any corrosion, pitting, or holes were observed, describe the location and extent for each piping run.

769Althea-1	769Althea-2	
Steel & Copper	Steel & Copper	
N/A	N/A	
N/A	N/A	
Suction	Suction	
Yes	Yes	
Yes	Yes	
No	No	
Late 1950s	Late 1950s	

Steel vent piping for both tanks were corroded and pitted. All  
copper supply and return piping were sound.

## VIII. BRIEF SITE DESCRIPTION AND HISTORY

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

## IX. SITE CONDITIONS

	Yes	No	Unk
<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 #
769 Althea-1	Excav at fill end	Soil	Sandy/Clay	5'8"	4/27/11 1445 hrs	P. Shaw	
769 Althea-2	Excav at fill end	Soil	Sandy	4'4"	4/28/11 1000 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

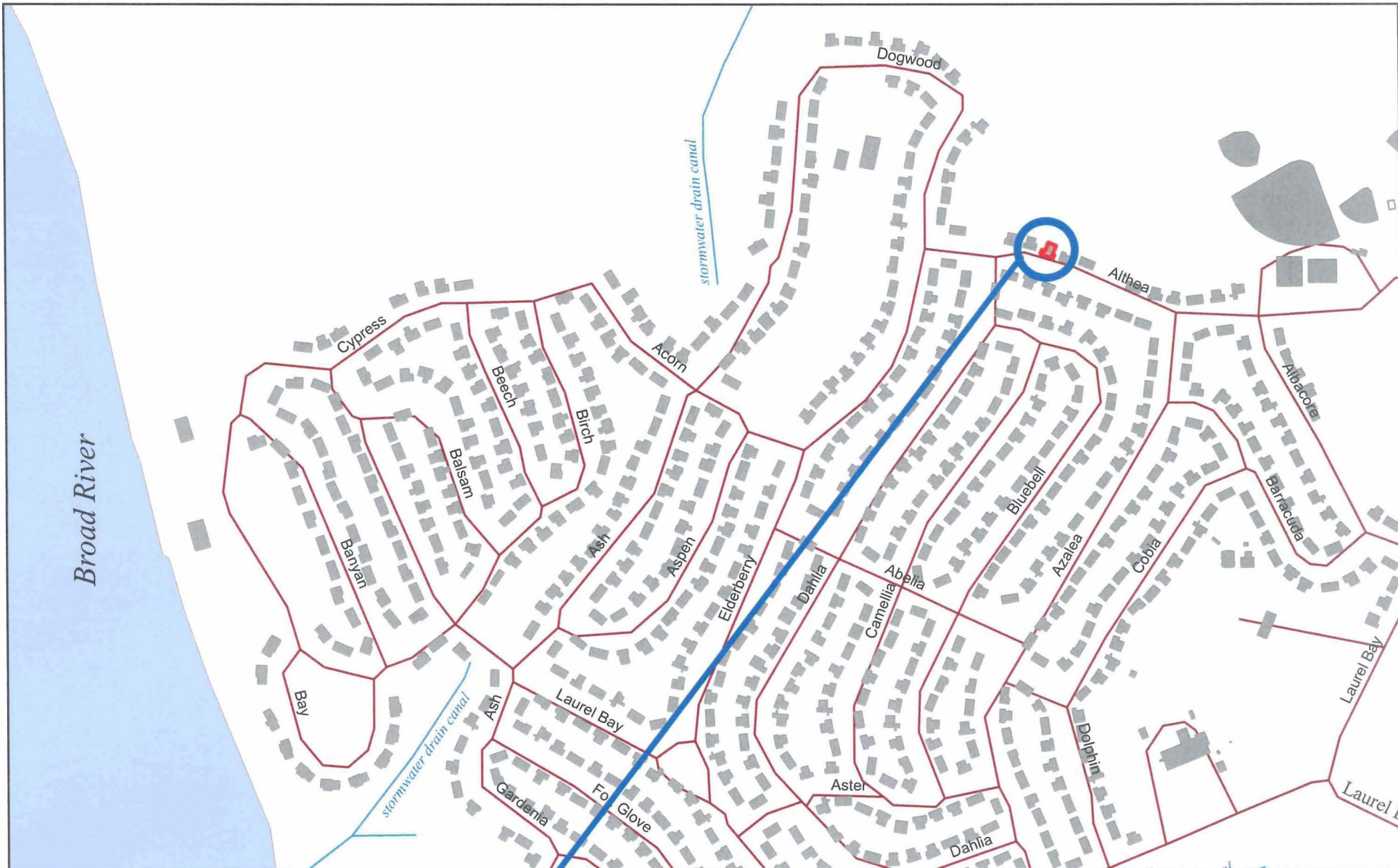
	Yes	No
<p>A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?</p> <p>If yes, indicate type of receptor, distance, and direction on site map.</p>		X
<p>B. Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?</p>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



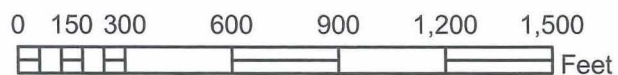
### **XIII. SITE MAP**

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

(Attach Site Map Here)



**769 ALTHEA ST.**



**SBG-EEG, Inc.**

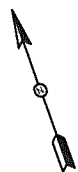
398 E. 5th North Street, Suite C  
Summerville SC 29483-6954

Ph. (843) 875-1930

Drawn By: L. DiAsio

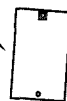
Dwg Date: MAY 2011

**FIGURE 1: LOCATION MAP**  
**769 ALTHEA ST.**  
**LAUREL BAY, BEAUFORT SC**



UST 769ALTHEA-1,  
280 GAL.

UST 769ALTHEA-2,  
280 GAL.



769 ALTHEA STREET  
LAUREL BAY MILITARY HOUSING  
MCAS BEAUFORT, SC

ASPHALT  
DRIVEWAY

GRAPHIC SCALE

0 5' 10' 20'

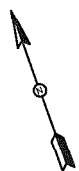
***SBG-EEG***

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

FIGURE 2 SITE MAP  
769 ALTHEA ST., LAUREL BAY  
MCAS BEAUFORT SC

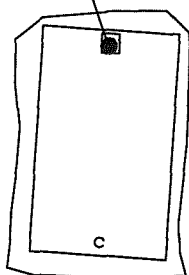
SCALE: GRAPHIC

DWG DATE MAY 2011

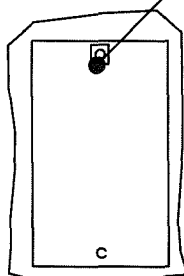


SOIL SAMPLE  
769 ALTHEA-2

FILL END

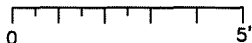


SOIL SAMPLE  
769 ALTHEA-1



REAR OF  
769 ALTHEA STREET

GRAPHIC SCALE



TANK DEPTH BELOW GRADE

769ALTHEA-1 = 32"

769ALTHEA-2 = 17"

**SBG-EEG**

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

FIGURE 3 UST SAMPLE LOCATIONS  
769 ALTHEA ST., LAUREL BAY  
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE MAY 2011





Picture 1: Location of tanks at 769 Althea Street.



Picture 2: UST 769Althea-1.





