

SUMMARY REPORT  
425 BOBWHITE DRIVE (FORMERLY 1190 BOBWHITE DRIVE)  
LAUREL BAY MILITARY HOUSING AREA  
MARINE CORPS AIR STATION BEAUFORT  
BEAUFORT, SC

Revision: 0  
Prepared for:

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

and



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

**JUNE 2021**

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Prepared by:



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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
PPV	Public-Private Venture
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
UFP SAP	Uniform Federal Policy Sampling and Analysis Plan
USEPA	United States Environmental Protection Agency
UST	underground storage tank
VISL	vapor intrusion screening level

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## 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 425 Bobwhite Drive (Formerly 1190 Bobwhite Drive). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

### 1.1 Background Information

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

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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.

In 2015, the Public-Private Venture (PPV) responsible for the management of the residential area at LBMH initiated a plan to replace outdated homes in the LBMH area. The plan includes the demolition of existing homes and subsequent construction of new homes. In discussions with the PPV it was revealed that construction of the new homes could occur on portions of the property where the USTs were formerly located. In response to this plan, MCAS Beaufort assessed subsurface soil gas concentrations in the area of the former USTs at select properties within the demolition areas. The subject property of this report is one of the properties within the planned demolition area which was selected for a soil gas evaluation. It should be noted that the house at the subject property has since been demolished and this property is an empty lot. There are no current plans for construction in this 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*

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(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. A multi-media investigation selection process tree, applicable to the LBMH UST investigations, is presented as Appendix A.

In accordance with the multi-media investigation selection process (Appendix A), groundwater analytical results are typically compared to the site specific groundwater vapor intrusion screening levels (VISLs) to evaluate the potential for vapor intrusion into existing homes and the necessity for an investigation associated with this media. However, as previously stated, this property did not have an existing home and instead was among those selected for an evaluation of soil gas because of the planned demolition and construction activities.

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## 2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 425 Bobwhite Drive (Formerly 1190 Bobwhite Drive). The sampling activities at 425 Bobwhite Drive (Formerly 1190 Bobwhite Drive) comprised a soil investigation, IGWA sampling, and a soil gas investigation. Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1190 Bobwhite Drive* (MCAS Beaufort, 2009). 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 – May and June 2015* (Resolution Consultants, 2015). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C. Details regarding the vapor intrusion investigation at this site are provided in the *Vapor Intrusion Report – July 2015, January 2016, and May 2016* (Resolution Consultants, 2017). The laboratory report that includes the pertinent soil gas analytical results for this site is presented in Appendix D.

### 2.1 UST Removal and Soil Sampling

On August 19, 2009, a single 280 gallon heating oil UST was removed from the landscaped area adjacent to the driveway at 425 Bobwhite Drive (Formerly 1190 Bobwhite Drive). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The UST was removed and properly disposed of (i.e., shipped offsite for recycling or transported to a landfill). There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depth to the base of the UST was 5'8" bgs and a single soil sample was collected from that depth. The sample was collected from the fill port side of the former UST to represent a worst case scenario.

Following UST removal, a soil sample was collected from the base of the excavation and shipped to an offsite laboratory for analysis of the petroleum COPCs. Sampling was performed in accordance with applicable South Carolina regulation R.61-92, Part 280 (SCDHEC, 2017) and assessment guidelines.

### 2.2 Soil Analytical Results

A summary of the laboratory analytical results and SCDHEC RBSLs is presented in Table 1. A copy of the laboratory analytical data report is included in the UST Assessment Report

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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 416 Bobwhite Drive (Formerly 1187 Bobwhite Drive) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated April 1, 2014, SCDHEC requested an IGWA for 416 Bobwhite Drive (Formerly 1187 Bobwhite Drive) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix E.

### **2.3 Groundwater Sampling**

On February 3, 2015, a temporary monitoring well was installed at 416 Bobwhite Drive (Formerly 1187 Bobwhite Drive), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST. The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – February 2015* (Resolution Consultants, 2015).

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 2015* (Resolution Consultants, 2015).

### **2.4 Groundwater Analytical Results**

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

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The groundwater results collected from 425 Bobwhite Drive (Formerly 1190 Bobwhite Drive) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated that the groundwater was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

## 2.5 Soil Gas Sampling

On May 4, 2016, a temporary subsurface soil gas well was installed at 425 Bobwhite Drive (Formerly 1190 Bobwhite Drive) in accordance with the SCDHEC approved *Uniform Federal Policy Sampling and Analysis Plan (UFP SAP) for Vapor Media, Revision 2* (Resolution Consultants, 2016). Soil gas sampling was conducted at this property to assess the potential risk for vapor intrusion associated with the possible construction of a new home on top of former the UST location. The soil gas well was placed in the same general location as the former heating oil UST and the IGWA sample location. The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Vapor Intrusion Report – July 2015, January 2016, and May 2016* (Resolution Consultants, 2017).

The sampling strategy for this phase of the investigation required a one-time sampling event of the soil gas well. The subsurface soil gas well at 425 Bobwhite Drive (Formerly 1190 Bobwhite Drive) was sampled on May 10, 2016. A soil gas samples was collected and shipped to an offsite laboratory for analysis of the petroleum COPCs. Upon completion of soil gas sampling, the temporary well was abandoned in accordance with the *UFP SAP for Vapor Media, Revision 2* (Resolution Consultants, 2016). Field forms are provided in the *Vapor Intrusion Report – July 2015, January 2016, and May 2016* (Resolution Consultants, 2017).

## 2.6 Soil Gas Analytical Results

A summary of the laboratory analytical results and United States Environmental Protection Agency (USEPA) VISLs is presented in Table 3. A copy of the laboratory analytical data report is included in Appendix D.

The soil gas results collected from 425 Bobwhite Drive (Formerly 1190 Bobwhite Drive) were below the USEPA VISLs, which indicated that subsurface soil gas was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

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### **3.0 PROPERTY STATUS**

The house at 425 Bobwhite Drive (Formerly 1190 Bobwhite Drive) was demolished and the property is an empty lot. There are no current plans for construction in this area. Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 425 Bobwhite Drive (Formerly 1190 Bobwhite Drive). The NFA determination for groundwater was obtained in a letter dated February 22, 2016. Based on the analytical results for soil gas, it was determined that there was not a vapor intrusion concern at this property and a recommendation was made for no additional vapor intrusion assessment activities. SCDHEC approved the no further vapor intrusion investigation recommendation for 425 Bobwhite Drive (Formerly 1190 Bobwhite Drive) in a letter dated June 20, 2017. SCDHEC's letters are provided in Appendix E.

### **4.0 REFERENCES**

Marine Corps Air Station Beaufort, 2009. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 1190 Bobwhite Drive, Laurel Bay Military Housing Area*, November 2009.

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

Resolution Consultants, 2016. *Uniform Federal Policy Sampling and Analysis Plan for Vapor Media, Revision 2, for Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, March 2016.

Resolution Consultants, 2017. *Vapor Intrusion Report – July 2015, January 2016, and May 2016 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, May 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.

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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.

United States Environmental Protection Agency, 2015. *USEPA OSWER Vapor Intrusion Assessment, Vapor Intrusion Screening Level Calculator, Version 3.4*, June 2015.

## Tables

**Table 1**  
**Laboratory Analytical Results - Soil**  
**425 Bobwhite Drive (Formerly 1190 Bobwhite Drive)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Results Sample Collected 08/19/09	
<b>Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)</b>			
Benzene	0.007		<b>0.0122</b>
Ethylbenzene	1.15		<b>4.30</b>
Naphthalene	0.036		<b>27.1</b>
Toluene	1.45		<b>1.25</b>
Xylenes, Total	14.5		<b>17.0</b>
<b>Semivolatile Organic Compounds Analyzed by EPA Method 8270C (mg/kg)</b>			
Benzo(a)anthracene	0.066		<b>2.66</b>
Benzo(b)fluoranthene	0.066		<b>1.63</b>
Benzo(k)fluoranthene	0.066		<b>1.52</b>
Chrysene	0.066		<b>3.33</b>
Dibenz(a,h)anthracene	0.066		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 1.0 (SCDHEC, May 2001).

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**  
**425 Bobwhite Drive (Formerly 1190 Bobwhite Drive)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Site-Specific Groundwater VISLs ( $\mu\text{g}/\text{L}$ ) <sup>(2)</sup>	Results <b>Sample Collected 06/11/15</b>
<b>Volatile Organic Compounds Analyzed by EPA Method 8260B (<math>\mu\text{g}/\text{L}</math>)</b>			
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	ND
Naphthalene	25	29.33	ND
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	ND
<b>Semivolatile Organic Compounds Analyzed by EPA Method 8270D (<math>\mu\text{g}/\text{L}</math>)</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:**

(1) South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.0 (SCDHEC, May 2015).

(2) Site-specific groundwater VISLs were calculated using the EPA JE Model Spreadsheets (Version 3.1, February 2004) and conservative modeling inputs representative of a small single-story house with an 8 foot ceiling. Site-specific groundwater VISLs were developed based on a target risk level of  $1 \times 10^{-6}$ , 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

$\mu\text{g}/\text{L}$  - micrograms per liter

VISL - Vapor Intrusion Screening Level

**Table 3**  
**Laboratory Analytical Results - Vapor**  
**425 Bobwhite Drive (Formerly 1190 Bobwhite Drive)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

Constituent	USEPA VISL <sup>(1)</sup>	Results Sample Collected 05/10/16
<b>Volatile Organic Compounds Analyzed by USEPA Method TO-15 (<math>\mu\text{g}/\text{m}^3</math>)</b>		
Benzene	12	ND
Toluene	17000	<b>0.81</b>
Ethylbenzene	37	<b>0.76</b>
m,p-Xylenes	350	<b>2.6</b>
o-Xylene	350	<b>1.5</b>
Naphthalene	2.8	<b>0.93</b>

**Notes:**

<sup>(1)</sup> United States Environmental Protection Agency Exterior Soil Gas Vapor Intrusion Screening Level (VISL) from VISL Calculator (Version 3.4, June 2015).

VISLs are based on a residual exposure scenario and a target risk level of  $1 \times 10^{-6}$  and a hazard quotient of 0.1.

Bold font indicates the analyte was detected.

Bold font and shading indicates the concentration exceeds the residential VISL.

USEPA - United States Environmental Protection Agency

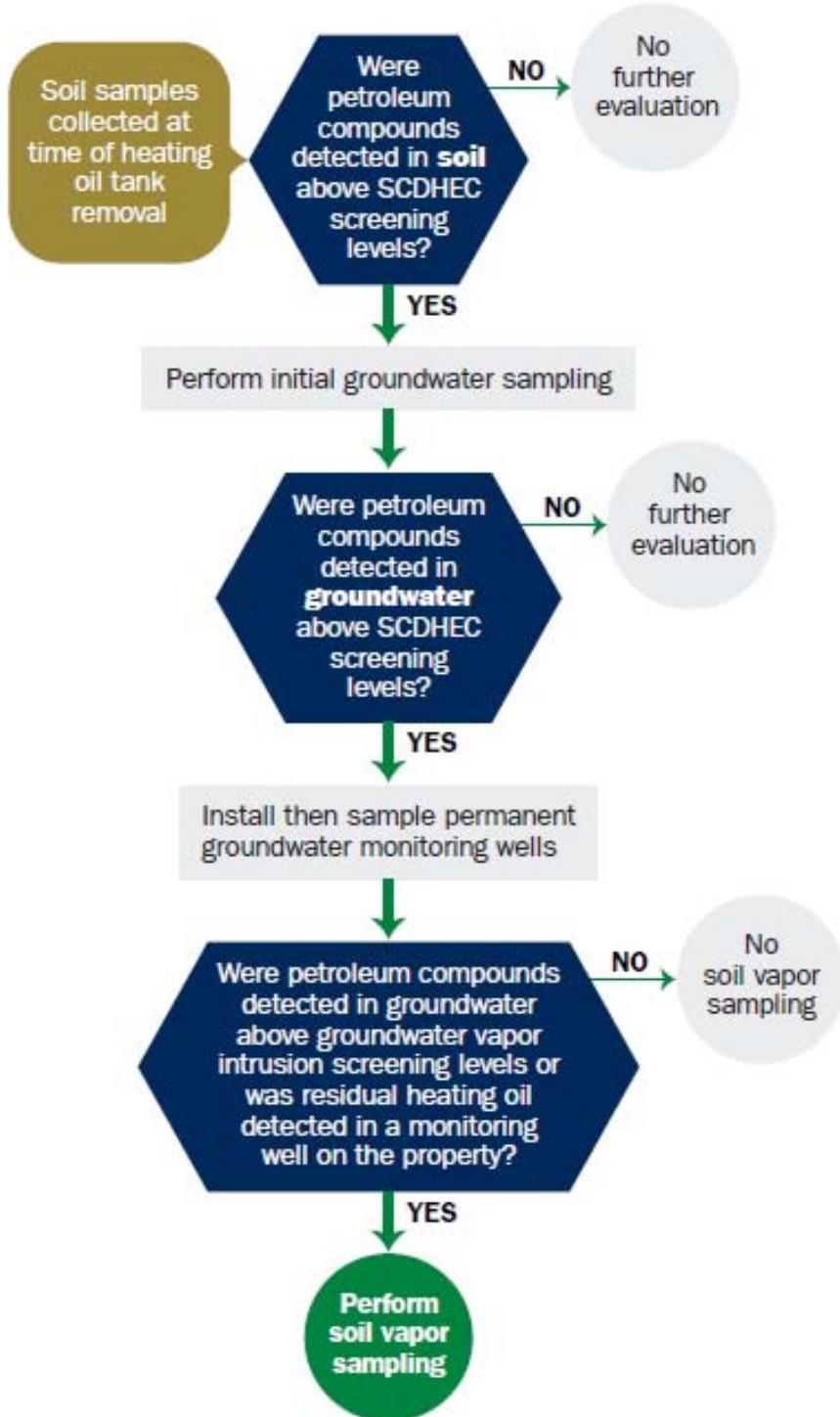
ND - not detected at the reporting limit (or method detection limit if shown on the laboratory report). The vapor laboratory report is provided in Appendix D.

