

**SUMMARY REPORT**  
**728 WEST CARDINAL LANE (FORMERLY 1477 WEST CARDINAL LANE)**  
**LAUREL BAY MILITARY HOUSING AREA**  
**MARINE CORPS AIR STATION BEAUFORT**  
**BEAUFORT, SC**

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

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

and



**Naval Facilities Engineering Command Atlantic**  
**9324 Virginia Avenue**  
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**JUNE 2021**

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**Norfolk, Virginia 23511-3095**

**Prepared by:**

**CDM - AECOM**  
Multimedia Joint Venture

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**10560 Arrowhead Drive, Suite 500**  
**Fairfax, Virginia 22030**

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

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## Table of Contents

<b>1.0 INTRODUCTION .....</b>	<b>1</b>
1.1 BACKGROUND INFORMATION.....	1
1.2 UST REMOVAL AND ASSESSMENT PROCESS.....	2
<b>2.0 SAMPLING ACTIVITIES AND RESULTS.....</b>	<b>4</b>
2.1 UST REMOVAL AND SOIL SAMPLING .....	4
2.2 SOIL ANALYTICAL RESULTS.....	4
2.3 GROUNDWATER SAMPLING.....	5
2.4 GROUNDWATER ANALYTICAL RESULTS .....	5
2.5 SOIL GAS SAMPLING.....	6
2.6 SOIL GAS ANALYTICAL RESULTS .....	6
<b>3.0 PROPERTY STATUS.....</b>	<b>7</b>
<b>4.0 REFERENCES .....</b>	<b>7</b>

## Tables

Table 1	Laboratory Analytical Results - Soil
Table 2	Laboratory Analytical Results - Groundwater
Table 3	Laboratory Analytical Results - Vapor

## Appendices

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

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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

## **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 728 West Cardinal Lane (Formerly 1477 West Cardinal Lane). 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 (QAPP)* for

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*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 728 West Cardinal Lane (Formerly 1477 West Cardinal Lane). The sampling activities at 728 West Cardinal Lane (Formerly 1477 West Cardinal Lane) 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 – 1478 West Cardinal Lane* (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 – February 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 *Technical Memorandum – Soil Gas Sampling Results – October 2014* (Resolution Consultants, 2015). 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 17, 2009, a single 280 gallon heating oil UST was removed from the front landscaped area adjacent to concrete porch at 728 West Cardinal Lane (Formerly 1477 West Cardinal Lane). 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 presented

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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 728 West Cardinal Lane (Formerly 1477 West Cardinal Lane) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated April 1, 2014, SCDHEC requested an IGWA for 728 West Cardinal Lane (Formerly 1477 West Cardinal Lane) 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 4, 2015, a temporary monitoring well was installed at 728 West Cardinal Lane (Formerly 1477 West Cardinal Lane), 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, May 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 728 West Cardinal Lane (Formerly 1477 West Cardinal Lane) 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 October 2, 2014, a temporary subsurface soil gas well was installed at 728 West Cardinal Lane (Formerly 1477 West Cardinal Lane) in accordance with the SCDHEC approved *Uniform Federal Policy Sampling and Analysis Plan (UFP SAP) for Vapor Media* (Resolution Consultants, 2015). 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 *Technical Memorandum – Soil Gas Sampling Results – October 2014* (Resolution Consultants, 2015).

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 728 West Cardinal Lane (Formerly 1477 West Cardinal Lane) was sampled on October 7, 2014. A soil gas sample was collected and was 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* (Resolution Consultants, 2015). Field forms are provided in the *Technical Memorandum – Soil Gas Sampling Results – October 2014* (Resolution Consultants, 2015).

## **2.6 Soil Gas Analytical Results**

A summary of the laboratory analytical results and USEPA (United States Environmental Protection Agency) 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 728 West Cardinal Lane (Formerly 1477 West Cardinal Lane) 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 728 West Cardinal Lane (Formerly 1477 West Cardinal Lane) 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 728 West Cardinal Lane (Formerly 1477 West Cardinal Lane). The NFA determination for groundwater was obtained in a letter dated May 5, 2015. 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 728 West Cardinal Lane (Formerly 1477 West Cardinal Lane) in a letter dated March 10, 2015. 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 – 1477 West Cardinal Lane, Laurel Bay Military Housing Area*, November 2009.

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

Resolution Consultants, 2015. *Technical Memorandum – Soil Gas Sampling Results – October 2014 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, January 2015.

Resolution Consultants, 2015. *Uniform Federal Policy Sampling and Analysis Plan for Vapor Media, for Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, February 2015.