Picture 3: UST 769Althea-2 during excavation.



Picture 4: UST 769Althea-2 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	769Althea-1		769Althea-2			
Benzene		ND		ND			
Toluene		ND		0.00125 mg/kg			
Ethylbenzene		ND		0.378 mg/kg			
Xylenes		ND		0.0437 mg/kg			
Naphthalene		ND		5.86 mg/kg			
Benzo (a) anthracene		ND		ND			
Benzo (b) fluoranthene		ND		ND			
Benzo (k) fluoranthene		ND		ND			
Chrysene		ND		ND			
Dibenz (a, h) anthracene		ND		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)

May 12, 2011

4:42:05PM

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

Work Order: NUE0001  
Project Name: Laurel Bay Housing Project  
Project Nbr: N/A  
P/O Nbr: 1027  
Date Received: 04/30/11

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
769 Althea-1	NUE0001-01	04/27/11 14:45
769 Althea-2	NUE0001-02	04/28/11 10:00

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.

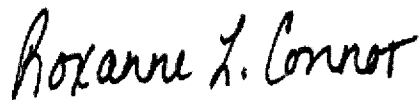
These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

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: NUE0001  
Project Name: Laurel Bay Housing Project  
Project Number: N/A  
Received: 04/30/11 08:30

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
<b>Sample ID: NUE0001-01 (769 Althea-1 - Soil) Sampled: 04/27/11 14:45</b>										
General Chemistry Parameters										
% Dry Solids	78.3		%	0.500	0.500	1	05/11/11 14:30	SW-846	AMS	11E2308
Volatile Organic Compounds by EPA Method 8260B										
Benzene	ND	RL1	mg/kg dry	0.0695	0.126	50	05/05/11 13:41	SW846 8260B	KKK	11E1197
Ethylbenzene	ND	RL1	mg/kg dry	0.0619	0.126	50	05/05/11 13:41	SW846 8260B	KKK	11E1197
Naphthalene	ND	RL1	mg/kg dry	0.107	0.316	50	05/05/11 13:41	SW846 8260B	KKK	11E1197
Toluene	ND	RL1	mg/kg dry	0.0562	0.126	50	05/05/11 13:41	SW846 8260B	KKK	11E1197
Xylenes, total	ND	RL1	mg/kg dry	0.120	0.316	50	05/05/11 13:41	SW846 8260B	KKK	11E1197
Surr: 1,2-Dichloroethane-d4 (67-138%)	91 %					50	05-05-11 13:41	SW846 8260B	KKK	11E1197
Surr: Dibromofluoromethane (75-125%)	97 %					50	05-05-11 13:41	SW846 8260B	KKK	11E1197
Surr: Toluene-d8 (76-129%)	95 %					50	05-05-11 13:41	SW846 8260B	KKK	11E1197
Surr: 4-Bromofluorobenzene (67-147%)	93 %					50	05-05-11 13:41	SW846 8260B	KKK	11E1197
Polyaromatic Hydrocarbons by EPA 8270D										
Acenaphthene	ND		mg/kg dry	0.0176	0.0844	1	05/04/11 18:39	SW846 8270D	jlf	11E0215
Acenaphthylene	ND		mg/kg dry	0.0252	0.0844	1	05/04/11 18:39	SW846 8270D	jlf	11E0215
Anthracene	ND		mg/kg dry	0.0113	0.0844	1	05/04/11 18:39	SW846 8270D	jlf	11E0215
Benzo (a) anthracene	ND		mg/kg dry	0.0139	0.0844	1	05/04/11 18:39	SW846 8270D	jlf	11E0215
Benzo (a) pyrene	ND		mg/kg dry	0.0101	0.0844	1	05/04/11 18:39	SW846 8270D	jlf	11E0215
Benzo (b) fluoranthene	ND		mg/kg dry	0.0479	0.0844	1	05/04/11 18:39	SW846 8270D	jlf	11E0215
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0113	0.0844	1	05/04/11 18:39	SW846 8270D	jlf	11E0215
Benzo (k) fluoranthene	ND		mg/kg dry	0.0466	0.0844	1	05/04/11 18:39	SW846 8270D	jlf	11E0215
Chrysene	ND		mg/kg dry	0.0390	0.0844	1	05/04/11 18:39	SW846 8270D	jlf	11E0215
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0189	0.0844	1	05/04/11 18:39	SW846 8270D	jlf	11E0215
Fluoranthene	0.146		mg/kg dry	0.0139	0.0844	1	05/04/11 18:39	SW846 8270D	jlf	11E0215
Fluorene	ND		mg/kg dry	0.0252	0.0844	1	05/04/11 18:39	SW846 8270D	jlf	11E0215
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0390	0.0844	1	05/04/11 18:39	SW846 8270D	jlf	11E0215
Naphthalene	ND		mg/kg dry	0.0176	0.0844	1	05/04/11 18:39	SW846 8270D	jlf	11E0215
Phenanthrene	ND		mg/kg dry	0.0126	0.0844	1	05/04/11 18:39	SW846 8270D	jlf	11E0215
Pyrene	0.107		mg/kg dry	0.0290	0.0844	1	05/04/11 18:39	SW846 8270D	jlf	11E0215
1-Methylnaphthalene	ND		mg/kg dry	0.0151	0.0844	1	05/04/11 18:39	SW846 8270D	jlf	11E0215
2-Methylnaphthalene	ND		mg/kg dry	0.0264	0.0844	1	05/04/11 18:39	SW846 8270D	jlf	11E0215
Surr: Terphenyl-d14 (18-120%)	93 %					1	05-04-11 18:39	SW846 8270D	jlf	11E0215
Surr: 2-Fluorobiphenyl (14-120%)	69 %					1	05-04-11 18:39	SW846 8270D	jlf	11E0215
Surr: Nitrobenzene-d5 (17-120%)	69 %					1	05-04-11 18:39	SW846 8270D	jlf	11E0215

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

Work Order: NUE0001  
Project Name: Laurel Bay Housing Project  
Project Number: N/A  
Received: 04/30/11 08:30