RBSL - Risk-Based Screening Level

$\mu\text{g}/\text{m}^3$  - micrograms per cubic meter

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

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

Date Received

State Use Only

RECEIVED

NOV 13 2009

SC DHEC - Bureau of  
Land & Waste Management

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

1190 Bobwhite Dr., Laurel Bay Military Housing Area  
Street Address or State Road (as applicable)

Beaufort,  
City

Beaufort  
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.....
- M. Method of disposal for any USTs removed from the ground (attach disposal manifests)  
UST 1190Bobwhite 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)  
UST 1190Bobwhite 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, pitting and holes were found throughout the tank.

1190				
Bobwhite				
Heating oil				
280 gal				
Late 1950s				
Steel				
Mid 1980s				
5 ' 8 "				
No				
No				
Removed				
8/19/09				
Yes				
Yes				

## 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.

1190 Bobwhite				
Steel & Copper				
N/A				
N/A				
Suction				
Yes				
Yes				
No				
Late 1950s				

Corrosion and pitting were found on the surface of the steel vent pipe. Copper supply and return lines were sound.

## VIII. BRIEF SITE DESCRIPTION AND HISTORY

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

## IX. SITE CONDITIONS

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

## X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009001

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
1190 Bobwhite	Excav at fill end	Soil	Sandy	5' 8"	8/19/09 1030 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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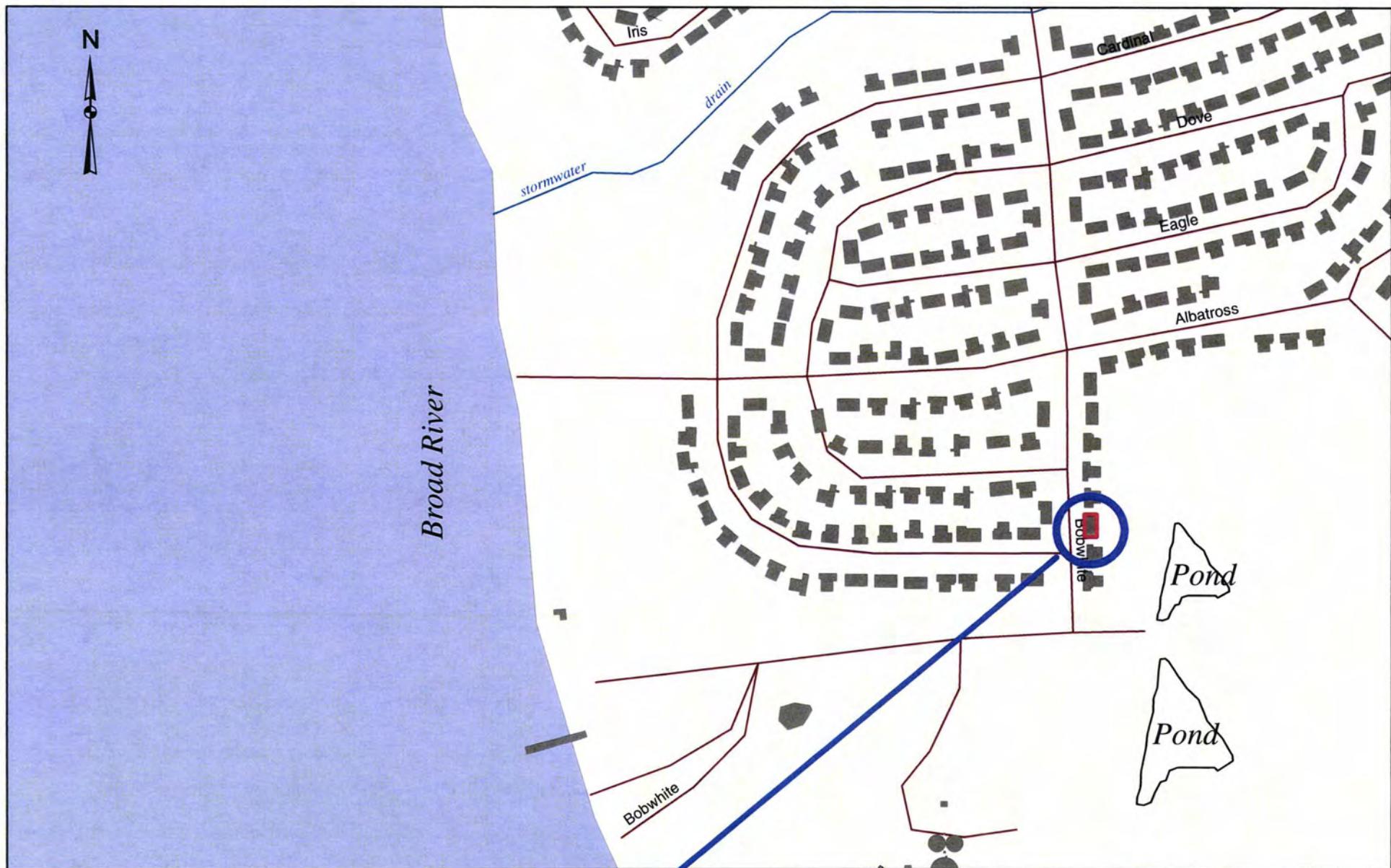
## XII. RECEPTORS

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

### **XIII. SITE MAP**

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

(Attach Site Map Here)

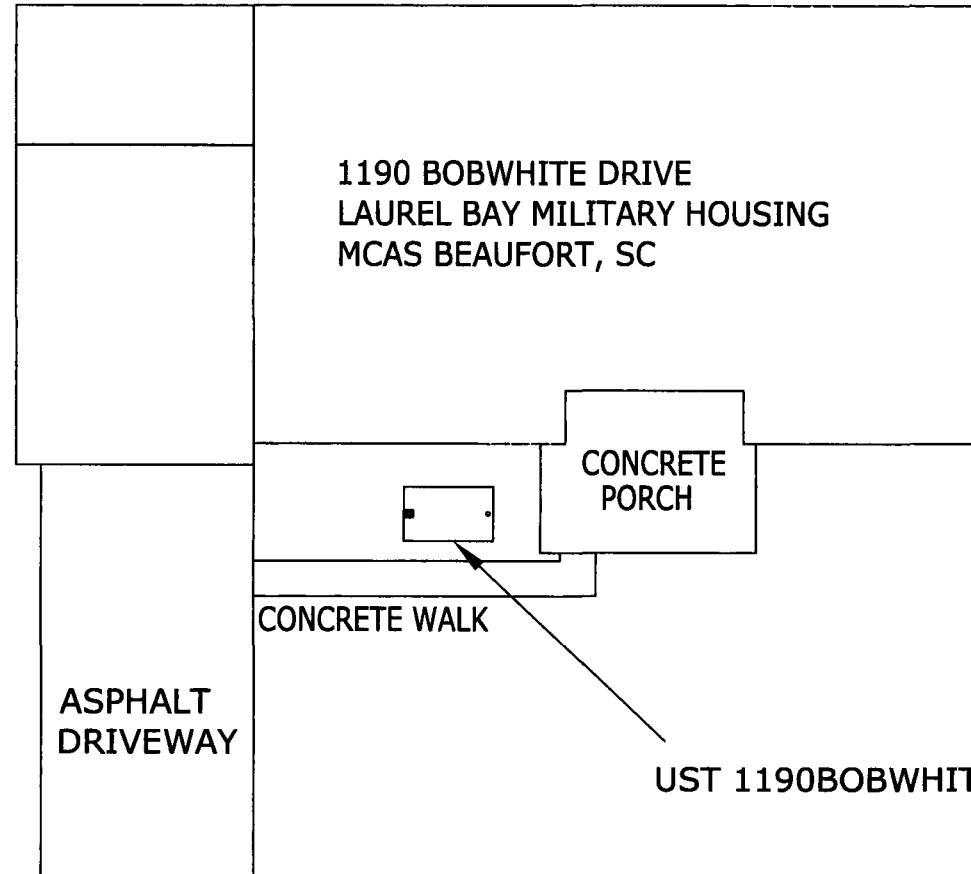
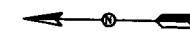


0 135 270 540 810 1,080 1,350  
 feet

<b>SBG-EEG, Inc.</b>
Small Business Group, Inc.
10179 Hwy 78
Ladson, SC 29456
Ph. (843) 879-0400
Drawn By: L. DiAsio
Dwg Date: Sept 2009

**FIGURE 1: LOCATION MAP  
 1190 BOBWHITE DR., LAUREL BAY  
 MCAS BEAUFORT SC**

POND ≈ 260' →



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

**FIGURE 2 SITE MAP**  
**1190 BOBWHITE DR., LAUREL BAY**  
**MCAS BEAUFORT SC**

SCALE: GRAPHIC

DWG DATE OCT 2009

1190 BOBWHITE DRIVE

GARAGE

ASPHALT  
DRIVEWAY

FILL END

EXCAVATION

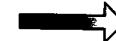
PORCH

SIDEWALK

GRASS

SOIL SAMPLE  
1190 BOBWHITE

UST 1190BOBWHITE,  
280 GAL.

POND ≈ 260' 

GRAPHIC SCALE  
0 5'

UST 1190BOBWHITE WAS  
32" BELOW GRADE.

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

FIGURE 3 UST SAMPLE LOCATIONS  
1190 BOBWHITE DR., LAUREL BAY  
MCAS BEAUFORT SC  
SCALE: GRAPHIC DWG DATE OCT 2009



Picture 1: Location of UST 1190Bobwhite.



Picture 2: UST 1190Bobwhite.

#### XIV. SUMMARY OF ANALYSIS RESULTS

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

<b>CoC</b>	<b>UST</b>	1190Bobwhite					
<b>Benzene</b>		0.0122 mg/kg					
<b>Toluene</b>		1.25 mg/kg					
<b>Ethylbenzene</b>		4.30 mg/kg					
<b>Xylenes</b>		17.0 mg/kg					
<b>Naphthalene</b>		27.1 mg/kg					
<b>Benzo (a) anthracene</b>		2.66 mg/kg					
<b>Benzo (b) fluoranthene</b>		1.63 mg/kg					
<b>Benzo (k) fluoranthene</b>		1.52 mg/kg					
<b>Chrysene</b>		3.33 mg/kg					
<b>Dibenz (a, h) anthracene</b>		ND					
<b>TPH (EPA 3550)</b>							

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

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

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

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

## **XV. ANALYTICAL RESULTS**

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

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

September 04, 2009 12:48:34PM

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

Work Order: NSH1890  
Project Name: Laurel Bay Housing Project  
Project Nbr: [none]  
P/O Nbr: 0829  
Date Received: 08/21/09

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
1190 Bobwhite	NSH1890-01	08/19/09 10:30
1186 Bobwhite	NSH1890-02	08/19/09 09:30
1210 Cardinal	NSH1890-03	08/19/09 14:55
1206 Cardinal	NSH1890-04	08/19/09 14:45
1205 Cardinal	NSH1890-05	08/20/09 09:10
1201 Cardinal	NSH1890-06	08/20/09 09:30
1207 Cardinal	NSH1890-07	08/20/09 11:45
1211 Cardinal	NSH1890-08	08/20/09 13:30

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: 84009001

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:



Ken A. Hayes

Senior Project Manager

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1890
		Project Name:	Laurel Bay Housing Project
Attn	Tom McElwee	Project Number:	[none]
		Received:	08/21/09 08:00