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

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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, 2014. *USEPA OSWER Vapor Intrusion Assessment, Vapor Intrusion Screening Level Calculator, Version 3.3.1*, May 2014.

## **Tables**

**Table 1**  
**Laboratory Analytical Results - Soil**  
**728 West Cardinal Lane (Formerly 1477 West Cardinal Lane)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Results Sample Collected 08/17/09
<b>Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)</b>		
Benzene	0.007	ND
Ethylbenzene	1.15	<b>0.169</b>
Naphthalene	0.036	<b>1.79</b>
Toluene	1.45	ND
Xylenes, Total	14.5	<b>0.118</b>
<b>Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)</b>		
Benzo(a)anthracene	0.066	<b>0.499</b>
Benzo(b)fluoranthene	0.066	<b>0.228</b>
Benzo(k)fluoranthene	0.066	<b>0.215</b>
Chrysene	0.066	<b>0.520</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**  
**728 West Cardinal Lane (Formerly 1477 West Cardinal Lane)**  
**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 Sample Collected 02/06/15
<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	<b>1.9</b>
Naphthalene	25	29.33	<b>1.7</b>
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	<b>0.13</b>
Benzo(b)fluoranthene	10	NA	<b>0.091</b>
Benzo(k)fluoranthene	10	NA	<b>0.032</b>
Chrysene	10	NA	<b>0.13</b>
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 2.0 (SCDHEC, April 2013).

(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**  
**728 West Cardinal Lane (Formerly 1477 West Cardinal Lane)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

<b>Constituent</b>	<b>USEPA VISL<sup>(1)</sup></b>	<b>Results Sample Collected 10/07/14</b>
<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	ND
m,p-Xylenes	350	ND
o-Xylene	350	ND
Naphthalene	2.8	ND

**Notes:**

<sup>(1)</sup> United States Environmental Protection Agency Exterior Soil Gas Vapor Intrusion Screening Level (VISL) from VISL Calculator (Version 3.3.1, May 2014).

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

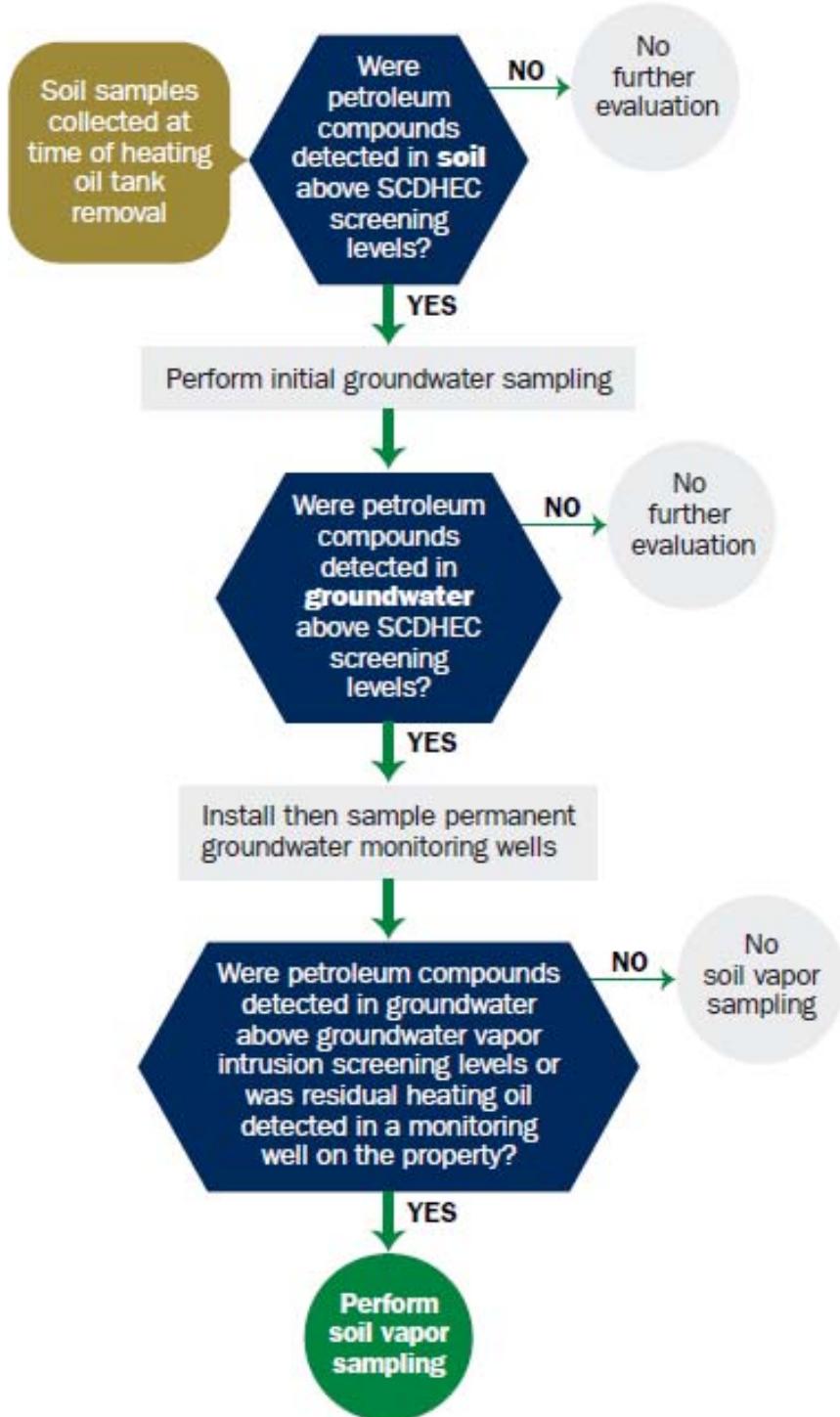
ND - not detected at the reporting limit (or method detection limit if shown on the laboratory report). The vapor laboratory report is provided in Appendix D.