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
<b>Sample ID: NUE0001-02 (769 Althea-2 - Soil) Sampled: 04/28/11 10:00</b>										
General Chemistry Parameters										
% Dry Solids	81.7		%	0.500	0.500	1	05/11/11 14:30	SW-846	AMS	11E2308
Volatile Organic Compounds by EPA Method 8260B										
Benzene	ND		mg/kg dry	0.00125	0.00227	1	05/04/11 17:26	SW846 8260B	KKK	11E0832
Ethylbenzene	0.378		mg/kg dry	0.0520	0.106	50	05/05/11 14:10	SW846 8260B	KKK	11E1197
Naphthalene	5.86		mg/kg dry	0.0902	0.265	50	05/05/11 14:10	SW846 8260B	KKK	11E1197
Toluene	0.00125	J	mg/kg dry	0.00101	0.00227	1	05/04/11 17:26	SW846 8260B	KKK	11E0832
Xylenes, total	0.0437		mg/kg dry	0.00216	0.00568	1	05/04/11 17:26	SW846 8260B	KKK	11E0832
Surr: 1,2-Dichloroethane-d4 (67-138%)	97 %					1	05-04-11 17:26	SW846 8260B	KKK	11E0832
Surr: 1,2-Dichloroethane-d4 (67-138%)	93 %					50	05-05-11 14:10	SW846 8260B	KKK	11E1197
Surr: Dibromofluoromethane (75-125%)	108 %					1	05-04-11 17:26	SW846 8260B	KKK	11E0832
Surr: Dibromofluoromethane (75-125%)	95 %					50	05-05-11 14:10	SW846 8260B	KKK	11E1197
Surr: Toluene-d8 (76-129%)	427 %	ZX				1	05-04-11 17:26	SW846 8260B	KKK	11E0832
Surr: Toluene-d8 (76-129%)	92 %					50	05-05-11 14:10	SW846 8260B	KKK	11E1197
Surr: 4-Bromofluorobenzene (67-147%)	1430 %	ZX				1	05-04-11 17:26	SW846 8260B	KKK	11E0832
Surr: 4-Bromofluorobenzene (67-147%)	89 %					50	05-05-11 14:10	SW846 8260B	KKK	11E1197
Polyaromatic Hydrocarbons by EPA 8270D										
Acenaphthene	7.36		mg/kg dry	0.170	0.813	10	05/06/11 14:08	SW846 8270D	BES	11E0215
Acenaphthylene	3.25		mg/kg dry	0.243	0.813	10	05/06/11 14:08	SW846 8270D	BES	11E0215
Anthracene	31.1		mg/kg dry	0.109	0.813	10	05/06/11 14:08	SW846 8270D	BES	11E0215
Benzo (a) anthracene	ND		mg/kg dry	0.133	0.813	10	05/06/11 14:08	SW846 8270D	BES	11E0215
Benzo (a) pyrene	ND		mg/kg dry	0.0970	0.813	10	05/06/11 14:08	SW846 8270D	BES	11E0215
Benzo (b) fluoranthene	ND		mg/kg dry	0.461	0.813	10	05/06/11 14:08	SW846 8270D	BES	11E0215
Benzo (g,h,i) perylene	ND		mg/kg dry	0.109	0.813	10	05/06/11 14:08	SW846 8270D	BES	11E0215
Benzo (k) fluoranthene	ND		mg/kg dry	0.449	0.813	10	05/06/11 14:08	SW846 8270D	BES	11E0215
Chrysene	ND		mg/kg dry	0.376	0.813	10	05/06/11 14:08	SW846 8270D	BES	11E0215
Dibenz (a,h) anthracene	ND		mg/kg dry	0.182	0.813	10	05/06/11 14:08	SW846 8270D	BES	11E0215
Fluoranthene	ND		mg/kg dry	0.133	0.813	10	05/06/11 14:08	SW846 8270D	BES	11E0215
Fluorene	16.9		mg/kg dry	0.243	0.813	10	05/06/11 14:08	SW846 8270D	BES	11E0215
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.376	0.813	10	05/06/11 14:08	SW846 8270D	BES	11E0215
Naphthalene	19.6		mg/kg dry	0.170	0.813	10	05/06/11 14:08	SW846 8270D	BES	11E0215
Phenanthrene	32.7		mg/kg dry	0.121	0.813	10	05/06/11 14:08	SW846 8270D	BES	11E0215
Pyrene	1.75		mg/kg dry	0.279	0.813	10	05/06/11 14:08	SW846 8270D	BES	11E0215
1-Methylnaphthalene	81.5		mg/kg dry	0.728	4.06	50	05/06/11 15:55	SW846 8270D	BES	11E0215
2-Methylnaphthalene	138		mg/kg dry	1.27	4.06	50	05/06/11 15:55	SW846 8270D	BES	11E0215
Surr: Terphenyl-d14 (18-120%)	155 %	ZX				10	05-06-11 14:08	SW846 8270D	BES	11E0215
Surr: 2-Fluorobiphenyl (14-120%)	173 %	ZX				10	05-06-11 14:08	SW846 8270D	BES	11E0215
Surr: Nitrobenzene-d5 (17-120%)	113 %					10	05-06-11 14:08	SW846 8270D	BES	11E0215

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

Work Order: NUE0001  
Project Name: Laurel Bay Housing Project  
Project Number: N/A  
Received: 04/30/11 08:30

## SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extract Vol	Date	Analyst	Extraction Method
Polyaromatic Hydrocarbons by EPA 8270D							
SW846 8270D	11E0215	NUE0001-01	30.41	1.00	05/04/11 07:50	JJR	EPA 3550C
SW846 8270D	11E0215	NUE0001-02	30.29	1.00	05/04/11 07:50	JJR	EPA 3550C
SW846 8270D	11E0215	NUE0001-02RE1	30.29	1.00	05/04/11 07:50	JJR	EPA 3550C
SW846 8270D	11E0215	NUE0001-02RE2	30.29	1.00	05/04/11 07:50	JJR	EPA 3550C
Volatile Organic Compounds by EPA Method 8260B							
SW846 8260B	11E0832	NUE0001-01	5.21	5.00	04/27/11 14:45	TSP	EPA 5035
SW846 8260B	11E1197	NUE0001-01RE1	5.82	5.00	04/27/11 14:45	TSP	EPA 5035
SW846 8260B	11E1197	NUE0001-01RE2	5.05	5.00	04/27/11 14:45	TSP	EPA 5035
SW846 8260B	11E0832	NUE0001-02	5.39	5.00	04/28/11 10:00	TSP	EPA 5035
SW846 8260B	11E1197	NUE0001-02RE1	5.77	5.00	04/28/11 10:00	TSP	EPA 5035

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

Work Order: NUE0001  
Project Name: Laurel Bay Housing Project  
Project Number: N/A  
Received: 04/30/11 08:30

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

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
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**Volatile Organic Compounds by EPA Method 8260B**

**11E0832-BLK1**

Benzene	<0.00110		mg/kg wet	11E0832	11E0832-BLK1	05/04/11 12:02
Ethylbenzene	<0.000980		mg/kg wet	11E0832	11E0832-BLK1	05/04/11 12:02
Naphthalene	<0.00170		mg/kg wet	11E0832	11E0832-BLK1	05/04/11 12:02
Toluene	<0.000890		mg/kg wet	11E0832	11E0832-BLK1	05/04/11 12:02
Xylenes, total	<0.00190		mg/kg wet	11E0832	11E0832-BLK1	05/04/11 12:02
Surrogate: 1,2-Dichloroethane-d4	101%			11E0832	11E0832-BLK1	05/04/11 12:02
Surrogate: Dibromofluoromethane	106%			11E0832	11E0832-BLK1	05/04/11 12:02
Surrogate: Toluene-d8	93%			11E0832	11E0832-BLK1	05/04/11 12:02
Surrogate: 4-Bromofluorobenzene	94%			11E0832	11E0832-BLK1	05/04/11 12:02