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
<b>Sample ID: NSH1890-01 (1190 Bobwhite - Soil) Sampled: 08/19/09 10:30</b>									
General Chemistry Parameters									
% Dry Solids									
% Dry Solids	81.4		%	0.500	1	09/01/09 08:53	SW-846	AJK	9085104
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	0.0122		mg/kg dry	0.00220	1	08/28/09 21:14	SW846 8260B	SMS	9083572
Ethylbenzene	4.30		mg/kg dry	0.110	50	08/31/09 19:05	SW846 8260B	SMS	9084596
Naphthalene	27.1		mg/kg dry	2.74	500	08/31/09 19:35	SW846 8260B	SMS	9084596
Toluene	1.25		mg/kg dry	0.110	50	08/31/09 19:05	SW846 8260B	SMS	9084596
Xylenes, total	17.0		mg/kg dry	0.274	50	08/31/09 19:05	SW846 8260B	SMS	9084596
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	108 %					08/28/09 21:14	SW846 8260B	SMS	9083572
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	95 %					08/31/09 19:05	SW846 8260B	SMS	9084596
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	99 %					08/31/09 19:35	SW846 8260B	SMS	9084596
<i>Surr: Dibromoformmethane (75-125%)</i>	103 %					08/28/09 21:14	SW846 8260B	SMS	9083572
<i>Surr: Dibromoformmethane (75-125%)</i>	88 %					08/31/09 19:05	SW846 8260B	SMS	9084596
<i>Surr: Dibromoformmethane (75-125%)</i>	88 %					08/31/09 19:35	SW846 8260B	SMS	9084596
<i>Surr: Toluene-d8 (76-129%)</i>	185 %	ZX				08/28/09 21:14	SW846 8260B	SMS	9083572
<i>Surr: Toluene-d8 (76-129%)</i>	96 %					08/31/09 19:05	SW846 8260B	SMS	9084596
<i>Surr: Toluene-d8 (76-129%)</i>	103 %					08/31/09 19:35	SW846 8260B	SMS	9084596
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	514 %	ZX				08/28/09 21:14	SW846 8260B	SMS	9083572
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	118 %					08/31/09 19:05	SW846 8260B	SMS	9084596
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	102 %					08/31/09 19:35	SW846 8260B	SMS	9084596
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.808	10	08/31/09 14:56	SW846 8270D	jlf	9083679
Acenaphthylene	ND		mg/kg dry	0.808	10	08/31/09 14:56	SW846 8270D	jlf	9083679
Anthracene	2.00		mg/kg dry	0.808	10	08/31/09 14:56	SW846 8270D	jlf	9083679
Benzo (a) anthracene	2.66		mg/kg dry	0.808	10	08/31/09 14:56	SW846 8270D	jlf	9083679
Benzo (a) pyrene	1.33		mg/kg dry	0.808	10	08/31/09 14:56	SW846 8270D	jlf	9083679
Benzo (b) fluoranthene	1.63		mg/kg dry	0.808	10	08/31/09 14:56	SW846 8270D	jlf	9083679
Benzo (g,h,i) perylene	ND		mg/kg dry	0.808	10	08/31/09 14:56	SW846 8270D	jlf	9083679
Benzo (k) fluoranthene	1.52		mg/kg dry	0.808	10	08/31/09 14:56	SW846 8270D	jlf	9083679
Chrysene	3.33		mg/kg dry	0.808	10	08/31/09 14:56	SW846 8270D	jlf	9083679
Dibenz (a,h) anthracene	ND		mg/kg dry	0.808	10	08/31/09 14:56	SW846 8270D	jlf	9083679
Fluoranthene	5.75		mg/kg dry	0.808	10	08/31/09 14:56	SW846 8270D	jlf	9083679
Fluorene	10.5		mg/kg dry	0.808	10	08/31/09 14:56	SW846 8270D	jlf	9083679
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.808	10	08/31/09 14:56	SW846 8270D	jlf	9083679
Naphthalene	26.2		mg/kg dry	0.808	10	08/31/09 14:56	SW846 8270D	jlf	9083679
Phenanthrene	21.6		mg/kg dry	0.808	10	08/31/09 14:56	SW846 8270D	jlf	9083679
Pyrene	7.38		mg/kg dry	0.808	10	08/31/09 14:56	SW846 8270D	jlf	9083679
1-Methylnaphthalene	53.9		mg/kg dry	4.04	50	08/31/09 17:35	SW846 8270D	jlf	9083679
2-Methylnaphthalene	84.8		mg/kg dry	4.04	50	08/31/09 17:35	SW846 8270D	jlf	9083679
<i>Surr: Terphenyl-d14 (18-120%)</i>	52 %					08/31/09 14:56	SW846 8270D	jlf	9083679
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	53 %					08/31/09 14:56	SW846 8270D	jlf	9083679
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	58 %					08/31/09 14:56	SW846 8270D	jlf	9083679

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1890
		Project Name:	Laurel Bay Housing Project
Attn	Tom McElwee	Project Number:	[none]
		Received:	08/21/09 08:00

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
<b>Sample ID: NSH1890-02 (1186 Bobwhite - Soil) Sampled: 08/19/09 09:30</b>									
General Chemistry Parameters									
% Dry Solids									
Benzene	ND		mg/kg dry	0.00218	1	08/31/09 17:35	SW846 8260B	SMS	9084596
Ethylbenzene	ND		mg/kg dry	0.114	50	09/02/09 13:16	SW846 8260B	CAW	9085110
Naphthalene	ND		mg/kg dry	0.285	50	09/02/09 13:16	SW846 8260B	CAW	9085110
Toluene	ND		mg/kg dry	0.114	50	09/02/09 13:16	SW846 8260B	CAW	9085110
Xylenes, total	ND		mg/kg dry	0.285	50	09/02/09 13:16	SW846 8260B	CAW	9085110
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	137 %					08/31/09 17:35	SW846 8260B	SMS	9084596
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	105 %					09/02/09 13:16	SW846 8260B	CAW	9085110
<i>Surr: Dibromoformmethane (75-125%)</i>	124 %					08/31/09 17:35	SW846 8260B	SMS	9084596
<i>Surr: Dibromoformmethane (75-125%)</i>	101 %					09/02/09 13:16	SW846 8260B	CAW	9085110
<i>Surr: Toluene-d8 (76-129%)</i>	107 %					08/31/09 17:35	SW846 8260B	SMS	9084596
<i>Surr: Toluene-d8 (76-129%)</i>	97 %					09/02/09 13:16	SW846 8260B	CAW	9085110
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	112 %					08/31/09 17:35	SW846 8260B	SMS	9084596
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	85 %					09/02/09 13:16	SW846 8260B	CAW	9085110
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.0693	1	08/30/09 16:40	SW846 8270D	jlf	9083679
Acenaphthylene	ND		mg/kg dry	0.0693	1	08/30/09 16:40	SW846 8270D	jlf	9083679
Anthracene	ND		mg/kg dry	0.0693	1	08/30/09 16:40	SW846 8270D	jlf	9083679
Benzo (a) anthracene	ND		mg/kg dry	0.0693	1	08/30/09 16:40	SW846 8270D	jlf	9083679
Benzo (a) pyrene	0.272		mg/kg dry	0.0693	1	08/30/09 16:40	SW846 8270D	jlf	9083679
Benzo (b) fluoranthene	0.169		mg/kg dry	0.0693	1	08/30/09 16:40	SW846 8270D	jlf	9083679
Benzo (g,h,i) perylene	0.0931		mg/kg dry	0.0693	1	08/30/09 16:40	SW846 8270D	jlf	9083679
Benzo (k) fluoranthene	ND		mg/kg dry	0.0693	1	08/30/09 16:40	SW846 8270D	jlf	9083679
Chrysene	0.100		mg/kg dry	0.0693	1	08/30/09 16:40	SW846 8270D	jlf	9083679
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0693	1	08/30/09 16:40	SW846 8270D	jlf	9083679
Fluoranthene	ND		mg/kg dry	0.0693	1	08/30/09 16:40	SW846 8270D	jlf	9083679
Fluorene	ND		mg/kg dry	0.0693	1	08/30/09 16:40	SW846 8270D	jlf	9083679
Indeno (1,2,3-cd) pyrene	0.0938		mg/kg dry	0.0693	1	08/30/09 16:40	SW846 8270D	jlf	9083679
Naphthalene	ND		mg/kg dry	0.0693	1	08/30/09 16:40	SW846 8270D	jlf	9083679
Phenanthrene	ND		mg/kg dry	0.0693	1	08/30/09 16:40	SW846 8270D	jlf	9083679
Pyrene	ND		mg/kg dry	0.0693	1	08/30/09 16:40	SW846 8270D	jlf	9083679
1-Methylnaphthalene	ND		mg/kg dry	0.0693	1	08/30/09 16:40	SW846 8270D	jlf	9083679
2-Methylnaphthalene	ND		mg/kg dry	0.0693	1	08/30/09 16:40	SW846 8270D	jlf	9083679
<i>Surr: Terphenyl-d14 (18-120%)</i>	105 %					08/30/09 16:40	SW846 8270D	jlf	9083679
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	86 %					08/30/09 16:40	SW846 8270D	jlf	9083679
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	34 %					08/30/09 16:40	SW846 8270D	jlf	9083679

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1890
		Project Name:	Laurel Bay Housing Project
Attn	Tom McElwee	Project Number:	[none]
		Received:	08/21/09 08:00

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
<b>Sample ID: NSH1890-03 (1210 Cardinal - Soil) Sampled: 08/19/09 14:55</b>									
General Chemistry Parameters									
% Dry Solids									
Benzene	ND		mg/kg dry	0.00236	1	08/31/09 18:05	SW846 8260B	SMS	9084596
Ethylbenzene	ND		mg/kg dry	0.00236	1	08/31/09 18:05	SW846 8260B	SMS	9084596
Naphthalene	ND		mg/kg dry	0.296	50	09/02/09 13:44	SW846 8260B	CAW	9085110
Toluene	ND		mg/kg dry	0.00236	1	08/31/09 18:05	SW846 8260B	SMS	9084596
Xylenes, total	ND		mg/kg dry	0.00591	1	08/31/09 18:05	SW846 8260B	SMS	9084596
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	102 %					08/31/09 18:05	SW846 8260B	SMS	9084596
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	93 %					09/02/09 13:44	SW846 8260B	CAW	9085110
<i>Surr: Dibromofluoromethane (75-125%)</i>	93 %					08/31/09 18:05	SW846 8260B	SMS	9084596
<i>Surr: Dibromofluoromethane (75-125%)</i>	94 %					09/02/09 13:44	SW846 8260B	CAW	9085110
<i>Surr: Toluene-d8 (76-129%)</i>	102 %					08/31/09 18:05	SW846 8260B	SMS	9084596
<i>Surr: Toluene-d8 (76-129%)</i>	99 %					09/02/09 13:44	SW846 8260B	CAW	9085110
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	132 %					08/31/09 18:05	SW846 8260B	SMS	9084596
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	102 %					09/02/09 13:44	SW846 8260B	CAW	9085110
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.0701	1	08/30/09 17:03	SW846 8270D	jlf	9083679
Acenaphthylene	ND		mg/kg dry	0.0701	1	08/30/09 17:03	SW846 8270D	jlf	9083679
Anthracene	ND		mg/kg dry	0.0701	1	08/30/09 17:03	SW846 8270D	jlf	9083679
Benzo (a) anthracene	ND		mg/kg dry	0.0701	1	08/30/09 17:03	SW846 8270D	jlf	9083679
Benzo (a) pyrene	0.652		mg/kg dry	0.0701	1	08/30/09 17:03	SW846 8270D	jlf	9083679
Benzo (b) fluoranthene	ND		mg/kg dry	0.0701	1	08/30/09 17:03	SW846 8270D	jlf	9083679
Benzo (g,h,i) perylene	0.304		mg/kg dry	0.0701	1	08/30/09 17:03	SW846 8270D	jlf	9083679
Benzo (k) fluoranthene	0.180		mg/kg dry	0.0701	1	08/30/09 17:03	SW846 8270D	jlf	9083679
Chrysene	0.108		mg/kg dry	0.0701	1	08/30/09 17:03	SW846 8270D	jlf	9083679
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0701	1	08/30/09 17:03	SW846 8270D	jlf	9083679
Fluoranthene	ND		mg/kg dry	0.0701	1	08/30/09 17:03	SW846 8270D	jlf	9083679
Fluorene	ND		mg/kg dry	0.0701	1	08/30/09 17:03	SW846 8270D	jlf	9083679
Indeno (1,2,3-cd) pyrene	0.269		mg/kg dry	0.0701	1	08/30/09 17:03	SW846 8270D	jlf	9083679
Naphthalene	ND		mg/kg dry	0.0701	1	08/30/09 17:03	SW846 8270D	jlf	9083679
Phenanthrene	ND		mg/kg dry	0.0701	1	08/30/09 17:03	SW846 8270D	jlf	9083679
Pyrene	ND		mg/kg dry	0.0701	1	08/30/09 17:03	SW846 8270D	jlf	9083679
1-Methylnaphthalene	ND		mg/kg dry	0.0701	1	08/30/09 17:03	SW846 8270D	jlf	9083679
2-Methylnaphthalene	ND		mg/kg dry	0.0701	1	08/30/09 17:03	SW846 8270D	jlf	9083679
<i>Surr: Terphenyl-d14 (18-120%)</i>	116 %					08/30/09 17:03	SW846 8270D	jlf	9083679
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	57 %					08/30/09 17:03	SW846 8270D	jlf	9083679
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	69 %					08/30/09 17:03	SW846 8270D	jlf	9083679

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1890
		Project Name:	Laurel Bay Housing Project
Attn	Tom McElwee	Project Number:	[none]
		Received:	08/21/09 08:00