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**

**RECEIVED**

Date Received

State Use Only

Submit Completed Form To NOV 09 2009  
 UST Program

SCDHEC

2600 Bull Street

Columbia, South Carolina 29204  
 Telephone (803) 896-7957

SC DHEC - Bureau of  
 Land & Waste Management

### 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,  
City

South Carolina  
State

29904-5001  
Zip Code

843  
Area Code

228-7317  
Telephone Number

Craig Ehde  
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

1477 Cardinal Lane, 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.....

1477Cardinal				
Heating oil				
280 gal				
Late 1950s				
Steel				
Mid 1980s				
5'8"				
No				
No				
Removed				
8/17/09				
Yes				
Yes				

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

UST 1477Cardinal was removed from the ground and disposed of at a Subtitle "D" landfill. See Attachment "A".

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

UST 1477Cardinal had been previously filled with sand by others.

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

Corrosion, pitting and holes were found throughout the tank.

## VII. PIPING INFORMATION

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

1477Cardinal				
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"/> X	<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"/> X	<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"/> X	<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"/> X	<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"/> X	<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 #
1477 Cardinal	Excav at fill end	Soil	Sandy	5' 8"	8/17/09 1040 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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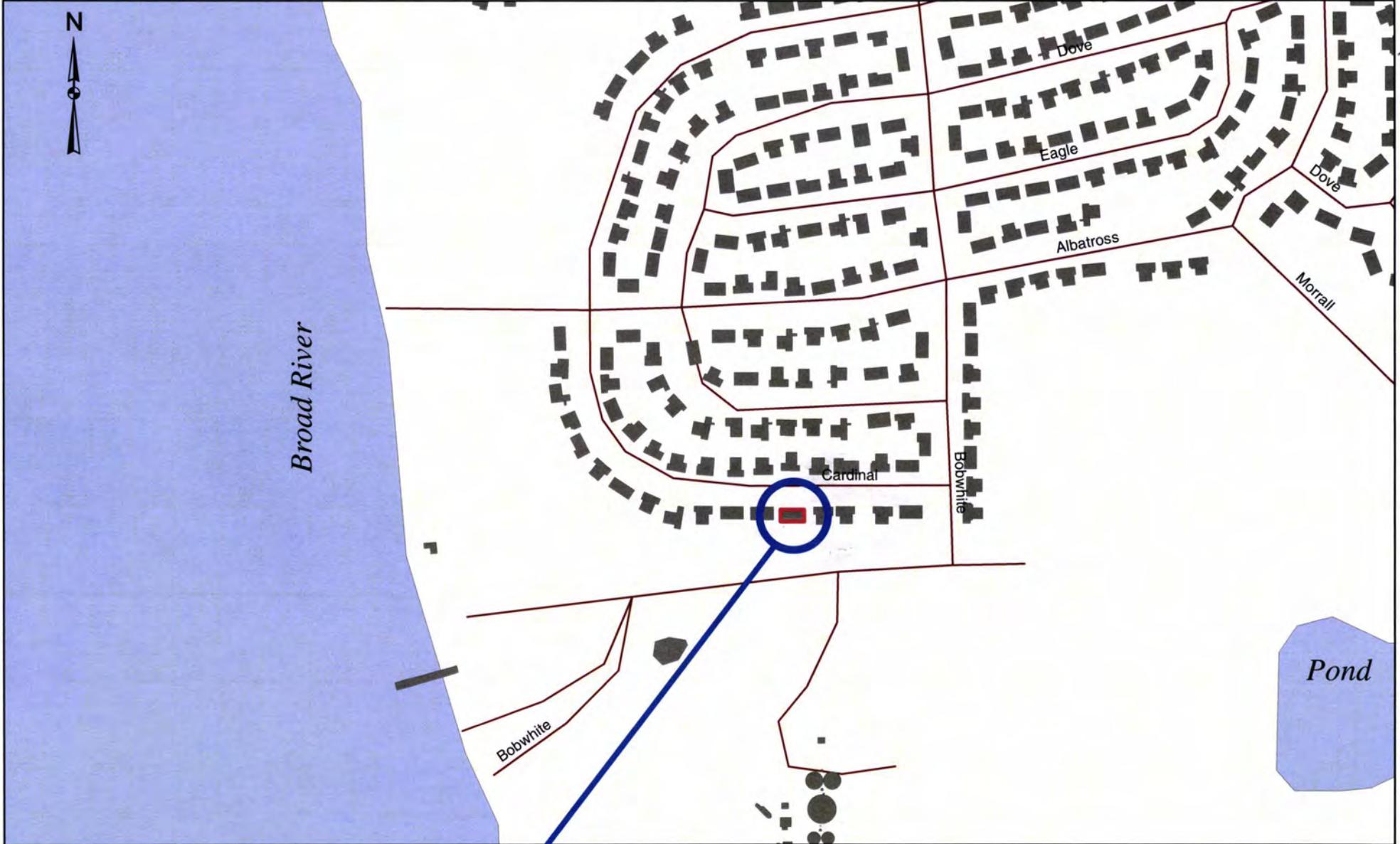
## XII. RECEPTORS