**11E0832-BLK2**

Benzene	<0.0550		mg/kg wet	11E0832	11E0832-BLK2	05/04/11 12:31
Ethylbenzene	<0.0490		mg/kg wet	11E0832	11E0832-BLK2	05/04/11 12:31
Naphthalene	<0.0850		mg/kg wet	11E0832	11E0832-BLK2	05/04/11 12:31
Toluene	<0.0445		mg/kg wet	11E0832	11E0832-BLK2	05/04/11 12:31
Xylenes, total	<0.0950		mg/kg wet	11E0832	11E0832-BLK2	05/04/11 12:31
Surrogate: 1,2-Dichloroethane-d4	100%			11E0832	11E0832-BLK2	05/04/11 12:31
Surrogate: Dibromofluoromethane	106%			11E0832	11E0832-BLK2	05/04/11 12:31
Surrogate: Toluene-d8	94%			11E0832	11E0832-BLK2	05/04/11 12:31
Surrogate: 4-Bromofluorobenzene	98%			11E0832	11E0832-BLK2	05/04/11 12:31

**11E1197-BLK1**

Benzene	<0.00110		mg/kg wet	11E1197	11E1197-BLK1	05/05/11 12:13
Ethylbenzene	<0.000980		mg/kg wet	11E1197	11E1197-BLK1	05/05/11 12:13
Naphthalene	<0.00170		mg/kg wet	11E1197	11E1197-BLK1	05/05/11 12:13
Toluene	<0.000890		mg/kg wet	11E1197	11E1197-BLK1	05/05/11 12:13
Xylenes, total	<0.00190		mg/kg wet	11E1197	11E1197-BLK1	05/05/11 12:13
Surrogate: 1,2-Dichloroethane-d4	99%			11E1197	11E1197-BLK1	05/05/11 12:13
Surrogate: Dibromofluoromethane	104%			11E1197	11E1197-BLK1	05/05/11 12:13
Surrogate: Toluene-d8	97%			11E1197	11E1197-BLK1	05/05/11 12:13
Surrogate: 4-Bromofluorobenzene	92%			11E1197	11E1197-BLK1	05/05/11 12:13

**11E1197-BLK2**

Benzene	<0.0550		mg/kg wet	11E1197	11E1197-BLK2	05/05/11 12:43
Ethylbenzene	<0.0490		mg/kg wet	11E1197	11E1197-BLK2	05/05/11 12:43
Naphthalene	<0.0850		mg/kg wet	11E1197	11E1197-BLK2	05/05/11 12:43
Toluene	<0.0445		mg/kg wet	11E1197	11E1197-BLK2	05/05/11 12:43
Xylenes, total	<0.0950		mg/kg wet	11E1197	11E1197-BLK2	05/05/11 12:43
Surrogate: 1,2-Dichloroethane-d4	99%			11E1197	11E1197-BLK2	05/05/11 12:43
Surrogate: Dibromofluoromethane	102%			11E1197	11E1197-BLK2	05/05/11 12:43
Surrogate: Toluene-d8	96%			11E1197	11E1197-BLK2	05/05/11 12:43
Surrogate: 4-Bromofluorobenzene	95%			11E1197	11E1197-BLK2	05/05/11 12:43

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

Work Order: NUE0001  
Project Name: Laurel Bay Housing Project  
Project Number: N/A  
Received: 04/30/11 08:30

## PROJECT QUALITY CONTROL DATA Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
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### Volatile Organic Compounds by EPA Method 8260B

### Polyaromatic Hydrocarbons by EPA 8270D

#### 11E0215-BLK1

Acenaphthene	<0.0140		mg/kg wet	11E0215	11E0215-BLK1	05/04/11 16:32
Acenaphthylene	<0.0200		mg/kg wet	11E0215	11E0215-BLK1	05/04/11 16:32
Anthracene	<0.00900		mg/kg wet	11E0215	11E0215-BLK1	05/04/11 16:32
Benzo (a) anthracene	<0.0110		mg/kg wet	11E0215	11E0215-BLK1	05/04/11 16:32
Benzo (a) pyrene	<0.00800		mg/kg wet	11E0215	11E0215-BLK1	05/04/11 16:32
Benzo (b) fluoranthene	<0.0380		mg/kg wet	11E0215	11E0215-BLK1	05/04/11 16:32
Benzo (g,h,i) perylene	<0.00900		mg/kg wet	11E0215	11E0215-BLK1	05/04/11 16:32
Benzo (k) fluoranthene	<0.0370		mg/kg wet	11E0215	11E0215-BLK1	05/04/11 16:32
Chrysene	<0.0310		mg/kg wet	11E0215	11E0215-BLK1	05/04/11 16:32
Dibenz (a,h) anthracene	<0.0150		mg/kg wet	11E0215	11E0215-BLK1	05/04/11 16:32
Fluoranthene	<0.0110		mg/kg wet	11E0215	11E0215-BLK1	05/04/11 16:32
Fluorene	<0.0200		mg/kg wet	11E0215	11E0215-BLK1	05/04/11 16:32
Indeno (1,2,3-cd) pyrene	<0.0310		mg/kg wet	11E0215	11E0215-BLK1	05/04/11 16:32
Naphthalene	<0.0140		mg/kg wet	11E0215	11E0215-BLK1	05/04/11 16:09
Phenanthrene	<0.0100		mg/kg wet	11E0215	11E0215-BLK1	05/04/11 16:32
Pyrene	<0.0230		mg/kg wet	11E0215	11E0215-BLK1	05/04/11 16:32
1-Methylnaphthalene	<0.0120		mg/kg wet	11E0215	11E0215-BLK1	05/04/11 16:32
2-Methylnaphthalene	<0.0210		mg/kg wet	11E0215	11E0215-BLK1	05/04/11 16:32
Surrogate: Terphenyl-d14	100%			11E0215	11E0215-BLK1	05/04/11 16:09
Surrogate: 2-Fluorobiphenyl	77%			11E0215	11E0215-BLK1	05/04/11 16:09
Surrogate: Nitrobenzene-d5	79%			11E0215	11E0215-BLK1	05/04/11 16:09

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

Work Order: NUE0001  
Project Name: Laurel Bay Housing Project  
Project Number: N/A  
Received: 04/30/11 08:30

## 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>11E2308-DUP1</b>										
% Dry Solids	76.7	76.8		%	0.2	20	11E2308	NUE0012-03		05/11/11 14:30



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

Work Order: NUE0001  
Project Name: Laurel Bay Housing Project  
Project Number: N/A  
Received: 04/30/11 08:30