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
<b>Sample ID: NSH1890-04 (1206 Cardinal - Soil) Sampled: 08/19/09 14:45</b>									
General Chemistry Parameters									
% Dry Solids									
% Dry Solids	90.7		%	0.500	1	09/01/09 08:53	SW-846	AJK	9085104
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00231	1	08/29/09 04:13	SW846 8260B	SMS	9083484
Ethylbenzene	ND		mg/kg dry	0.00231	1	08/29/09 04:13	SW846 8260B	SMS	9083484
Naphthalene	ND		mg/kg dry	0.00577	1	08/29/09 04:13	SW846 8260B	SMS	9083484
Toluene	ND		mg/kg dry	0.00231	1	08/29/09 04:13	SW846 8260B	SMS	9083484
Xylenes, total	ND		mg/kg dry	0.00577	1	08/29/09 04:13	SW846 8260B	SMS	9083484
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	103 %					08/29/09 04:13	SW846 8260B	SMS	9083484
<i>Surr: Dibromoformmethane (75-125%)</i>	94 %					08/29/09 04:13	SW846 8260B	SMS	9083484
<i>Surr: Toluene-d8 (76-129%)</i>	98 %					08/29/09 04:13	SW846 8260B	SMS	9083484
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	103 %					08/29/09 04:13	SW846 8260B	SMS	9083484
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.0734	1	08/30/09 17:26	SW846 8270D	jlf	9083679
Acenaphthylene	ND		mg/kg dry	0.0734	1	08/30/09 17:26	SW846 8270D	jlf	9083679
Anthracene	ND		mg/kg dry	0.0734	1	08/30/09 17:26	SW846 8270D	jlf	9083679
Benzo (a) anthracene	ND		mg/kg dry	0.0734	1	08/30/09 17:26	SW846 8270D	jlf	9083679
Benzo (a) pyrene	ND		mg/kg dry	0.0734	1	08/30/09 17:26	SW846 8270D	jlf	9083679
Benzo (b) fluoranthene	ND		mg/kg dry	0.0734	1	08/30/09 17:26	SW846 8270D	jlf	9083679
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0734	1	08/30/09 17:26	SW846 8270D	jlf	9083679
Benzo (k) fluoranthene	ND		mg/kg dry	0.0734	1	08/30/09 17:26	SW846 8270D	jlf	9083679
Chrysene	ND		mg/kg dry	0.0734	1	08/30/09 17:26	SW846 8270D	jlf	9083679
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0734	1	08/30/09 17:26	SW846 8270D	jlf	9083679
Fluoranthene	ND		mg/kg dry	0.0734	1	08/30/09 17:26	SW846 8270D	jlf	9083679
Fluorene	ND		mg/kg dry	0.0734	1	08/30/09 17:26	SW846 8270D	jlf	9083679
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0734	1	08/30/09 17:26	SW846 8270D	jlf	9083679
Naphthalene	ND		mg/kg dry	0.0734	1	08/30/09 17:26	SW846 8270D	jlf	9083679
Phenanthrene	ND		mg/kg dry	0.0734	1	08/30/09 17:26	SW846 8270D	jlf	9083679
Pyrene	ND		mg/kg dry	0.0734	1	08/30/09 17:26	SW846 8270D	jlf	9083679
1-Methylnaphthalene	ND		mg/kg dry	0.0734	1	08/30/09 17:26	SW846 8270D	jlf	9083679
2-Methylnaphthalene	ND		mg/kg dry	0.0734	1	08/30/09 17:26	SW846 8270D	jlf	9083679
<i>Surr: Terphenyl-d14 (18-120%)</i>	81 %					08/30/09 17:26	SW846 8270D	jlf	9083679
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	63 %					08/30/09 17:26	SW846 8270D	jlf	9083679
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	60 %					08/30/09 17:26	SW846 8270D	jlf	9083679

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSH1890
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	Received:	08/21/09 08:00

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
<b>Sample ID: NSH1890-05 (1205 Cardinal - Soil) Sampled: 08/20/09 09:10</b>									
General Chemistry Parameters									
% Dry Solids	90.4		%	0.500	1	09/01/09 08:53	SW-846	AJK	9085104
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00230	1	08/29/09 04:43	SW846 8260B	SMS	9083484
Ethylbenzene	ND		mg/kg dry	0.00230	1	08/29/09 04:43	SW846 8260B	SMS	9083484
Naphthalene	ND		mg/kg dry	0.00574	1	08/29/09 04:43	SW846 8260B	SMS	9083484
Toluene	ND		mg/kg dry	0.00230	1	08/29/09 04:43	SW846 8260B	SMS	9083484
Xylenes, total	ND		mg/kg dry	0.00574	1	08/29/09 04:43	SW846 8260B	SMS	9083484
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	97 %					08/29/09 04:43	SW846 8260B	SMS	9083484
<i>Surr: Dibromoformmethane (75-125%)</i>	93 %					08/29/09 04:43	SW846 8260B	SMS	9083484
<i>Surr: Toluene-d8 (76-129%)</i>	99 %					08/29/09 04:43	SW846 8260B	SMS	9083484
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	100 %					08/29/09 04:43	SW846 8260B	SMS	9083484
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.0732	1	08/30/09 17:48	SW846 8270D	jlf	9083679
Acenaphthylene	ND		mg/kg dry	0.0732	1	08/30/09 17:48	SW846 8270D	jlf	9083679
Anthracene	ND		mg/kg dry	0.0732	1	08/30/09 17:48	SW846 8270D	jlf	9083679
Benzo (a) anthracene	ND		mg/kg dry	0.0732	1	08/30/09 17:48	SW846 8270D	jlf	9083679
Benzo (a) pyrene	ND		mg/kg dry	0.0732	1	08/30/09 17:48	SW846 8270D	jlf	9083679
Benzo (b) fluoranthene	ND		mg/kg dry	0.0732	1	08/30/09 17:48	SW846 8270D	jlf	9083679
Benzo (g,h,i) perylene	0.133		mg/kg dry	0.0732	1	08/30/09 17:48	SW846 8270D	jlf	9083679
Benzo (k) fluoranthene	ND		mg/kg dry	0.0732	1	08/30/09 17:48	SW846 8270D	jlf	9083679
Chrysene	ND		mg/kg dry	0.0732	1	08/30/09 17:48	SW846 8270D	jlf	9083679
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0732	1	08/30/09 17:48	SW846 8270D	jlf	9083679
Fluoranthene	ND		mg/kg dry	0.0732	1	08/30/09 17:48	SW846 8270D	jlf	9083679
Fluorene	ND		mg/kg dry	0.0732	1	08/30/09 17:48	SW846 8270D	jlf	9083679
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0732	1	08/30/09 17:48	SW846 8270D	jlf	9083679
Naphthalene	ND		mg/kg dry	0.0732	1	08/30/09 17:48	SW846 8270D	jlf	9083679
Phenanthrene	ND		mg/kg dry	0.0732	1	08/30/09 17:48	SW846 8270D	jlf	9083679
Pyrene	ND		mg/kg dry	0.0732	1	08/30/09 17:48	SW846 8270D	jlf	9083679
1-Methylnaphthalene	ND		mg/kg dry	0.0732	1	08/30/09 17:48	SW846 8270D	jlf	9083679
2-Methylnaphthalene	ND		mg/kg dry	0.0732	1	08/30/09 17:48	SW846 8270D	jlf	9083679
<i>Surr: Terphenyl-d14 (18-120%)</i>	68 %					08/30/09 17:48	SW846 8270D	jlf	9083679
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	51 %					08/30/09 17:48	SW846 8270D	jlf	9083679
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	46 %					08/30/09 17:48	SW846 8270D	jlf	9083679

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1890
		Project Name:	Laurel Bay Housing Project
Attn	Tom McElwee	Project Number:	[none]
		Received:	08/21/09 08:00

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
<b>Sample ID: NSH1890-06 (1201 Cardinal - Soil) Sampled: 08/20/09 09:30</b>									
General Chemistry Parameters									
% Dry Solids	92.0		%	0.500	1	09/01/09 08:53	SW-846	AJK	9085104
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00236	1	08/29/09 05:13	SW846 8260B	SMS	9083484
Ethylbenzene	ND		mg/kg dry	0.00236	1	08/29/09 05:13	SW846 8260B	SMS	9083484
Naphthalene	ND		mg/kg dry	0.00591	1	08/29/09 05:13	SW846 8260B	SMS	9083484
Toluene	ND		mg/kg dry	0.00236	1	08/29/09 05:13	SW846 8260B	SMS	9083484
Xylenes, total	ND		mg/kg dry	0.00591	1	08/29/09 05:13	SW846 8260B	SMS	9083484
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	97 %					08/29/09 05:13	SW846 8260B	SMS	9083484
<i>Surr: Dibromoformmethane (75-125%)</i>	92 %					08/29/09 05:13	SW846 8260B	SMS	9083484
<i>Surr: Toluene-d8 (76-129%)</i>	101 %					08/29/09 05:13	SW846 8260B	SMS	9083484
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	102 %					08/29/09 05:13	SW846 8260B	SMS	9083484
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.0711	1	08/30/09 18:11	SW846 8270D	jlf	9083679
Acenaphthylene	ND		mg/kg dry	0.0711	1	08/30/09 18:11	SW846 8270D	jlf	9083679
Anthracene	ND		mg/kg dry	0.0711	1	08/30/09 18:11	SW846 8270D	jlf	9083679
Benzo (a) anthracene	ND		mg/kg dry	0.0711	1	08/30/09 18:11	SW846 8270D	jlf	9083679
Benzo (a) pyrene	ND		mg/kg dry	0.0711	1	08/30/09 18:11	SW846 8270D	jlf	9083679
Benzo (b) fluoranthene	ND		mg/kg dry	0.0711	1	08/30/09 18:11	SW846 8270D	jlf	9083679
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0711	1	08/30/09 18:11	SW846 8270D	jlf	9083679
Benzo (k) fluoranthene	ND		mg/kg dry	0.0711	1	08/30/09 18:11	SW846 8270D	jlf	9083679
Chrysene	ND		mg/kg dry	0.0711	1	08/30/09 18:11	SW846 8270D	jlf	9083679
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0711	1	08/30/09 18:11	SW846 8270D	jlf	9083679
Fluoranthene	ND		mg/kg dry	0.0711	1	08/30/09 18:11	SW846 8270D	jlf	9083679
Fluorene	ND		mg/kg dry	0.0711	1	08/30/09 18:11	SW846 8270D	jlf	9083679
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0711	1	08/30/09 18:11	SW846 8270D	jlf	9083679
Naphthalene	ND		mg/kg dry	0.0711	1	08/30/09 18:11	SW846 8270D	jlf	9083679
Phenanthrene	ND		mg/kg dry	0.0711	1	08/30/09 18:11	SW846 8270D	jlf	9083679
Pyrene	ND		mg/kg dry	0.0711	1	08/30/09 18:11	SW846 8270D	jlf	9083679
1-Methylnaphthalene	ND		mg/kg dry	0.0711	1	08/30/09 18:11	SW846 8270D	jlf	9083679
2-Methylnaphthalene	ND		mg/kg dry	0.0711	1	08/30/09 18:11	SW846 8270D	jlf	9083679
<i>Surr: Terphenyl-d14 (18-120%)</i>	87 %					08/30/09 18:11	SW846 8270D	jlf	9083679
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	65 %					08/30/09 18:11	SW846 8270D	jlf	9083679
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	59 %					08/30/09 18:11	SW846 8270D	jlf	9083679

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1890
		Project Name:	Laurel Bay Housing Project
Attn	Tom McElwee	Project Number:	[none]
		Received:	08/21/09 08:00

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
<b>Sample ID: NSH1890-07 (1207 Cardinal - Soil) Sampled: 08/20/09 11:45</b>									
General Chemistry Parameters									
% Dry Solids	96.8		%	0.500	1	09/01/09 08:53	SW-846	AJK	9085104
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00212	1	08/29/09 05:43	SW846 8260B	SMS	9083484
Ethylbenzene	ND		mg/kg dry	0.00212	1	08/29/09 05:43	SW846 8260B	SMS	9083484
Naphthalene	ND		mg/kg dry	0.00530	1	08/29/09 05:43	SW846 8260B	SMS	9083484
Toluene	ND		mg/kg dry	0.00212	1	08/29/09 05:43	SW846 8260B	SMS	9083484
Xylenes, total	ND		mg/kg dry	0.00530	1	08/29/09 05:43	SW846 8260B	SMS	9083484
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	104 %					08/29/09 05:43	SW846 8260B	SMS	9083484
<i>Surr: Dibromoformmethane (75-125%)</i>	98 %					08/29/09 05:43	SW846 8260B	SMS	9083484
<i>Surr: Toluene-d8 (76-129%)</i>	100 %					08/29/09 05:43	SW846 8260B	SMS	9083484
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	112 %					08/29/09 05:43	SW846 8260B	SMS	9083484
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.0685	1	08/30/09 18:33	SW846 8270D	jlf	9083679
Acenaphthylene	ND		mg/kg dry	0.0685	1	08/30/09 18:33	SW846 8270D	jlf	9083679
Anthracene	ND		mg/kg dry	0.0685	1	08/30/09 18:33	SW846 8270D	jlf	9083679
Benzo (a) anthracene	ND		mg/kg dry	0.0685	1	08/30/09 18:33	SW846 8270D	jlf	9083679
Benzo (a) pyrene	ND		mg/kg dry	0.0685	1	08/30/09 18:33	SW846 8270D	jlf	9083679
Benzo (b) fluoranthene	ND		mg/kg dry	0.0685	1	08/30/09 18:33	SW846 8270D	jlf	9083679
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0685	1	08/30/09 18:33	SW846 8270D	jlf	9083679
Benzo (k) fluoranthene	0.0805		mg/kg dry	0.0685	1	08/30/09 18:33	SW846 8270D	jlf	9083679
Chrysene	ND		mg/kg dry	0.0685	1	08/30/09 18:33	SW846 8270D	jlf	9083679
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0685	1	08/30/09 18:33	SW846 8270D	jlf	9083679
Fluoranthene	ND		mg/kg dry	0.0685	1	08/30/09 18:33	SW846 8270D	jlf	9083679
Fluorene	ND		mg/kg dry	0.0685	1	08/30/09 18:33	SW846 8270D	jlf	9083679
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0685	1	08/30/09 18:33	SW846 8270D	jlf	9083679
Naphthalene	ND		mg/kg dry	0.0685	1	08/30/09 18:33	SW846 8270D	jlf	9083679
Phenanthrene	ND		mg/kg dry	0.0685	1	08/30/09 18:33	SW846 8270D	jlf	9083679
Pyrene	ND		mg/kg dry	0.0685	1	08/30/09 18:33	SW846 8270D	jlf	9083679
1-Methylnaphthalene	ND		mg/kg dry	0.0685	1	08/30/09 18:33	SW846 8270D	jlf	9083679
2-Methylnaphthalene	ND		mg/kg dry	0.0685	1	08/30/09 18:33	SW846 8270D	jlf	9083679
<i>Surr: Terphenyl-d14 (18-120%)</i>	85 %					08/30/09 18:33	SW846 8270D	jlf	9083679
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	66 %					08/30/09 18:33	SW846 8270D	jlf	9083679
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	64 %					08/30/09 18:33	SW846 8270D	jlf	9083679