	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?  *Sewer & water  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)



0 100 200 400 600 800 1,000  
 Feet

**SBG-EEG, Inc.**  
 Small Business Group, Inc.  
 10179 Hwy 78  
 Ladson, SC 29456

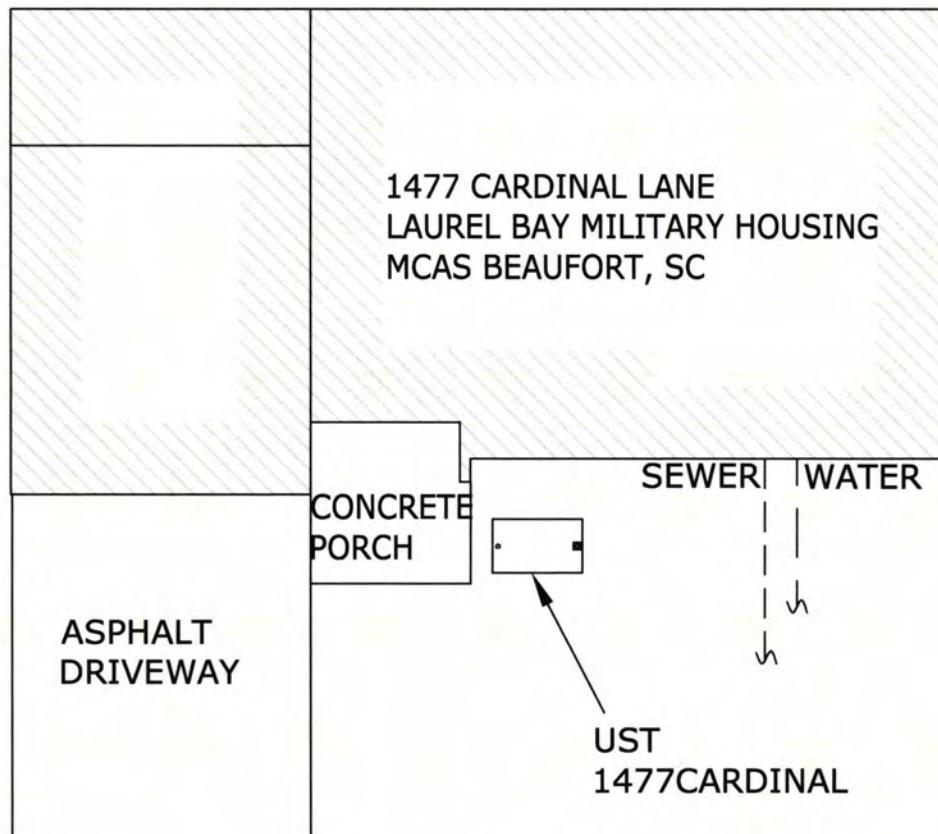
Ph. (843) 879-0400

Drawn By: L. DiAsia

Dwg Date: Sept 2009

**FIGURE 1: LOCATION MAP**  
**1477 CARDINAL LANE, LAUREL BAY**  
**MCAS BEAUFORT SC**

POND ≈735'