## 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>11E0832-BS1</b>								
Benzene	50.0	54.6		ug/kg	109%	78 - 126	11E0832	05/04/11 10:31
Ethylbenzene	50.0	50.2		ug/kg	100%	79 - 130	11E0832	05/04/11 10:31
Naphthalene	50.0	49.4		ug/kg	99%	72 - 150	11E0832	05/04/11 10:31
Toluene	50.0	50.6		ug/kg	101%	76 - 126	11E0832	05/04/11 10:31
Xylenes, total	150	151		ug/kg	101%	80 - 130	11E0832	05/04/11 10:31
Surrogate: 1,2-Dichloroethane-d4	50.0	48.8			98%	67 - 138	11E0832	05/04/11 10:31
Surrogate: Dibromofluoromethane	50.0	54.0			108%	75 - 125	11E0832	05/04/11 10:31
Surrogate: Toluene-d8	50.0	47.2			94%	76 - 129	11E0832	05/04/11 10:31
Surrogate: 4-Bromofluorobenzene	50.0	48.4			97%	67 - 147	11E0832	05/04/11 10:31
<b>11E1197-BS1</b>								
Benzene	50.0	48.9		ug/kg	98%	78 - 126	11E1197	05/05/11 10:44
Ethylbenzene	50.0	49.8		ug/kg	100%	79 - 130	11E1197	05/05/11 10:44
Naphthalene	50.0	51.6		ug/kg	103%	72 - 150	11E1197	05/05/11 10:44
Toluene	50.0	49.6		ug/kg	99%	76 - 126	11E1197	05/05/11 10:44
Xylenes, total	150	154		ug/kg	103%	80 - 130	11E1197	05/05/11 10:44
Surrogate: 1,2-Dichloroethane-d4	50.0	46.1			92%	67 - 138	11E1197	05/05/11 10:44
Surrogate: Dibromofluoromethane	50.0	50.8			102%	75 - 125	11E1197	05/05/11 10:44
Surrogate: Toluene-d8	50.0	48.5			97%	76 - 129	11E1197	05/05/11 10:44
Surrogate: 4-Bromofluorobenzene	50.0	45.2			90%	67 - 147	11E1197	05/05/11 10:44
<b>Polyaromatic Hydrocarbons by EPA 8270D</b>								
<b>11E0215-BS1</b>								
Acenaphthene	1.67	1.34		mg/kg wet	80%	49 - 120	11E0215	05/04/11 16:53
Acenaphthylene	1.67	1.17		mg/kg wet	70%	52 - 120	11E0215	05/04/11 16:53
Anthracene	1.67	1.49		mg/kg wet	90%	58 - 120	11E0215	05/04/11 16:53
Benzo (a) anthracene	1.67	1.51		mg/kg wet	90%	57 - 120	11E0215	05/04/11 16:53
Benzo (a) pyrene	1.67	1.46		mg/kg wet	88%	55 - 120	11E0215	05/04/11 16:53
Benzo (b) fluoranthene	1.67	1.38		mg/kg wet	83%	51 - 123	11E0215	05/04/11 16:53
Benzo (g,h,i) perylene	1.67	1.47		mg/kg wet	88%	49 - 121	11E0215	05/04/11 16:53
Benzo (k) fluoranthene	1.67	1.60		mg/kg wet	96%	42 - 129	11E0215	05/04/11 16:53
Chrysene	1.67	1.44		mg/kg wet	86%	55 - 120	11E0215	05/04/11 16:53
Dibenz (a,h) anthracene	1.67	1.49		mg/kg wet	90%	50 - 123	11E0215	05/04/11 16:53
Fluoranthene	1.67	1.48		mg/kg wet	89%	58 - 120	11E0215	05/04/11 16:53
Fluorene	1.67	1.49		mg/kg wet	90%	54 - 120	11E0215	05/04/11 16:53
Indeno (1,2,3-cd) pyrene	1.67	1.48		mg/kg wet	89%	50 - 122	11E0215	05/04/11 16:53
Naphthalene	1.67	1.23		mg/kg wet	74%	28 - 120	11E0215	05/04/11 16:53
Phenanthrene	1.67	1.50		mg/kg wet	90%	56 - 120	11E0215	05/04/11 16:53
Pyrene	1.67	1.61		mg/kg wet	97%	56 - 120	11E0215	05/04/11 16:53
1-Methylnaphthalene	1.67	1.11		mg/kg wet	66%	36 - 120	11E0215	05/04/11 16:53
2-Methylnaphthalene	1.67	1.29		mg/kg wet	78%	36 - 120	11E0215	05/04/11 16:53

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

Work Order: NUE0001  
Project Name: Laurel Bay Housing Project  
Project Number: N/A  
Received: 04/30/11 08:30

**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>11E0215-BS1</b>								
<i>Surrogate: Terphenyl-d14</i>	1.67	1.81			109%	18 - 120	11E0215	05/04/11 16:53
<i>Surrogate: 2-Fluorobiphenyl</i>	1.67	1.25			75%	14 - 120	11E0215	05/04/11 16:53
<i>Surrogate: Nitrobenzene-d5</i>	1.67	1.19			71%	17 - 120	11E0215	05/04/11 16:53

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

Work Order: NUE0001  
Project Name: Laurel Bay Housing Project  
Project Number: N/A  
Received: 04/30/11 08:30

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>11E0832-BSD1</b>												
Benzene		50.8		ug/kg	50.0	102%	78 - 126	7	50	11E0832		05/04/11 11:00
Ethylbenzene		47.3		ug/kg	50.0	95%	79 - 130	6	50	11E0832		05/04/11 11:00
Naphthalene		47.2		ug/kg	50.0	94%	72 - 150	5	50	11E0832		05/04/11 11:00
Toluene		47.8		ug/kg	50.0	96%	76 - 126	6	50	11E0832		05/04/11 11:00
Xylenes, total		140		ug/kg	150	93%	80 - 130	8	50	11E0832		05/04/11 11:00
Surrogate: 1,2-Dichloroethane-d4		47.6		ug/kg	50.0	95%	67 - 138			11E0832		05/04/11 11:00
Surrogate: Dibromofluoromethane		52.9		ug/kg	50.0	106%	75 - 125			11E0832		05/04/11 11:00
Surrogate: Toluene-d8		47.4		ug/kg	50.0	95%	76 - 129			11E0832		05/04/11 11:00
Surrogate: 4-Bromofluorobenzene		48.5		ug/kg	50.0	97%	67 - 147			11E0832		05/04/11 11:00
<b>11E1197-BSD1</b>												
Benzene		49.5		ug/kg	50.0	99%	78 - 126	1	50	11E1197		05/05/11 11:14
Ethylbenzene		49.9		ug/kg	50.0	100%	79 - 130	0.1	50	11E1197		05/05/11 11:14
Naphthalene		52.6		ug/kg	50.0	105%	72 - 150	2	50	11E1197		05/05/11 11:14
Toluene		49.8		ug/kg	50.0	100%	76 - 126	0.6	50	11E1197		05/05/11 11:14
Xylenes, total		152		ug/kg	150	101%	80 - 130	1	50	11E1197		05/05/11 11:14
Surrogate: 1,2-Dichloroethane-d4		46.8		ug/kg	50.0	94%	67 - 138			11E1197		05/05/11 11:14
Surrogate: Dibromofluoromethane		51.0		ug/kg	50.0	102%	75 - 125			11E1197		05/05/11 11:14
Surrogate: Toluene-d8		49.0		ug/kg	50.0	98%	76 - 129			11E1197		05/05/11 11:14
Surrogate: 4-Bromofluorobenzene		45.4		ug/kg	50.0	91%	67 - 147			11E1197		05/05/11 11:14

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

Work Order: NUE0001  
Project Name: Laurel Bay Housing Project  
Project Number: N/A  
Received: 04/30/11 08:30