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSH1890
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	Received:	08/21/09 08:00

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
<b>Sample ID: NSH1890-08 (1211 Cardinal - Soil) Sampled: 08/20/09 13:30</b>									
General Chemistry Parameters									
% Dry Solids									
	86.0		%	0.500	1	09/01/09 08:53	SW-846	AJK	9085104
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00248	1	08/29/09 06:13	SW846 8260B	SMS	9083484
Ethylbenzene	ND		mg/kg dry	0.00248	1	08/29/09 06:13	SW846 8260B	SMS	9083484
Naphthalene	ND		mg/kg dry	0.00620	1	08/29/09 06:13	SW846 8260B	SMS	9083484
Toluene	ND		mg/kg dry	0.00248	1	08/29/09 06:13	SW846 8260B	SMS	9083484
Xylenes, total	ND		mg/kg dry	0.00620	1	08/29/09 06:13	SW846 8260B	SMS	9083484
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	104 %					08/29/09 06:13	SW846 8260B	SMS	9083484
<i>Surr: Dibromofluoromethane (75-125%)</i>	96 %					08/29/09 06:13	SW846 8260B	SMS	9083484
<i>Surr: Toluene-d8 (76-129%)</i>	100 %					08/29/09 06:13	SW846 8260B	SMS	9083484
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	103 %					08/29/09 06:13	SW846 8260B	SMS	9083484
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.0760	1	08/30/09 18:56	SW846 8270D	jlf	9083679
Acenaphthylene	ND		mg/kg dry	0.0760	1	08/30/09 18:56	SW846 8270D	jlf	9083679
Anthracene	ND		mg/kg dry	0.0760	1	08/30/09 18:56	SW846 8270D	jlf	9083679
Benzo (a) anthracene	ND		mg/kg dry	0.0760	1	08/30/09 18:56	SW846 8270D	jlf	9083679
Benzo (a) pyrene	ND		mg/kg dry	0.0760	1	08/30/09 18:56	SW846 8270D	jlf	9083679
Benzo (b) fluoranthene	ND		mg/kg dry	0.0760	1	08/30/09 18:56	SW846 8270D	jlf	9083679
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0760	1	08/30/09 18:56	SW846 8270D	jlf	9083679
Benzo (k) fluoranthene	ND		mg/kg dry	0.0760	1	08/30/09 18:56	SW846 8270D	jlf	9083679
Chrysene	ND		mg/kg dry	0.0760	1	08/30/09 18:56	SW846 8270D	jlf	9083679
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0760	1	08/30/09 18:56	SW846 8270D	jlf	9083679
Fluoranthene	ND		mg/kg dry	0.0760	1	08/30/09 18:56	SW846 8270D	jlf	9083679
Fluorene	ND		mg/kg dry	0.0760	1	08/30/09 18:56	SW846 8270D	jlf	9083679
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0760	1	08/30/09 18:56	SW846 8270D	jlf	9083679
Naphthalene	ND		mg/kg dry	0.0760	1	08/30/09 18:56	SW846 8270D	jlf	9083679
Phenanthrene	ND		mg/kg dry	0.0760	1	08/30/09 18:56	SW846 8270D	jlf	9083679
Pyrene	ND		mg/kg dry	0.0760	1	08/30/09 18:56	SW846 8270D	jlf	9083679
1-Methylnaphthalene	ND		mg/kg dry	0.0760	1	08/30/09 18:56	SW846 8270D	jlf	9083679
2-Methylnaphthalene	ND		mg/kg dry	0.0760	1	08/30/09 18:56	SW846 8270D	jlf	9083679
<i>Surr: Terphenyl-d14 (18-120%)</i>	88 %					08/30/09 18:56	SW846 8270D	jlf	9083679
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	62 %					08/30/09 18:56	SW846 8270D	jlf	9083679
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	57 %					08/30/09 18:56	SW846 8270D	jlf	9083679

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1890
		Project Name:	Laurel Bay Housing Project
Attn	Tom McElwee	Project Number:	[none]
		Received:	08/21/09 08:00

### SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
<b>Polyaromatic Hydrocarbons by EPA 8270D</b>							
SW846 8270D	9083679	NSH1890-01	30.55	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1890-01RE1	30.55	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1890-01RE2	30.55	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1890-02	30.87	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1890-03	30.17	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1890-04	30.20	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1890-05	30.36	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1890-06	30.71	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1890-07	30.30	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1890-08	30.75	1.00	08/28/09 09:15	AJF	EPA 3550B
<b>Selected Volatile Organic Compounds by EPA Method 8260B</b>							
SW846 8260B	9083572	NSH1890-01	5.59	5.00	08/19/09 10:30	CHH	EPA 5035
SW846 8260B	9084596	NSH1890-01RE1	5.60	5.00	08/19/09 10:30	CHH	EPA 5035
SW846 8260B	9084596	NSH1890-01RE2	5.60	5.00	08/19/09 10:30	CHH	EPA 5035
SW846 8260B	9083572	NSH1890-02	4.60	5.00	08/19/09 09:30	CHH	EPA 5035
SW846 8260B	9083572	NSH1890-02RE1	4.67	5.00	08/19/09 09:30	JRL	EPA 5035
SW846 8260B	9084596	NSH1890-02RE2	4.88	5.00	08/19/09 09:30	CHH	EPA 5035
SW846 8260B	9085110	NSH1890-02RE3	4.67	5.00	08/20/09 14:55	CHH	EPA 5035
SW846 8260B	9083484	NSH1890-03	4.54	5.00	08/19/09 14:55	JRL	EPA 5035
SW846 8260B	9084596	NSH1890-03RE1	4.45	5.00	08/19/09 14:55	JRL	EPA 5035
SW846 8260B	9085110	NSH1890-03RE2	4.44	5.00	08/20/09 14:55	JRL	EPA 5035
SW846 8260B	9083484	NSH1890-04	4.78	5.00	08/19/09 14:45	JRL	EPA 5035
SW846 8260B	9083484	NSH1890-05	4.82	5.00	08/20/09 09:10	JRL	EPA 5035
SW846 8260B	9083484	NSH1890-06	4.60	5.00	08/20/09 09:30	JRL	EPA 5035
SW846 8260B	9083484	NSH1890-07	4.87	5.00	08/20/09 11:45	JRL	EPA 5035
SW846 8260B	9083484	NSH1890-08	4.69	5.00	08/20/09 13:30	JRL	EPA 5035
SW846 8260B	9083484	NSH1890-08RE1	5.19	5.00	08/20/09 13:30	JRL	EPA 5035

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1890
		Project Name:	Laurel Bay Housing Project
Attn	Tom McElwee	Project Number:	[none]
		Received:	08/21/09 08:00

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

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

**9083484-BLK1**

Benzene	<0.000670		mg/kg wet	9083484	9083484-BLK1	08/29/09 03:13
Ethylbenzene	<0.000670		mg/kg wet	9083484	9083484-BLK1	08/29/09 03:13
Naphthalene	<0.00170		mg/kg wet	9083484	9083484-BLK1	08/29/09 03:13
Toluene	0.000440	B	mg/kg wet	9083484	9083484-BLK1	08/29/09 03:13
Xylenes, total	<0.00130		mg/kg wet	9083484	9083484-BLK1	08/29/09 03:13
<i>Surrogate: 1,2-Dichloroethane-d4</i>	105%			9083484	9083484-BLK1	08/29/09 03:13
<i>Surrogate: Dibromofluoromethane</i>	96%			9083484	9083484-BLK1	08/29/09 03:13
<i>Surrogate: Toluene-d8</i>	96%			9083484	9083484-BLK1	08/29/09 03:13
<i>Surrogate: 4-Bromofluorobenzene</i>	95%			9083484	9083484-BLK1	08/29/09 03:13

**9083572-BLK1**

Benzene	<0.000670		mg/kg wet	9083572	9083572-BLK1	08/28/09 15:43
Ethylbenzene	<0.000670		mg/kg wet	9083572	9083572-BLK1	08/28/09 15:43
Naphthalene	<0.00170		mg/kg wet	9083572	9083572-BLK1	08/28/09 15:43
Toluene	0.000580	B	mg/kg wet	9083572	9083572-BLK1	08/28/09 15:43
Xylenes, total	<0.00130		mg/kg wet	9083572	9083572-BLK1	08/28/09 15:43
<i>Surrogate: 1,2-Dichloroethane-d4</i>	107%			9083572	9083572-BLK1	08/28/09 15:43
<i>Surrogate: Dibromofluoromethane</i>	99%			9083572	9083572-BLK1	08/28/09 15:43
<i>Surrogate: Toluene-d8</i>	96%			9083572	9083572-BLK1	08/28/09 15:43
<i>Surrogate: 4-Bromofluorobenzene</i>	95%			9083572	9083572-BLK1	08/28/09 15:43

**9084596-BLK1**

Benzene	<0.000670		mg/kg wet	9084596	9084596-BLK1	08/31/09 15:00
Ethylbenzene	<0.000670		mg/kg wet	9084596	9084596-BLK1	08/31/09 15:00
Naphthalene	<0.00170		mg/kg wet	9084596	9084596-BLK1	08/31/09 15:00
Toluene	<0.000400		mg/kg wet	9084596	9084596-BLK1	08/31/09 15:00
Xylenes, total	<0.00130		mg/kg wet	9084596	9084596-BLK1	08/31/09 15:00
<i>Surrogate: 1,2-Dichloroethane-d4</i>	106%			9084596	9084596-BLK1	08/31/09 15:00
<i>Surrogate: Dibromofluoromethane</i>	96%			9084596	9084596-BLK1	08/31/09 15:00
<i>Surrogate: Toluene-d8</i>	97%			9084596	9084596-BLK1	08/31/09 15:00
<i>Surrogate: 4-Bromofluorobenzene</i>	95%			9084596	9084596-BLK1	08/31/09 15:00

**9085110-BLK1**

Benzene	<0.0335		mg/kg wet	9085110	9085110-BLK1	09/02/09 12:48
Ethylbenzene	<0.0335		mg/kg wet	9085110	9085110-BLK1	09/02/09 12:48
Naphthalene	<0.0850		mg/kg wet	9085110	9085110-BLK1	09/02/09 12:48
Toluene	<0.0200		mg/kg wet	9085110	9085110-BLK1	09/02/09 12:48
Xylenes, total	<0.0650		mg/kg wet	9085110	9085110-BLK1	09/02/09 12:48
<i>Surrogate: 1,2-Dichloroethane-d4</i>	105%			9085110	9085110-BLK1	09/02/09 12:48
<i>Surrogate: Dibromofluoromethane</i>	105%			9085110	9085110-BLK1	09/02/09 12:48
<i>Surrogate: Toluene-d8</i>	96%			9085110	9085110-BLK1	09/02/09 12:48
<i>Surrogate: 4-Bromofluorobenzene</i>	102%			9085110	9085110-BLK1	09/02/09 12:48

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

Work Order: NSH1890  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 08/21/09 08:00