GRAPHIC SCALE  
0 5' 10' 20'

**SBG-EEG**  
10179 HWY 78  
LADSON, SC 29456

ph. (843) 879-0400

FIGURE 2 SITE MAP  
1477 CARDINAL LANE, LAUREL BAY  
MCAS BEAUFORT SC

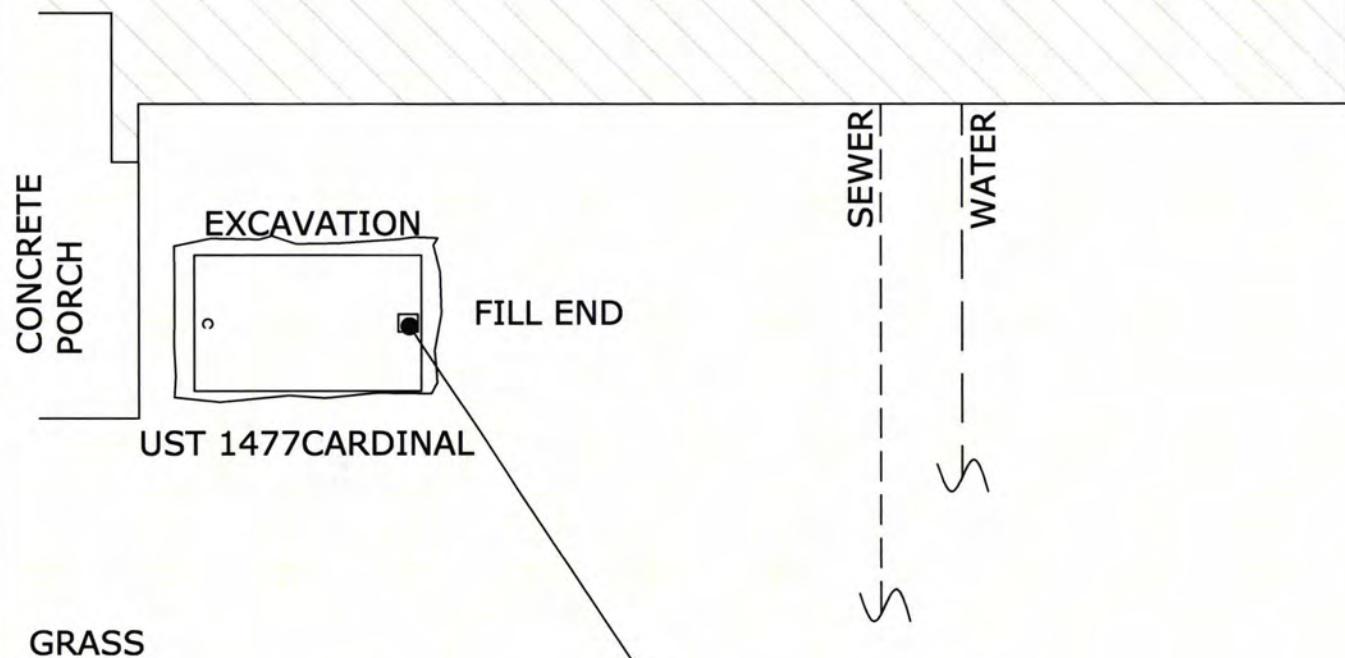
SCALE: GRAPHIC

DWG DATE SEPT 2009

1477 CARDINAL LANE



POND ≈735'



GRAPHIC SCALE  
0 5'

UST 1477CARDINAL WAS  
32" BELOW GRADE.

**SBG-EEG**  
10179 HWY 78  
LADSON, SC 29456

ph. (843) 879-0400

FIGURE 3 UST SAMPLE LOCATIONS  
1477 CARDINAL LANE, LAUREL BAY  
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE SEPT 2009



Picture 1: Location of UST 1477Cardinal.



Picture 2: 1477 Cardinal Lane after removal of the tank.