## 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>11E0832-MS1</b>										
Benzene	ND	2.36		mg/kg wet	2.31	102%	42 - 141	11E0832	NUD4548-02R E1	05/04/11 18:54
Ethylbenzene	0.138	2.48		mg/kg wet	2.31	101%	21 - 165	11E0832	NUD4548-02R E1	05/04/11 18:54
Naphthalene	1.21	3.20		mg/kg wet	2.31	86%	10 - 160	11E0832	NUD4548-02R E1	05/04/11 18:54
Toluene	0.154	2.44		mg/kg wet	2.31	99%	45 - 145	11E0832	NUD4548-02R E1	05/04/11 18:54
Xylenes, total	5.02	12.7		mg/kg wet	6.94	111%	31 - 159	11E0832	NUD4548-02R E1	05/04/11 18:54
Surrogate: 1,2-Dichloroethane-d4		43.8		ug/kg	50.0	88%	67 - 138	11E0832	NUD4548-02R E1	05/04/11 18:54
Surrogate: Dibromofluoromethane		48.6		ug/kg	50.0	97%	75 - 125	11E0832	NUD4548-02R E1	05/04/11 18:54
Surrogate: Toluene-d8		49.2		ug/kg	50.0	98%	76 - 129	11E0832	NUD4548-02R E1	05/04/11 18:54
Surrogate: 4-Bromofluorobenzene		49.8		ug/kg	50.0	100%	67 - 147	11E0832	NUD4548-02R E1	05/04/11 18:54
<b>11E1197-MS1</b>										
Benzene	ND	2.15		mg/kg wet	2.24	96%	42 - 141	11E1197	NUD4552-02R E1	05/05/11 21:10
Ethylbenzene	0.350	2.64		mg/kg wet	2.24	102%	21 - 165	11E1197	NUD4552-02R E1	05/05/11 21:10
Naphthalene	0.785	2.69		mg/kg wet	2.24	85%	10 - 160	11E1197	NUD4552-02R E1	05/05/11 21:10
Toluene	ND	2.18		mg/kg wet	2.24	98%	45 - 145	11E1197	NUD4552-02R E1	05/05/11 21:10
Xylenes, total	0.284	7.39		mg/kg wet	6.71	106%	31 - 159	11E1197	NUD4552-02R E1	05/05/11 21:10
Surrogate: 1,2-Dichloroethane-d4		45.1		ug/kg	50.0	90%	67 - 138	11E1197	NUD4552-02R E1	05/05/11 21:10
Surrogate: Dibromofluoromethane		49.2		ug/kg	50.0	98%	75 - 125	11E1197	NUD4552-02R E1	05/05/11 21:10
Surrogate: Toluene-d8		51.4		ug/kg	50.0	103%	76 - 129	11E1197	NUD4552-02R E1	05/05/11 21:10
Surrogate: 4-Bromofluorobenzene		50.2		ug/kg	50.0	100%	67 - 147	11E1197	NUD4552-02R E1	05/05/11 21:10
<b>Polyaromatic Hydrocarbons by EPA 8270D</b>										
<b>11E0215-MS1</b>										
Acenaphthene	ND	1.54		mg/kg dry	2.13	73%	42 - 120	11E0215	NUE0001-01	05/04/11 17:57
Acenaphthylene	ND	1.24		mg/kg dry	2.13	58%	32 - 120	11E0215	NUE0001-01	05/04/11 17:57
Anthracene	ND	1.56		mg/kg dry	2.13	73%	10 - 200	11E0215	NUE0001-01	05/04/11 17:57
Benzo (a) anthracene	ND	1.61		mg/kg dry	2.13	76%	41 - 120	11E0215	NUE0001-01	05/04/11 17:57
Benzo (a) pyrene	ND	1.53		mg/kg dry	2.13	72%	33 - 121	11E0215	NUE0001-01	05/04/11 17:57
Benzo (b) fluoranthene	ND	1.48		mg/kg dry	2.13	70%	26 - 137	11E0215	NUE0001-01	05/04/11 17:57

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

Work Order: NUE0001  
Project Name: Laurel Bay Housing Project  
Project Number: N/A  
Received: 04/30/11 08:30

**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>11E0215-MS1</b>										
Benzo (g,h,i) perylene	ND	1.51		mg/kg dry	2.13	71%	21 - 124	11E0215	NUE0001-01	05/04/11 17:57
Benzo (k) fluoranthene	ND	1.65		mg/kg dry	2.13	78%	14 - 140	11E0215	NUE0001-01	05/04/11 17:57
Chrysene	ND	1.54		mg/kg dry	2.13	72%	28 - 123	11E0215	NUE0001-01	05/04/11 17:57
Dibenz (a,h) anthracene	ND	1.55		mg/kg dry	2.13	73%	25 - 127	11E0215	NUE0001-01	05/04/11 17:57
Fluoranthene	0.146	1.67		mg/kg dry	2.13	72%	38 - 120	11E0215	NUE0001-01	05/04/11 17:57
Fluorene	ND	1.60		mg/kg dry	2.13	75%	41 - 120	11E0215	NUE0001-01	05/04/11 17:57
Indeno (1,2,3-cd) pyrene	ND	1.53		mg/kg dry	2.13	72%	25 - 123	11E0215	NUE0001-01	05/04/11 17:57
Naphthalene	ND	1.34		mg/kg dry	2.13	63%	25 - 120	11E0215	NUE0001-01	05/04/11 17:57
Phenanthrene	ND	1.61		mg/kg dry	2.13	76%	37 - 120	11E0215	NUE0001-01	05/04/11 17:57
Pyrene	0.107	1.73		mg/kg dry	2.13	76%	29 - 125	11E0215	NUE0001-01	05/04/11 17:57
1-Methylnaphthalene	ND	1.19		mg/kg dry	2.13	56%	19 - 120	11E0215	NUE0001-01	05/04/11 17:57
2-Methylnaphthalene	ND	1.37		mg/kg dry	2.13	64%	11 - 120	11E0215	NUE0001-01	05/04/11 17:57
Surrogate: Terphenyl-d14		1.78		mg/kg dry	2.13	84%	18 - 120	11E0215	NUE0001-01	05/04/11 17:57
Surrogate: 2-Fluorobiphenyl		1.23		mg/kg dry	2.13	58%	14 - 120	11E0215	NUE0001-01	05/04/11 17:57
Surrogate: Nitrobenzene-d5		1.21		mg/kg dry	2.13	57%	17 - 120	11E0215	NUE0001-01	05/04/11 17:57

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

Work Order: NUE0001  
Project Name: Laurel Bay Housing Project  
Project Number: N/A  
Received: 04/30/11 08:30