## PROJECT QUALITY CONTROL DATA Blank - Cont.

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

#### Polyaromatic Hydrocarbons by EPA 8270D

##### 9083679-BLK1

Acenaphthene	<0.0320		mg/kg wet	9083679	9083679-BLK1	08/30/09 14:47
Acenaphthylene	<0.0310		mg/kg wet	9083679	9083679-BLK1	08/30/09 14:47
Anthracene	<0.0330		mg/kg wet	9083679	9083679-BLK1	08/30/09 14:47
Benzo (a) anthracene	<0.0380		mg/kg wet	9083679	9083679-BLK1	08/30/09 14:47
Benzo (a) pyrene	<0.0300		mg/kg wet	9083679	9083679-BLK1	08/30/09 14:47
Benzo (b) fluoranthene	<0.0300		mg/kg wet	9083679	9083679-BLK1	08/30/09 14:47
Benzo (g,h,i) perylene	<0.0300		mg/kg wet	9083679	9083679-BLK1	08/30/09 14:47
Benzo (k) fluoranthene	<0.0300		mg/kg wet	9083679	9083679-BLK1	08/30/09 14:47
Chrysene	<0.0400		mg/kg wet	9083679	9083679-BLK1	08/30/09 14:47
Dibenz (a,h) anthracene	<0.0310		mg/kg wet	9083679	9083679-BLK1	08/30/09 14:47
Fluoranthene	<0.0340		mg/kg wet	9083679	9083679-BLK1	08/30/09 14:47
Fluorene	<0.0360		mg/kg wet	9083679	9083679-BLK1	08/30/09 14:47
Indeno (1,2,3-cd) pyrene	<0.0310		mg/kg wet	9083679	9083679-BLK1	08/30/09 14:47
Naphthalene	<0.0410		mg/kg wet	9083679	9083679-BLK1	08/30/09 14:47
Phenanthrene	<0.0340		mg/kg wet	9083679	9083679-BLK1	08/30/09 14:47
Pyrene	<0.0410		mg/kg wet	9083679	9083679-BLK1	08/30/09 14:47
1-Methylnaphthalene	<0.0320		mg/kg wet	9083679	9083679-BLK1	08/30/09 14:47
2-Methylnaphthalene	<0.0330		mg/kg wet	9083679	9083679-BLK1	08/30/09 14:47
Surrogate: Terphenyl-d14	95%			9083679	9083679-BLK1	08/30/09 14:47
Surrogate: 2-Fluorobiphenyl	78%			9083679	9083679-BLK1	08/30/09 14:47
Surrogate: Nitrobenzene-d5	72%			9083679	9083679-BLK1	08/30/09 14:47

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

Attn Tom McElwee

Work Order: NSH1890  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 08/21/09 08:00

**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>9085104-DUP1</b>										
% Dry Solids	95.8	96.2		%	0.4	20	9085104	NSH1879-01		09/01/09 08:53

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

Work Order: NSH1890  
 Project Name: Laurel Bay Housing Project  
 Project Number: [none]  
 Received: 08/21/09 08:00

### PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
<b>Selected Volatile Organic Compounds by EPA Method 8260B</b>								
<b>9083484-BS1</b>								
Benzene	50.0	51.7		ug/kg	103%	78 - 126	9083484	08/29/09 01:14
Ethylbenzene	50.0	55.1		ug/kg	110%	79 - 130	9083484	08/29/09 01:14
Naphthalene	50.0	60.5		ug/kg	121%	72 - 150	9083484	08/29/09 01:14
Toluene	50.0	53.2		ug/kg	106%	76 - 126	9083484	08/29/09 01:14
Xylenes, total	150	165		ug/kg	110%	80 - 130	9083484	08/29/09 01:14
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0	53.1			106%	67 - 138	9083484	08/29/09 01:14
<i>Surrogate: DibromoFluoromethane</i>	50.0	50.6			101%	75 - 125	9083484	08/29/09 01:14
<i>Surrogate: Toluene-d8</i>	50.0	50.5			101%	76 - 129	9083484	08/29/09 01:14
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0	49.1			98%	67 - 147	9083484	08/29/09 01:14
<b>9083572-BS1</b>								
Benzene	50.0	52.2		ug/kg	104%	78 - 126	9083572	08/28/09 13:13
Ethylbenzene	50.0	57.5		ug/kg	115%	79 - 130	9083572	08/28/09 13:13
Naphthalene	50.0	59.0		ug/kg	118%	72 - 150	9083572	08/28/09 13:13
Toluene	50.0	54.6		ug/kg	109%	76 - 126	9083572	08/28/09 13:13
Xylenes, total	150	173		ug/kg	115%	80 - 130	9083572	08/28/09 13:13
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0	52.6			105%	67 - 138	9083572	08/28/09 13:13
<i>Surrogate: DibromoFluoromethane</i>	50.0	51.7			103%	75 - 125	9083572	08/28/09 13:13
<i>Surrogate: Toluene-d8</i>	50.0	50.2			100%	76 - 129	9083572	08/28/09 13:13
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0	47.9			96%	67 - 147	9083572	08/28/09 13:13
<b>9084596-BS1</b>								
Benzene	50.0	51.1		ug/kg	102%	78 - 126	9084596	08/31/09 13:00
Ethylbenzene	50.0	51.4		ug/kg	103%	79 - 130	9084596	08/31/09 13:00
Naphthalene	50.0	53.7		ug/kg	107%	72 - 150	9084596	08/31/09 13:00
Toluene	50.0	50.0		ug/kg	100%	76 - 126	9084596	08/31/09 13:00
Xylenes, total	150	155		ug/kg	104%	80 - 130	9084596	08/31/09 13:00
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0	52.1			104%	67 - 138	9084596	08/31/09 13:00
<i>Surrogate: DibromoFluoromethane</i>	50.0	50.4			101%	75 - 125	9084596	08/31/09 13:00
<i>Surrogate: Toluene-d8</i>	50.0	49.7			99%	76 - 129	9084596	08/31/09 13:00
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0	48.9			98%	67 - 147	9084596	08/31/09 13:00
<b>9085110-BS1</b>								
Benzene	50.0	50.3		ug/kg	101%	78 - 126	9085110	09/02/09 10:13
Ethylbenzene	50.0	49.7		ug/kg	99%	79 - 130	9085110	09/02/09 10:13
Naphthalene	50.0	51.6		ug/kg	103%	72 - 150	9085110	09/02/09 10:13
Toluene	50.0	54.1		ug/kg	108%	76 - 126	9085110	09/02/09 10:13
Xylenes, total	150	140		ug/kg	94%	80 - 130	9085110	09/02/09 10:13
<i>Surrogate: 1,2-Dichloroethane-d4</i>	25.0	25.7			103%	67 - 138	9085110	09/02/09 10:13
<i>Surrogate: DibromoFluoromethane</i>	25.0	26.0			104%	75 - 125	9085110	09/02/09 10:13
<i>Surrogate: Toluene-d8</i>	25.0	25.5			102%	76 - 129	9085110	09/02/09 10:13
<i>Surrogate: 4-Bromofluorobenzene</i>	25.0	23.4			94%	67 - 147	9085110	09/02/09 10:13

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1890
Attn	Tom McElwee	Project Name:	Laurel Bay Housing Project
		Project Number:	[none]
		Received:	08/21/09 08:00

## PROJECT QUALITY CONTROL DATA LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
<b>Selected Volatile Organic Compounds by EPA Method 8260B</b>								
<b>Polyaromatic Hydrocarbons by EPA 8270D</b>								
<b>9083679-BS1</b>								
Acenaphthene	1.67	1.34		mg/kg wet	80%	49 - 120	9083679	08/30/09 15:10
Acenaphthylene	1.67	1.39		mg/kg wet	83%	52 - 120	9083679	08/30/09 15:10
Anthracene	1.67	1.59		mg/kg wet	95%	58 - 120	9083679	08/30/09 15:10
Benzo (a) anthracene	1.67	1.32		mg/kg wet	79%	57 - 120	9083679	08/30/09 15:10
Benzo (a) pyrene	1.67	1.45		mg/kg wet	87%	55 - 120	9083679	08/30/09 15:10
Benzo (b) fluoranthene	1.67	1.35		mg/kg wet	81%	51 - 123	9083679	08/30/09 15:10
Benzo (g,h,i) perylene	1.67	1.55		mg/kg wet	93%	49 - 121	9083679	08/30/09 15:10
Benzo (k) fluoranthene	1.67	1.40		mg/kg wet	84%	42 - 129	9083679	08/30/09 15:10
Chrysene	1.67	1.37		mg/kg wet	82%	55 - 120	9083679	08/30/09 15:10
Dibenz (a,h) anthracene	1.67	1.54		mg/kg wet	92%	50 - 123	9083679	08/30/09 15:10
Fluoranthene	1.67	1.37		mg/kg wet	82%	58 - 120	9083679	08/30/09 15:10
Fluorene	1.67	1.35		mg/kg wet	81%	54 - 120	9083679	08/30/09 15:10
Indeno (1,2,3-cd) pyrene	1.67	1.53		mg/kg wet	92%	50 - 122	9083679	08/30/09 15:10
Naphthalene	1.67	1.08		mg/kg wet	65%	28 - 120	9083679	08/30/09 15:10
Phenanthrene	1.67	1.43		mg/kg wet	86%	56 - 120	9083679	08/30/09 15:10
Pyrene	1.67	1.42		mg/kg wet	85%	56 - 120	9083679	08/30/09 15:10
1-Methylnaphthalene	1.67	0.969		mg/kg wet	58%	36 - 120	9083679	08/30/09 15:10
2-Methylnaphthalene	1.67	1.02		mg/kg wet	61%	36 - 120	9083679	08/30/09 15:10
<i>Surrogate: Terphenyl-d14</i>	1.67	1.38			83%	18 - 120	9083679	08/30/09 15:10
<i>Surrogate: 2-Fluorobiphenyl</i>	1.67	1.26			76%	14 - 120	9083679	08/30/09 15:10
<i>Surrogate: Nitrobenzene-d5</i>	1.67	1.00			60%	17 - 120	9083679	08/30/09 15:10

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1890
		Project Name:	Laurel Bay Housing Project
Attn	Tom McElwee	Project Number:	[none]
		Received:	08/21/09 08:00

**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>Selected Volatile Organic Compounds by EPA Method 8260B</b>												
<b>9083484-BSD1</b>												
Benzene	51.4			ug/kg	50.0	103%	78 - 126	0.5	50	9083484		08/29/09 01:44
Ethylbenzene	53.6			ug/kg	50.0	107%	79 - 130	3	50	9083484		08/29/09 01:44
Naphthalene	52.8			ug/kg	50.0	106%	72 - 150	14	50	9083484		08/29/09 01:44
Toluene	52.5			ug/kg	50.0	105%	76 - 126	1	50	9083484		08/29/09 01:44
Xylenes, total	161			ug/kg	150	107%	80 - 130	2	50	9083484		08/29/09 01:44
Surrogate: 1,2-Dichloroethane-d4	52.8			ug/kg	50.0	106%	67 - 138			9083484		08/29/09 01:44
Surrogate: Dibromofluoromethane	51.0			ug/kg	50.0	102%	75 - 125			9083484		08/29/09 01:44
Surrogate: Toluene-d8	50.6			ug/kg	50.0	101%	76 - 129			9083484		08/29/09 01:44
Surrogate: 4-Bromofluorobenzene	49.3			ug/kg	50.0	99%	67 - 147			9083484		08/29/09 01:44
<b>9084596-BSD1</b>												
Benzene	49.4			ug/kg	50.0	99%	78 - 126	3	50	9084596		08/31/09 13:30
Ethylbenzene	52.2			ug/kg	50.0	104%	79 - 130	2	50	9084596		08/31/09 13:30
Naphthalene	54.0			ug/kg	50.0	108%	72 - 150	0.5	50	9084596		08/31/09 13:30
Toluene	51.1			ug/kg	50.0	102%	76 - 126	2	50	9084596		08/31/09 13:30
Xylenes, total	157			ug/kg	150	105%	80 - 130	1	50	9084596		08/31/09 13:30
Surrogate: 1,2-Dichloroethane-d4	52.2			ug/kg	50.0	104%	67 - 138			9084596		08/31/09 13:30
Surrogate: Dibromofluoromethane	50.5			ug/kg	50.0	101%	75 - 125			9084596		08/31/09 13:30
Surrogate: Toluene-d8	50.0			ug/kg	50.0	100%	76 - 129			9084596		08/31/09 13:30
Surrogate: 4-Bromofluorobenzene	47.9			ug/kg	50.0	96%	67 - 147			9084596		08/31/09 13:30
<b>9085110-BSD1</b>												
Benzene	51.2			ug/kg	50.0	102%	78 - 126	2	50	9085110		09/02/09 10:41
Ethylbenzene	50.6			ug/kg	50.0	101%	79 - 130	2	50	9085110		09/02/09 10:41
Naphthalene	51.2			ug/kg	50.0	102%	72 - 150	0.8	50	9085110		09/02/09 10:41
Toluene	55.2			ug/kg	50.0	110%	76 - 126	2	50	9085110		09/02/09 10:41
Xylenes, total	145			ug/kg	150	96%	80 - 130	3	50	9085110		09/02/09 10:41
Surrogate: 1,2-Dichloroethane-d4	25.5			ug/kg	25.0	102%	67 - 138			9085110		09/02/09 10:41
Surrogate: Dibromofluoromethane	25.8			ug/kg	25.0	103%	75 - 125			9085110		09/02/09 10:41
Surrogate: Toluene-d8	25.3			ug/kg	25.0	101%	76 - 129			9085110		09/02/09 10:41
Surrogate: 4-Bromofluorobenzene	23.2			ug/kg	25.0	93%	67 - 147			9085110		09/02/09 10:41

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1890
		Project Name:	Laurel Bay Housing Project
Attn	Tom McElwee	Project Number:	[none]
		Received:	08/21/09 08:00