#### 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>	1477Cardinal						
<b>Benzene</b>		ND						
<b>Toluene</b>		ND						
<b>Ethylbenzene</b>		0.169 mg/kg						
<b>Xylenes</b>		0.118 mg/kg						
<b>Naphthalene</b>		1.79 mg/kg						
<b>Benzo (a) anthracene</b>		0.499 mg/kg						
<b>Benzo (b) fluoranthene</b>		0.228 mg/kg						
<b>Benzo (k) fluoranthene</b>		0.215 mg/kg						
<b>Chrysene</b>		0.520 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>				
Benzene	5				
Toluene	1,000				
Ethylbenzene	700				
Xylenes	10,000				
Total BTEX	N/A				
MTBE	40				
Naphthalene	25				
Benzo (a) anthracene	10				
Benzo (b) flouranthene	10				
Benzo (k) flouranthene	10				
Chrysene	10				
Dibenz (a, h) anthracene	10				
EDB	.05				
1,2-DCA	5				
Lead	Site specific				

## **XV. ANALYTICAL RESULTS**

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

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

September 04, 2009 1:45:53PM

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

Work Order: NSH1908  
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
1474 Cardinal	NSH1908-01	08/17/09 09:50
1477 Cardinal	NSH1908-02	08/17/09 10:40
1478 Cardinal	NSH1908-03	08/17/09 13:55
1485 Cardinal	NSH1908-04	08/17/09 15:45
1176 Bobwhite	NSH1908-05	08/18/09 10:05
1172 Bobwhite	NSH1908-06	08/18/09 09:45
1180 Bobwhite	NSH1908-07	08/18/09 13:45
1182 Bobwhite	NSH1908-08	08/18/09 14:05

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:	NSH1908
		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: NSH1908-01 (1474 Cardinal - Soil) Sampled: 08/17/09 09:50</b>									
General Chemistry Parameters									
% 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	ND		mg/kg dry	0.00210	1	08/28/09 17:14	SW846 8260B	SMS	9083572
Ethylbenzene	ND		mg/kg dry	0.00210	1	08/28/09 17:14	SW846 8260B	SMS	9083572
Naphthalene	ND		mg/kg dry	0.00525	1	08/28/09 17:14	SW846 8260B	SMS	9083572
Toluene	ND		mg/kg dry	0.00210	1	08/28/09 17:14	SW846 8260B	SMS	9083572
Xylenes, total	ND		mg/kg dry	0.00525	1	08/28/09 17:14	SW846 8260B	SMS	9083572
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	105 %					08/28/09 17:14	SW846 8260B	SMS	9083572
<i>Surr: Dibromoformmethane (75-125%)</i>	96 %					08/28/09 17:14	SW846 8260B	SMS	9083572
<i>Surr: Toluene-d8 (76-129%)</i>	100 %					08/28/09 17:14	SW846 8260B	SMS	9083572
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	112 %					08/28/09 17:14	SW846 8260B	SMS	9083572
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.0813	1	08/30/09 19:18	SW846 8270D	jlf	9083679
Acenaphthylene	ND		mg/kg dry	0.0813	1	08/30/09 19:18	SW846 8270D	jlf	9083679
Anthracene	ND		mg/kg dry	0.0813	1	08/30/09 19:18	SW846 8270D	jlf	9083679
Benzo (a) anthracene	ND		mg/kg dry	0.0813	1	08/30/09 19:18	SW846 8270D	jlf	9083679
Benzo (a) pyrene	ND		mg/kg dry	0.0813	1	08/30/09 19:18	SW846 8270D	jlf	9083679
Benzo (b) fluoranthene	ND		mg/kg dry	0.0813	1	08/30/09 19:18	SW846 8270D	jlf	9083679
Benzo (g,h,i) perylene	0.155		mg/kg dry	0.0813	1	08/30/09 19:18	SW846 8270D	jlf	9083679
Benzo (k) fluoranthene	ND		mg/kg dry	0.0813	1	08/30/09 19:18	SW846 8270D	jlf	9083679
Chrysene	ND		mg/kg dry	0.0813	1	08/30/09 19:18	SW846 8270D	jlf	9083679
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0813	1	08/30/09 19:18	SW846 8270D	jlf	9083679
Fluoranthene	ND		mg/kg dry	0.0813	1	08/30/09 19:18	SW846 8270D	jlf	9083679
Fluorene	ND		mg/kg dry	0.0813	1	08/30/09 19:18	SW846 8270D	jlf	9083679
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0813	1	08/30/09 19:18	SW846 8270D	jlf	9083679
Naphthalene	ND		mg/kg dry	0.0813	1	08/30/09 19:18	SW846 8270D	jlf	9083679
Phenanthrene	ND		mg/kg dry	0.0813	1	08/30/09 19:18	SW846 8270D	jlf	9083679
Pyrene	ND		mg/kg dry	0.0813	1	08/30/09 19:18	SW846 8270D	jlf	9083679
1-Methylnaphthalene	ND		mg/kg dry	0.0813	1	08/30/09 19:18	SW846 8270D	jlf	9083679
2-Methylnaphthalene	ND		mg/kg dry	0.0813	1	08/30/09 19:18	SW846 8270D	jlf	9083679
<i>Surr: Terphenyl-d14 (18-120%)</i>	83 %					08/30/09 19:18	SW846 8270D	jlf	9083679
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	64 %					08/30/09 19:18	SW846 8270D	jlf	9083679
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	59 %					08/30/09 19:18	SW846 8270D	jlf	9083679