## 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>11E0832-MSD1</b>												
Benzene	ND	2.47		mg/kg wet	2.31	107%	42 - 141	5	50	11E0832	NUD4548-02R E1	05/04/11 19:23
Ethylbenzene	0.138	2.56		mg/kg wet	2.31	105%	21 - 165	3	50	11E0832	NUD4548-02R E1	05/04/11 19:23
Naphthalene	1.21	3.20		mg/kg wet	2.31	86%	10 - 160	0.07	50	11E0832	NUD4548-02R E1	05/04/11 19:23
Toluene	0.154	2.47		mg/kg wet	2.31	100%	45 - 145	1	50	11E0832	NUD4548-02R E1	05/04/11 19:23
Xylenes, total	5.02	12.6		mg/kg wet	6.94	109%	31 - 159	0.8	50	11E0832	NUD4548-02R E1	05/04/11 19:23
Surrogate: 1,2-Dichloroethane-d4		44.6		ug/kg	50.0	89%	67 - 138			11E0832	NUD4548-02R E1	05/04/11 19:23
Surrogate: Dibromofluoromethane		50.8		ug/kg	50.0	102%	75 - 125			11E0832	NUD4548-02R E1	05/04/11 19:23
Surrogate: Toluene-d8		47.8		ug/kg	50.0	96%	76 - 129			11E0832	NUD4548-02R E1	05/04/11 19:23
Surrogate: 4-Bromofluorobenzene		48.7		ug/kg	50.0	97%	67 - 147			11E0832	NUD4548-02R E1	05/04/11 19:23
<b>11E1197-MSD1</b>												
Benzene	ND	2.25		mg/kg wet	2.24	101%	42 - 141	5	50	11E1197	NUD4552-02R E1	05/05/11 21:39
Ethylbenzene	0.350	2.70		mg/kg wet	2.24	105%	21 - 165	2	50	11E1197	NUD4552-02R E1	05/05/11 21:39
Naphthalene	0.785	2.88		mg/kg wet	2.24	94%	10 - 160	7	50	11E1197	NUD4552-02R E1	05/05/11 21:39
Toluene	ND	2.23		mg/kg wet	2.24	100%	45 - 145	2	50	11E1197	NUD4552-02R E1	05/05/11 21:39
Xylenes, total	0.284	7.46		mg/kg wet	6.71	107%	31 - 159	0.9	50	11E1197	NUD4552-02R E1	05/05/11 21:39
Surrogate: 1,2-Dichloroethane-d4		45.7		ug/kg	50.0	91%	67 - 138			11E1197	NUD4552-02R E1	05/05/11 21:39
Surrogate: Dibromofluoromethane		49.5		ug/kg	50.0	99%	75 - 125			11E1197	NUD4552-02R E1	05/05/11 21:39
Surrogate: Toluene-d8		50.7		ug/kg	50.0	101%	76 - 129			11E1197	NUD4552-02R E1	05/05/11 21:39
Surrogate: 4-Bromofluorobenzene		48.3		ug/kg	50.0	97%	67 - 147			11E1197	NUD4552-02R E1	05/05/11 21:39
<b>Polyaromatic Hydrocarbons by EPA 8270D</b>												
<b>11E0215-MSD1</b>												
Acenaphthene	ND	1.42		mg/kg dry	2.09	68%	42 - 120	8	40	11E0215	NUE0001-01	05/04/11 18:18
Acenaphthylene	ND	1.26		mg/kg dry	2.09	60%	32 - 120	1	30	11E0215	NUE0001-01	05/04/11 18:18
Anthracene	ND	1.57		mg/kg dry	2.09	75%	10 - 200	0.8	50	11E0215	NUE0001-01	05/04/11 18:18
Benzo (a) anthracene	ND	1.65		mg/kg dry	2.09	79%	41 - 120	3	30	11E0215	NUE0001-01	05/04/11 18:18
Benzo (a) pyrene	ND	1.57		mg/kg dry	2.09	75%	33 - 121	2	33	11E0215	NUE0001-01	05/04/11 18:18
Benzo (b) fluoranthene	ND	1.66		mg/kg dry	2.09	80%	26 - 137	11	42	11E0215	NUE0001-01	05/04/11 18:18
Benzo (g,h,i) perylene	ND	1.55		mg/kg dry	2.09	74%	21 - 124	3	32	11E0215	NUE0001-01	05/04/11 18:18
Benzo (k) fluoranthene	ND	1.51		mg/kg dry	2.09	72%	14 - 140	9	39	11E0215	NUE0001-01	05/04/11 18:18

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

Work Order: NUE0001  
Project Name: Laurel Bay Housing Project  
Project Number: N/A  
Received: 04/30/11 08:30

**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>11E0215-MSD1</b>												
Chrysene	ND	1.57		mg/kg dry	2.09	75%	28 - 123	2	34	11E0215	NUE0001-01	05/04/11 18:18
Dibenz (a,h) anthracene	ND	1.59		mg/kg dry	2.09	76%	25 - 127	2	31	11E0215	NUE0001-01	05/04/11 18:18
Fluoranthene	0.146	1.66		mg/kg dry	2.09	73%	38 - 120	0.5	35	11E0215	NUE0001-01	05/04/11 18:18
Fluorene	ND	1.59		mg/kg dry	2.09	76%	41 - 120	0.6	37	11E0215	NUE0001-01	05/04/11 18:18
Indeno (1,2,3-cd) pyrene	ND	1.57		mg/kg dry	2.09	75%	25 - 123	2	32	11E0215	NUE0001-01	05/04/11 18:18
Naphthalene	ND	1.34		mg/kg dry	2.09	64%	25 - 120	0.4	42	11E0215	NUE0001-01	05/04/11 18:18
Phenanthrene	ND	1.59		mg/kg dry	2.09	76%	37 - 120	1	32	11E0215	NUE0001-01	05/04/11 18:18
Pyrene	0.107	1.76		mg/kg dry	2.09	79%	29 - 125	2	40	11E0215	NUE0001-01	05/04/11 18:18
1-Methylnaphthalene	ND	1.20		mg/kg dry	2.09	57%	19 - 120	1	45	11E0215	NUE0001-01	05/04/11 18:18
2-Methylnaphthalene	ND	1.39		mg/kg dry	2.09	66%	11 - 120	1	50	11E0215	NUE0001-01	05/04/11 18:18
Surrogate: Terphenyl-d14		1.79		mg/kg dry	2.09	85%	18 - 120			11E0215	NUE0001-01	05/04/11 18:18
Surrogate: 2-Fluorobiphenyl		1.27		mg/kg dry	2.09	61%	14 - 120			11E0215	NUE0001-01	05/04/11 18:18
Surrogate: Nitrobenzene-d5		1.22		mg/kg dry	2.09	58%	17 - 120			11E0215	NUE0001-01	05/04/11 18:18

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

Work Order: NUE0001  
Project Name: Laurel Bay Housing Project  
Project Number: N/A  
Received: 04/30/11 08:30

## 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: NUE0001  
Project Name: Laurel Bay Housing Project  
Project Number: N/A  
Received: 04/30/11 08:30

## DATA QUALIFIERS AND DEFINITIONS

**J** Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).  
Concentrations within this range are estimated.

**RL1** Reporting limit raised due to sample matrix effects.

**ZX** Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

**ND** Not detected at the reporting limit (or method detection limit if shown)

## METHOD MODIFICATION NOTES

05/16/11 23 59

THE LEADER IN ENVIRONMENTAL TESTING

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

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

**Address:** 10179 Highway 78

City/State/Zip: Ladson, SC 29456

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

**Telephone Number: 843.412.2097**

**Sampler Name: (Print)**

**Sampler Signature:**

**Fax No.:**

(843) 879-0401

Compliance Monitoring?	Yes	No
------------------------	-----	----

Enforcement Action?	Yes	No
1. Is the information provided in the report accurate and complete?		
2. Is the information provided in the report reliable and verifiable?		
3. Is the information provided in the report relevant and material?		
4. Is the information provided in the report clear and concise?		
5. Is the information provided in the report consistent and coherent?		
6. Is the information provided in the report timely and up-to-date?		
7. Is the information provided in the report objective and unbiased?		
8. Is the information provided in the report useful and actionable?		
9. Is the information provided in the report compliant with applicable laws and regulations?		
10. Is the information provided in the report consistent with the organization's policies and procedures?		