**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>Selected Volatile Organic Compounds by EPA Method 8260B</b>										
<b>9083484-MS1</b>										
Benzene										
Benzene	ND	2.57		mg/kg dry	2.91	88%	42 - 141	9083484	NSH1890-08RE 1	08/29/09 07:13
Ethylbenzene	ND	2.74		mg/kg dry	2.91	94%	21 - 165	9083484	NSH1890-08RE 1	08/29/09 07:13
Naphthalene	ND	2.60		mg/kg dry	2.91	89%	10 - 160	9083484	NSH1890-08RE 1	08/29/09 07:13
Toluene	0.0263	2.55		mg/kg dry	2.91	87%	45 - 145	9083484	NSH1890-08RE 1	08/29/09 07:13
Xylenes, total	ND	8.40		mg/kg dry	8.72	96%	31 - 159	9083484	NSH1890-08RE 1	08/29/09 07:13
<i>Surrogate: 1,2-Dichloroethane-d4</i>		48.2		ug/kg	50.0	96%	67 - 138	9083484	NSH1890-08RE 1	08/29/09 07:13
<i>Surrogate: Dibromoformmethane</i>		49.4		ug/kg	50.0	99%	75 - 125	9083484	NSH1890-08RE 1	08/29/09 07:13
<i>Surrogate: Toluene-d8</i>		47.8		ug/kg	50.0	96%	76 - 129	9083484	NSH1890-08RE 1	08/29/09 07:13
<i>Surrogate: 4-Bromofluorobenzene</i>		46.9		ug/kg	50.0	94%	67 - 147	9083484	NSH1890-08RE 1	08/29/09 07:13
<b>9083572-MS1</b>										
Benzene										
Benzene	ND	2.43		mg/kg dry	2.66	91%	42 - 141	9083572	NSH1890-02RE 1	08/28/09 22:44
Ethylbenzene	0.0787	2.72		mg/kg dry	2.66	99%	21 - 165	9083572	NSH1890-02RE 1	08/28/09 22:44
Naphthalene	0.780	2.82		mg/kg dry	2.66	77%	10 - 160	9083572	NSH1890-02RE 1	08/28/09 22:44
Toluene	0.0775	2.49		mg/kg dry	2.66	91%	45 - 145	9083572	NSH1890-02RE 1	08/28/09 22:44
Xylenes, total	0.292	8.14		mg/kg dry	7.99	98%	31 - 159	9083572	NSH1890-02RE 1	08/28/09 22:44
<i>Surrogate: 1,2-Dichloroethane-d4</i>		50.6		ug/kg	50.0	101%	67 - 138	9083572	NSH1890-02RE 1	08/28/09 22:44
<i>Surrogate: Dibromoformmethane</i>		48.4		ug/kg	50.0	97%	75 - 125	9083572	NSH1890-02RE 1	08/28/09 22:44
<i>Surrogate: Toluene-d8</i>		48.7		ug/kg	50.0	97%	76 - 129	9083572	NSH1890-02RE 1	08/28/09 22:44
<i>Surrogate: 4-Bromofluorobenzene</i>		51.5		ug/kg	50.0	103%	67 - 147	9083572	NSH1890-02RE 1	08/28/09 22:44
<b>9084596-MS1</b>										
Benzene										
Benzene	ND	2.48		mg/kg wet	2.50	99%	42 - 141	9084596	NSH1986-01RE 1	08/31/09 23:34
Ethylbenzene	0.920	3.38		mg/kg wet	2.50	98%	21 - 165	9084596	NSH1986-01RE 1	08/31/09 23:34
Naphthalene	1.85	4.24		mg/kg wet	2.50	96%	10 - 160	9084596	NSH1986-01RE 1	08/31/09 23:34
Toluene	0.0311	2.34		mg/kg wet	2.50	92%	45 - 145	9084596	NSH1986-01RE 1	08/31/09 23:34

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1890
		Project Name:	Laurel Bay Housing Project
Attn	Tom McElwee	Project Number:	[none]
		Received:	08/21/09 08:00

**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>Selected Volatile Organic Compounds by EPA Method 8260B</b>										
<b>9084596-MS1</b>										
Xylenes, total	2.31	9.68		mg/kg wet	7.50	98%	31 - 159	9084596	NSH1986-01RE 1	08/31/09 23:34
Surrogate: 1,2-Dichloroethane-d4		49.6		ug/kg	50.0	99%	67 - 138	9084596	NSH1986-01RE 1	08/31/09 23:34
Surrogate: Dibromoformmethane		49.2		ug/kg	50.0	98%	75 - 125	9084596	NSH1986-01RE 1	08/31/09 23:34
Surrogate: Toluene-d8		47.3		ug/kg	50.0	95%	76 - 129	9084596	NSH1986-01RE 1	08/31/09 23:34
Surrogate: 4-Bromofluorobenzene		48.0		ug/kg	50.0	96%	67 - 147	9084596	NSH1986-01RE 1	08/31/09 23:34
<b>Polyaromatic Hydrocarbons by EPA 8270D</b>										
<b>9083679-MS1</b>										
Acenaphthene	ND	1.27		mg/kg dry	1.74	73%	42 - 120	9083679	NSH1908-05	08/30/09 15:32
Acenaphthylene	ND	1.31		mg/kg dry	1.74	75%	32 - 120	9083679	NSH1908-05	08/30/09 15:32
Anthracene	ND	1.45		mg/kg dry	1.74	83%	10 - 200	9083679	NSH1908-05	08/30/09 15:32
Benzo (a) anthracene	ND	1.21		mg/kg dry	1.74	70%	41 - 120	9083679	NSH1908-05	08/30/09 15:32
Benzo (a) pyrene	ND	1.32		mg/kg dry	1.74	76%	33 - 121	9083679	NSH1908-05	08/30/09 15:32
Benzo (b) fluoranthene	ND	1.32		mg/kg dry	1.74	76%	26 - 137	9083679	NSH1908-05	08/30/09 15:32
Benzo (g,h,i) perylene	ND	1.43		mg/kg dry	1.74	82%	21 - 124	9083679	NSH1908-05	08/30/09 15:32
Benzo (k) fluoranthene	ND	1.24		mg/kg dry	1.74	71%	14 - 140	9083679	NSH1908-05	08/30/09 15:32
Chrysene	ND	1.26		mg/kg dry	1.74	73%	28 - 123	9083679	NSH1908-05	08/30/09 15:32
Dibenz (a,h) anthracene	ND	1.42		mg/kg dry	1.74	82%	25 - 127	9083679	NSH1908-05	08/30/09 15:32
Fluoranthene	ND	1.25		mg/kg dry	1.74	72%	38 - 120	9083679	NSH1908-05	08/30/09 15:32
Fluorene	ND	1.28		mg/kg dry	1.74	73%	41 - 120	9083679	NSH1908-05	08/30/09 15:32
Indeno (1,2,3-cd) pyrene	ND	1.41		mg/kg dry	1.74	81%	25 - 123	9083679	NSH1908-05	08/30/09 15:32
Naphthalene	ND	1.07		mg/kg dry	1.74	61%	25 - 120	9083679	NSH1908-05	08/30/09 15:32
Phenanthrene	ND	1.31		mg/kg dry	1.74	76%	37 - 120	9083679	NSH1908-05	08/30/09 15:32
Pyrene	ND	1.31		mg/kg dry	1.74	75%	29 - 125	9083679	NSH1908-05	08/30/09 15:32
1-Methylnaphthalene	ND	0.951		mg/kg dry	1.74	55%	19 - 120	9083679	NSH1908-05	08/30/09 15:32
2-Methylnaphthalene	ND	0.989		mg/kg dry	1.74	57%	11 - 120	9083679	NSH1908-05	08/30/09 15:32
Surrogate: Terphenyl-d14		1.25		mg/kg dry	1.74	72%	18 - 120	9083679	NSH1908-05	08/30/09 15:32
Surrogate: 2-Fluorobiphenyl		1.24		mg/kg dry	1.74	71%	14 - 120	9083679	NSH1908-05	08/30/09 15:32
Surrogate: Nitrobenzene-d5		1.04		mg/kg dry	1.74	60%	17 - 120	9083679	NSH1908-05	08/30/09 15:32

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1890
		Project Name:	Laurel Bay Housing Project
Attn	Tom McElwee	Project Number:	[none]
		Received:	08/21/09 08:00

**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>Selected Volatile Organic Compounds by EPA Method 8260B</b>												
<b>9083484-MSD1</b>												
Benzene	ND	2.35		mg/kg dry	2.91	81%	42 - 141	9	50	9083484	NSH1890-08R E1	08/29/09 07:43
Ethylbenzene	ND	2.41		mg/kg dry	2.91	83%	21 - 165	13	50	9083484	NSH1890-08R E1	08/29/09 07:43
Naphthalene	ND	2.45		mg/kg dry	2.91	84%	10 - 160	6	50	9083484	NSH1890-08R E1	08/29/09 07:43
Toluene	0.0263	2.32		mg/kg dry	2.91	79%	45 - 145	10	50	9083484	NSH1890-08R E1	08/29/09 07:43
Xylenes, total	ND	7.33		mg/kg dry	8.72	84%	31 - 159	14	50	9083484	NSH1890-08R E1	08/29/09 07:43
<i>Surrogate: 1,2-Dichloroethane-d4</i>		49.8		ug/kg	50.0	100%	67 - 138			9083484	NSH1890-08R E1	08/29/09 07:43
<i>Surrogate: Dibromofluoromethane</i>		49.5		ug/kg	50.0	99%	75 - 125			9083484	NSH1890-08R E1	08/29/09 07:43
<i>Surrogate: Toluene-d8</i>		47.4		ug/kg	50.0	95%	76 - 129			9083484	NSH1890-08R E1	08/29/09 07:43
<i>Surrogate: 4-Bromofluorobenzene</i>		46.8		ug/kg	50.0	94%	67 - 147			9083484	NSH1890-08R E1	08/29/09 07:43
<b>9083572-MSD1</b>												
Benzene	ND	2.17		mg/kg dry	2.66	81%	42 - 141	11	50	9083572	NSH1890-02R E1	08/28/09 23:14
Ethylbenzene	0.0787	2.36		mg/kg dry	2.66	86%	21 - 165	14	50	9083572	NSH1890-02R E1	08/28/09 23:14
Naphthalene	0.780	2.35		mg/kg dry	2.66	59%	10 - 160	18	50	9083572	NSH1890-02R E1	08/28/09 23:14
Toluene	0.0775	2.15		mg/kg dry	2.66	78%	45 - 145	14	50	9083572	NSH1890-02R E1	08/28/09 23:14
Xylenes, total	0.292	6.95		mg/kg dry	7.99	83%	31 - 159	16	50	9083572	NSH1890-02R E1	08/28/09 23:14
<i>Surrogate: 1,2-Dichloroethane-d4</i>		49.7		ug/kg	50.0	99%	67 - 138			9083572	NSH1890-02R E1	08/28/09 23:14
<i>Surrogate: Dibromofluoromethane</i>		46.5		ug/kg	50.0	93%	75 - 125			9083572	NSH1890-02R E1	08/28/09 23:14
<i>Surrogate: Toluene-d8</i>		48.7		ug/kg	50.0	97%	76 - 129			9083572	NSH1890-02R E1	08/28/09 23:14
<i>Surrogate: 4-Bromofluorobenzene</i>		52.5		ug/kg	50.0	105%	67 - 147			9083572	NSH1890-02R E1	08/28/09 23:14
<b>9084596-MSD1</b>												
Benzene	ND	2.51		mg/kg wet	2.50	100%	42 - 141	1	50	9084596	NSH1986-01R E1	09/01/09 00:04
Ethylbenzene	0.920	3.38		mg/kg wet	2.50	98%	21 - 165	0.09	50	9084596	NSH1986-01R E1	09/01/09 00:04
Toluene	0.0311	2.33		mg/kg wet	2.50	92%	45 - 145	0.4	50	9084596	NSH1986-01R E1	09/01/09 00:04
Xylenes, total	2.31	9.68		mg/kg wet	7.50	98%	31 - 159	0.005	50	9084596	NSH1986-01R E1	09/01/09 00:04
<i>Surrogate: 1,2-Dichloroethane-d4</i>		48.2		ug/kg	50.0	96%	67 - 138			9084596	NSH1986-01R E1	09/01/09 00:04

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1890
		Project Name:	Laurel Bay Housing Project
Attn	Tom McElwee	Project Number:	[none]
		Received:	08/21/09 08:00