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1908
		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: NSH1908-02 (1477 Cardinal - Soil) Sampled: 08/17/09 10:40</b>									
General Chemistry Parameters									
% Dry Solids	80.5		%	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	0.00222	1	08/28/09 17:44	SW846 8260B	SMS	9083572
Ethylbenzene	0.169		mg/kg dry	0.00222	1	08/28/09 17:44	SW846 8260B	SMS	9083572
Naphthalene	1.79		mg/kg dry	0.280	50	08/31/09 16:06	SW846 8260B	SMS	9084596
Toluene	ND		mg/kg dry	0.00222	1	08/28/09 17:44	SW846 8260B	SMS	9083572
Xylenes, total	0.118		mg/kg dry	0.00556	1	08/28/09 17:44	SW846 8260B	SMS	9083572
<i>Surrogate: 1,2-Dichloroethane-d4 (67-138%)</i>	108 %					08/28/09 17:44	SW846 8260B	SMS	9083572
<i>Surrogate: 1,2-Dichloroethane-d4 (67-138%)</i>	103 %					08/31/09 16:06	SW846 8260B	SMS	9084596
<i>Surrogate: Dibromoformmethane (75-125%)</i>	102 %					08/28/09 17:44	SW846 8260B	SMS	9083572
<i>Surrogate: Dibromoformmethane (75-125%)</i>	102 %					08/31/09 16:06	SW846 8260B	SMS	9084596
<i>Surrogate: Toluene-d8 (76-129%)</i>	116 %					08/28/09 17:44	SW846 8260B	SMS	9083572
<i>Surrogate: Toluene-d8 (76-129%)</i>	92 %					08/31/09 16:06	SW846 8260B	SMS	9084596
<i>Surrogate: 4-Bromofluorobenzene (67-147%)</i>	335 %	ZV				08/28/09 17:44	SW846 8260B	SMS	9083572
<i>Surrogate: 4-Bromofluorobenzene (67-147%)</i>	97 %					08/31/09 16:06	SW846 8260B	SMS	9084596
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.0817	1	08/30/09 19:41	SW846 8270D	jlf	9083679
Acenaphthylene	ND		mg/kg dry	0.0817	1	08/30/09 19:41	SW846 8270D	jlf	9083679
Anthracene	0.773		mg/kg dry	0.0817	1	08/30/09 19:41	SW846 8270D	jlf	9083679
Benzo (a) anthracene	0.499		mg/kg dry	0.0817	1	08/30/09 19:41	SW846 8270D	jlf	9083679
Benzo (a) pyrene	0.197		mg/kg dry	0.0817	1	08/30/09 19:41	SW846 8270D	jlf	9083679
Benzo (b) fluoranthene	0.228		mg/kg dry	0.0817	1	08/30/09 19:41	SW846 8270D	jlf	9083679
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0817	1	08/30/09 19:41	SW846 8270D	jlf	9083679
Benzo (k) fluoranthene	0.215		mg/kg dry	0.0817	1	08/30/09 19:41	SW846 8270D	jlf	9083679
Chrysene	0.520		mg/kg dry	0.0817	1	08/30/09 19:41	SW846 8270D	jlf	9083679
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0817	1	08/30/09 19:41	SW846 8270D	jlf	9083679
Fluoranthene	1.30		mg/kg dry	0.0817	1	08/30/09 19:41	SW846 8270D	jlf	9083679
Fluoréne	ND		mg/kg dry	0.0817	1	08/30/09 19:41	SW846 8270D	jlf	9083679
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0817	1	08/30/09 19:41	SW846 8270D	jlf	9083679
Naphthalene	ND		mg/kg dry	0.0817	1	08/30/09 19:41	SW846 8270D	jlf	9083679
Phenanthrene	4.22		mg/kg dry	0.408	5	08/31/09 15:40	SW846 8270D	jlf	9083679
Pyrene	1.75		mg/kg dry	0.0817	1	08/30/09 19:41	SW846 8270D	jlf	9083679
1-Methylnaphthalene	6.52		mg/kg dry	0.408	5	08/31/09 15:40	SW846 8270D	jlf	9083679
2-Methylnaphthalene	9.21		mg/kg dry	0.408	5	08/31/09 15:40	SW846 8270D	jlf	9083679
<i>Surrogate: Terphenyl-d14 (18-120%)</i>	87 %					08/30/09 19:41	SW846 8270D	jlf	9083679
<i>Surrogate: 2-Fluorobiphenyl (14-120%)</i>	60 %					08/30/09 19:41	SW846 8270D	jlf	9083679
<i>Surrogate: Nitrobenzene-d5 (17-120%)</i>	51 %					08/30/09 19:41	SW846 8270D	jlf	9083679