Site State: SC

PO#:

**TA Quote #:**

**Project ID: Laurel Bay Housing Project**

**Project #:**

21  
 22

**Special Instructions:**

Laboratory Comments:

### Temperature Upon Receipt: VOCs Free of Headspace?

1

Relinquished by:

Date \_\_\_\_\_

Time

Received by:

**Method of Shipment:**

FEDEX

Date \_\_\_\_\_

Time

Relinquished by:

Date \_\_\_\_\_

Time

Received by TestAmerica:

Date \_\_\_\_\_

Time

04/30/11	0830
----------	------

ATTACHMENT A

# UST Certificate of Disposal

## CONTRACTOR

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

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

## TANK ID & LOCATION

UST 769 Althea-1, 769 Althea Street, Laurel Bay Housing Area, MCAS Beaufort, S.C.

## DISPOSAL LOCATION

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

### TYPE OF TANK

### SIZE (GAL)

Steel

280

## CLEANING/DISPOSAL METHOD

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

## DISPOSAL CERTIFICATION

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

T.L. V. [Signature] / 5/23/11  
(Name) (Date)



# 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 WMNA		00316811				
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				
11. Description of Waste Materials		12. Containers		13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments				
		No.	Type							
		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 USIS from: 1) 1358 CARDINAL 2) 1444 DOOR-21 3) 769 ALTHEA-21 4) 1383 DOOR 5) 1408 EASE 6) 1362 CARDINAL										
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 Charles H. Herron		Signature "On behalf of" Charles H. Herron				Month 5	Day 11	Year 11		
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed Name James Baldwin				Signature James Baldwin		Month 5	Day 12	Year 11
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed Name				Signature		Month	Day	Year
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 Toni Cofield				Signature Toni Cofield		Month 5	Day 12	Year 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>QK18003-014</b>			
Description: <b>BEALB769TW02WG20151118</b>				Matrix: <b>Aqueous</b>			
Date Sampled: <b>11/18/2015 1040</b>							
Date Received: <b>11/19/2015</b>							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	11/25/2015 1746	ALL		90579

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	0.45	U	5.0	0.45	0.21	ug/L	2
Ethylbenzene	100-41-4	8260B	1.3	J	5.0	0.51	0.21	ug/L	2
Naphthalene	91-20-3	8260B	11		5.0	0.96	0.14	ug/L	2
Toluene	108-88-3	8260B	0.48	U	5.0	0.48	0.24	ug/L	2
Xylenes (total)	1330-20-7	8260B	4.0	J	5.0	0.57	0.32	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		99	75-120
1,2-Dichloroethane-d4		99	70-120
Toluene-d8		94	85-120
Dibromofluoromethane		100	85-115

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

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

# Semivolatile Organic Compounds by GC/MS (SIM)

Client: <b>AECOM - Resolution Consultants</b>	Laboratory ID: <b>QK18003-014</b>
Description: <b>BEALB769TW02WG20151118</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>11/18/2015 1040</b>	
Date Received: <b>11/19/2015</b>	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D (SIM)	1	12/03/2015 1848	RBH	11/24/2015 1615	90443

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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Methylnaphthalene-d10		47	15-139
Fluoranthene-d10		64	23-154

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

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



## **Appendix D**

### **Regulatory Correspondence**



Catherine E. Heigel, Director

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

July 1, 2015

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

RE: IGWA  
Laurel Bay Underground Storage Tank Assessment Reports for:  
*See attached sheet*

Dear Mr. Drawdy,

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

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

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

If you have any questions, please contact me at [kriegkm@dhec.sc.gov](mailto:kriegkm@dhec.sc.gov) or 803-898-0255.

Sincerely,

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

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



Catherine E. Heigel, Director

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

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

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

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

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

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



Catherine E. Heigel, Director

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

Division of Waste Management  
Bureau of Land and Waste Management

June 8, 2016

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

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

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received groundwater data in the above referenced Groundwater Investigation Report for the attached addresses on May 2, 2016. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

Per the Department's request, groundwater samples were collected from the attached referenced addresses. The Department reviewed the groundwater data and previous investigations and it agrees with the conclusions and recommendations included in the document. To further assess the impact to groundwater, permanent wells should be installed at the 15 stated addresses. For the remaining 80 addresses, there is no indication of contamination on the property and therefore no further investigation is required at this time.

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

If you have any questions, please contact me at [petruslb@dhec.sc.gov](mailto:petruslb@dhec.sc.gov) or 803-898-0294.

Sincerely,

Laurel Petrus  
RCRA Federal Facilities Section

*Attachment: Specific Property Recommendations*

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

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

## Draft Final Initial Groundwater Investigation Report for (95 addresses)

[illegible]



**No Further Action recommendation (80 addresses)**

118 Banyan Drive	644 Dahlia Drive
126 Banyan Drive	646 Dahlia Drive
127 Banyan Drive	665 Camellia Drive
141 Laurel Bay Blvd	699 Abelia Street
151 Laurel Bay Blvd	744 Blue Bell Lane
224 Cypress Street	745 Blue Bell Lane
227 Cypress Street	751 Blue Bell Lane
257 Beech Street	762 Althea Street
264 Beech Street	765 Althea Street
265 Beech Street	766 Althea Street
275 Birch Drive	767 Althea Street
277 Birch Drive	768 Althea Street
297 Birch Drive	769 Althea Street
301 Ash Street	819 Azalea Drive
306 Ash Street	840 Azalea Drive
310 Ash Street	878 Cobia Drive
313 Ash Street	891 Cobia Drive
315 Ash Street	913 Barracuda Drive
316 Ash Street	916 Barracuda Drive
319 Ash Street	923 Wren Lane
320 Ash Street	1004 Bobwhite Drive
321 Ash Street	1022 Foxglove Street
329 Ash Street	1031 Foxglove Street
332 Ash Street	1061 Gardenia Drive
333 Ash Street	1064 Gardenia Drive
341 Ash Street	1067 Gardenia Drive
347 Ash Street	1077 Heather Street
378 Aspen Street	1081 Heather Street
379 Aspen Street	1101 Iris Lane
382 Aspen Street	1105 Iris Lane
394 Acorn Street	1142 Iris Lane
400 Elderberry Drive	1146 Iris Lane
432 Elderberry Drive	1218 Cardinal Lane
436 Elderberry Drive	1240 Dove Lane
482 Laurel Bay Blvd	1266 Dove Lane
517 Laurel Bay Blvd	1292 Eagle Lane
586 Aster Street	1299 Eagle Lane
632 Dahlia Drive	1302 Eagle Lane
639 Dahlia Drive	1336 Albatross Drive
643 Dahlia Drive	1351 Cardinal Lane