**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>Selected Volatile Organic Compounds by EPA Method 8260B</b>												
<b>9084596-MSD1</b>												
Surrogate: Dibromofluoromethane	48.9			ug/kg	50.0	98%	75 - 125			9084596	NSH1986-01R E1	09/01/09 00:04
Surrogate: Toluene-d8	46.6			ug/kg	50.0	93%	76 - 129			9084596	NSH1986-01R E1	09/01/09 00:04
Surrogate: 4-Bromofluorobenzene	47.9			ug/kg	50.0	96%	67 - 147			9084596	NSH1986-01R E1	09/01/09 00:04
<b>Polyaromatic Hydrocarbons by EPA 8270D</b>												
<b>9083679-MSD1</b>												
Acenaphthene	ND	1.37		mg/kg dry	1.73	79%	42 - 120	8	40	9083679	NSH1908-05	08/30/09 15:55
Acenaphthylene	ND	1.40		mg/kg dry	1.73	81%	32 - 120	7	30	9083679	NSH1908-05	08/30/09 15:55
Anthracene	ND	1.59		mg/kg dry	1.73	92%	10 - 200	9	50	9083679	NSH1908-05	08/30/09 15:55
Benzo (a) anthracene	ND	1.33		mg/kg dry	1.73	77%	41 - 120	9	30	9083679	NSH1908-05	08/30/09 15:55
Benzo (a) pyrene	ND	1.43		mg/kg dry	1.73	82%	33 - 121	8	33	9083679	NSH1908-05	08/30/09 15:55
Benzo (b) fluoranthene	ND	1.43		mg/kg dry	1.73	82%	26 - 137	7	42	9083679	NSH1908-05	08/30/09 15:55
Benzo (g,h,i) perylene	ND	1.54		mg/kg dry	1.73	89%	21 - 124	8	32	9083679	NSH1908-05	08/30/09 15:55
Benzo (k) fluoranthene	ND	1.38		mg/kg dry	1.73	80%	14 - 140	10	39	9083679	NSH1908-05	08/30/09 15:55
Chrysene	ND	1.36		mg/kg dry	1.73	79%	28 - 123	8	34	9083679	NSH1908-05	08/30/09 15:55
Dibenz (a,h) anthracene	ND	1.56		mg/kg dry	1.73	90%	25 - 127	9	31	9083679	NSH1908-05	08/30/09 15:55
Fluoranthene	ND	1.38		mg/kg dry	1.73	80%	38 - 120	10	35	9083679	NSH1908-05	08/30/09 15:55
Fluorene	ND	1.38		mg/kg dry	1.73	80%	41 - 120	8	37	9083679	NSH1908-05	08/30/09 15:55
Indeno (1,2,3-cd) pyrene	ND	1.54		mg/kg dry	1.73	89%	25 - 123	9	32	9083679	NSH1908-05	08/30/09 15:55
Naphthalene	ND	1.07		mg/kg dry	1.73	62%	25 - 120	0.5	42	9083679	NSH1908-05	08/30/09 15:55
Phenanthrene	ND	1.44		mg/kg dry	1.73	83%	37 - 120	10	32	9083679	NSH1908-05	08/30/09 15:55
Pyrene	ND	1.42		mg/kg dry	1.73	82%	29 - 125	8	40	9083679	NSH1908-05	08/30/09 15:55
1-Methylnaphthalene	ND	0.994		mg/kg dry	1.73	57%	19 - 120	4	45	9083679	NSH1908-05	08/30/09 15:55
2-Methylnaphthalene	ND	1.03		mg/kg dry	1.73	59%	11 - 120	4	50	9083679	NSH1908-05	08/30/09 15:55
Surrogate: Terphenyl-d14		1.37		mg/kg dry	1.73	79%	18 - 120			9083679	NSH1908-05	08/30/09 15:55
Surrogate: 2-Fluorobiphenyl		1.35		mg/kg dry	1.73	78%	14 - 120			9083679	NSH1908-05	08/30/09 15:55
Surrogate: Nitrobenzene-d5		1.10		mg/kg dry	1.73	64%	17 - 120			9083679	NSH1908-05	08/30/09 15:55

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

Work Order: NSH1890  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 08/21/09 08:00

## 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: NSH1890  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 08/21/09 08:00

#### DATA QUALIFIERS AND DEFINITIONS

- B** Analyte was detected in the associated Method Blank.  
**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



**Nashville Division  
2960 Foster Creighton  
Nashville, TN 37204**

**Phone: 615-728-0177  
Toll Free: 800-765-0980  
Fax: 615-728-3404**

**Client Name/Account #:** EEG # 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.: 393-574-0401

**Sampler Name: (Print)**

**Sampler Signature:**

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

09.04.09 23:59

09.04.09 23:59

**Compliance Monitoring?**

**Yes**      **No**

**Enforcement Action?**

Yes \_\_\_\_\_ No \_\_\_\_\_

**Site State:** SC

PO#:

TA Quote #:

**Project ID: Laurel Bay Housing Project**

Project

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Preservative	Matrix	Analyze For:
1190 Bobwhite	8/19/09	1030	5	X	2	
1186 Bobwhite	8/19/09	0930	5	X	2	
1210 CARDINAL	8/19/09	1435	5	X	2	
1206 CARDINAL	8/19/09	1445	5	X	2	
1205 CARDINAL	8/20/09	0910	5	X	2	
1201 CARDINAL	8/20/09	0930	5	X	2	
1207 CARDINAL	8/20/09	1145	5	X	2	
1211 CARDINAL	8/20/09	1330	5	X	2	

**Special Instructions:**

**Method of Shipment:**

EEDE

**Laboratory Comments**

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

Relinquished by	Date
	8/29/00

Relinquished by: / / Date: / /

ATTACHMENT A



# NON-HAZARDOUS MANIFEST

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

<b>NON-HAZARDOUS MANIFEST</b>		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1
3. Generator's Name and Mailing Address <b>MCAS, Beaufort Laurel Bay Housing Beaufort SC 29904</b>				A. Manifest Number <b>WMNA 10885422</b>
4. Generator's Phone <b>843 228-6460</b>				B. State Generator's ID
5. Transporter 1 Company Name <b>EEG, Inc.</b>		6. US EPA ID Number	C. State Transporter's ID	
7. Transporter 2 Company Name		8. US EPA ID Number	D. Transporter's Phone <b>843 879-0411</b>	
9. Designated Facility Name and Site Address <b>HICKORY HILL LANDFILL ROUTE 1, BOX 121 RIDGE LAND SC 29936</b>		10. US EPA ID Number	E. State Transporter's ID	
11. Description of Waste Materials <b>a Heating Oil Tank filled with Sand</b>		12. Containers No.	13. Total Quantity	14. Unit Wt/Vol.
GEN ERA TO R	WM Profile # <b>102655SC</b>	<b>0 0 1</b>	<b>7.96</b>	<b>TN</b>
	WM Profile #			
	WM Profile #			
	WM Profile #			
J. Additional Descriptions for Materials Listed Above Landfill _____ Solidification _____ Bio Remediation _____		K. Disposal Location Cell _____ Level _____ Grid _____		
15. Special Handling Instructions and Additional Information <i>(REAGENTS FROM D1176 Bobwhite Purchase Order # 2/1172 Bobwhite)</i>		3) 1180 Bobwhite 4) 1182 Bobwhite 5) 1186 Bobwhite 6) 1190 Bobwhite EMERGENCY CONTACT:		
16. GENERATOR'S CERTIFICATION: I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable regulations.				
Printed/Typed Name <i>W.B. Dakos, Jr.</i>		Signature "On behalf of" <i>[Signature]</i> Month Day Year <i>04/03/09</i>		
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <i>James Baldwin</i>		Signature <i>James Baldwin</i> Month Day Year <i>04/03/09</i>	
	18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature	
ACILITY	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/Typed Name <i>Jan Collins</i>		Signature <i>[Signature]</i>	

Appendix C  
Laboratory Analytical Report - Groundwater

# Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Laboratory ID: QF10006-021

Description: BEALB1190TW01WG20150611

Matrix: Aqueous

Date Sampled: 06/11/2015 0905

Date Received: 06/12/2015

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	06/17/2015 1524	EH1		77479			
Parameter		CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene		71-43-2	8260B	0.45	U	5.0	0.45	0.21	ug/L	1
Ethylbenzene		100-41-4	8260B	0.51	U	5.0	0.51	0.21	ug/L	1
Naphthalene		91-20-3	8260B	0.96	U	5.0	0.96	0.14	ug/L	1
Toluene		108-88-3	8260B	0.48	U	5.0	0.48	0.24	ug/L	1
Xylenes (total)		1330-20-7	8260B	0.57	U	5.0	0.57	0.19	ug/L	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits							
Bromofluorobenzene	100		75-120							
1,2-Dichloroethane-d4	111		70-120							
Toluene-d8	106		85-120							
Dibromofluoromethane	102		85-115							

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Q = Surrogate failure

ND = Not detected at or above the MDL

J = Estimated result < PQL and  $\geq$  MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

L

= LCS/LCSD failure

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

S = MS/MSD failure

Shealy Environmental Services, Inc.

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

Level 1 Report v2.1

# Semivolatile Organic Compounds by GC/MS (SIM)

Client: AECOM - Resolution Consultants

Laboratory ID: QF10006-021

Description: BEALB1190TW01WG20150611

Matrix: Aqueous

Date Sampled: 06/11/2015 0905

Date Received: 06/12/2015

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch					
1	3520C	8270D (SIM)	1	06/20/2015 0030	RBH	06/17/2015 1058	77467					
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		81			15-139							
Fluoranthene-d10		78			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  $\geq$  MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

L = LCS/LCSD failure

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

S = MS/MSD failure

Shealy Environmental Services, Inc.

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

Level 1 Report v2.1

Appendix D  
Laboratory Analytical Report - Vapor

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 1

**Client:** AECOM

**Client Sample ID:** BEALB1190SG01GS20160510

ALS Project ID: P1602451

**Client Project ID:** WE56 LBMH Soil Vapor Assesments / 60342031.FI.WI

ALS Sample ID: P1602451-005

Test Code: EPA TO-15

Date Collected: 5/10/16

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8

Date Received: 5/11/16

Analyst: Wida Ang

Date Analyzed: 5/17/16

Sampling Media: 6.0 L Summa Canister

Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container ID: SC01755

Initial Pressure (psig): -2.69      Final Pressure (psig): 3.58

Canister Dilution Factor: 1.52

CAS #	Compound	Result µg/m³	LOQ µg/m³	LOD µg/m³	MDL µg/m³	Data Qualifier
71-43-2	Benzene	0.67	0.76	0.67	0.24	U
108-88-3	Toluene	<b>0.81</b>	0.76	0.64	0.26	
100-41-4	Ethylbenzene	<b>0.76</b>	0.76	0.64	0.24	J
179601-23-1	m,p-Xylenes	<b>2.6</b>	1.5	1.3	0.46	
95-47-6	o-Xylene	<b>1.5</b>	0.76	0.62	0.23	
91-20-3	Naphthalene	<b>0.93</b>	0.76	0.61	0.27	

U = Undetected at the limit of detection: The associated data value is the limit of detection, adjusted by any dilution factor used in the analysis.

LOQ = Limit of Quantitation - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the LOQ but greater than or equal to the MDL.

Appendix E  
Regulatory Correspondence

# D H E C

PROMOTE PROTECT PROSPER

Catherine B. Templeton, Director

May 15, 2014

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

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

Dear Mr. Drawdy,

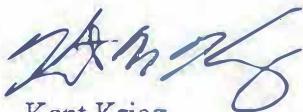
The South Carolina Department of Health and Environmental Control (the Department) received the above referenced Underground Storage Tank Assessment Reports for the addresses listed above. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina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

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

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

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

Sincerely,



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

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

# D H E C

PROMOTE PROTECT PROSPER

Catherine B. Templeton, Director

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

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

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

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

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



Catherine E. Heigel, Director

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

Division of Waste Management  
Bureau of Land and Waste Management

February 22, 2016

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

RE: Approval and Concurrence with Draft Final Initial Groundwater Investigation Report-May and June 2015  
Laurel Bay Military Housing Area Multiple Properties  
Dated October 2015

Dear Mr. Drawdy,

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

Per the Department's request, groundwater samples were collected from the attached referenced addresses. The Department reviewed the groundwater data and previous investigations and it agrees with the conclusions and recommendations included in the document. To further assess the impact to groundwater, permanent wells should be installed at the 52 stated addresses. For the remaining 91 addresses, there is no indication of contamination on the property and therefore no further investigation is required at this time.

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

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

Sincerely,

Laurel Petrus  
RCRA Federal Facilities Section

*Attachment: Specific Property Recommendations*

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

Attachment to: Petrus to Drawdy  
Subject: Draft Final Initial Groundwater Investigation Report-May and June 2015  
Specific Property Recommendations  
Dated February 22, 2016

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

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

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

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

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

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

Attachment to: Petrus to Drawdy

Subject: Draft Final Initial Groundwater Investigation Report-May and June 2015

Specific Property Recommendations

Dated February 22, 2016, Page 2



Healthy People. Healthy Communities.

June 20, 2017

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

RE: Approval Response to Comments and Draft Final Revision 1 Vapor Intrusion Report July 2015, January 2016 and May 2016, Laurel Bay Military Housing Area, Multiple Properties

RE: Approval Response to Comments and Draft Final Revision 1 Letter Report - Petroleum Vapor Intrusion Investigations - June 2016 and January 2017, Multiple Properties, Laurel Bay Military Housing Area

Dear Mr. Drawdy:

The South Carolina Department of Health and Environmental Control (DHEC) received the above referenced response to comments and errata pages on May 24 and June 7, 2017. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

DHEC has reviewed the response to comments and errata pages. Based on this review, DHEC did not generate any additional comments. Please note that the Department's decision is based on information provided by the Marine Corps Air Station (MCAS) to date. Any information found to be contradictory to this decision may require additional action. Furthermore, the Department retains the right to request further investigation if deemed necessary. If you have any questions, please contact me at petruslb@dhec.sc.gov or 803-898-0294.

Sincerely,

Laurel Petrus  
Department of Defense Corrective Action Section

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