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1908
		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: NSH1908-03 (1478 Cardinal - Soil) Sampled: 08/17/09 13:55</b>									
General Chemistry Parameters									
% Dry Solids	90.8		%	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	0.00239	1	08/31/09 15:30	SW846 8260B	SMS	9084596
Ethylbenzene	ND		mg/kg dry	0.00239	1	08/31/09 15:30	SW846 8260B	SMS	9084596
Naphthalene	ND		mg/kg dry	0.00599	1	08/31/09 15:30	SW846 8260B	SMS	9084596
Toluene	ND		mg/kg dry	0.00239	1	08/31/09 15:30	SW846 8260B	SMS	9084596
Xylenes, total	ND		mg/kg dry	0.00599	1	08/31/09 15:30	SW846 8260B	SMS	9084596
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	110 %					08/31/09 15:30	SW846 8260B	SMS	9084596
<i>Surr: Dibromoformmethane (75-125%)</i>	101 %					08/31/09 15:30	SW846 8260B	SMS	9084596
<i>Surr: Toluene-d8 (76-129%)</i>	98 %					08/31/09 15:30	SW846 8260B	SMS	9084596
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	101 %					08/31/09 15:30	SW846 8260B	SMS	9084596
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.0728	1	08/30/09 20:03	SW846 8270D	jlf	9083679
Acenaphthylene	ND		mg/kg dry	0.0728	1	08/30/09 20:03	SW846 8270D	jlf	9083679
Anthracene	1.05		mg/kg dry	0.0728	1	08/30/09 20:03	SW846 8270D	jlf	9083679
Benzo (a) anthracene	9.49		mg/kg dry	0.364	5	08/31/09 16:04	SW846 8270D	jlf	9083679
Benzo (a) pyrene	4.04		mg/kg dry	0.364	5	08/31/09 16:04	SW846 8270D	jlf	9083679
Benzo (b) fluoranthene	5.92		mg/kg dry	0.364	5	08/31/09 16:04	SW846 8270D	jlf	9083679
Benzo (g,h,i) perylene	1.35		mg/kg dry	0.0728	1	08/30/09 20:03	SW846 8270D	jlf	9083679
Benzo (k) fluoranthene	3.59		mg/kg dry	0.0728	1	08/30/09 20:03	SW846 8270D	jlf	9083679
Chrysene	11.2		mg/kg dry	0.364	5	08/31/09 16:04	SW846 8270D	jlf	9083679
Dibenz (a,h) anthracene	0.733		mg/kg dry	0.0728	1	08/30/09 20:03	SW846 8270D	jlf	9083679
Fluoranthene	22.2		mg/kg dry	0.728	10	08/31/09 16:27	SW846 8270D	jlf	9083679
Fluorene	0.0909		mg/kg dry	0.0728	1	08/30/09 20:03	SW846 8270D	jlf	9083679
Indeno (1,2,3-cd) pyrene	1.49		mg/kg dry	0.0728	1	08/30/09 20:03	SW846 8270D	jlf	9083679
Naphthalene	ND		mg/kg dry	0.0728	1	08/30/09 20:03	SW846 8270D	jlf	9083679
Phenanthrene	4.45		mg/kg dry	0.364	5	08/31/09 16:04	SW846 8270D	jlf	9083679
Pyrene	19.6		mg/kg dry	0.728	10	08/31/09 16:27	SW846 8270D	jlf	9083679
1-Methylnaphthalene	ND		mg/kg dry	0.0728	1	08/30/09 20:03	SW846 8270D	jlf	9083679
2-Methylnaphthalene	ND		mg/kg dry	0.0728	1	08/30/09 20:03	SW846 8270D	jlf	9083679
<i>Surr: Terphenyl-d14 (18-120%)</i>	63 %					08/30/09 20:03	SW846 8270D	jlf	9083679
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	61 %					08/30/09 20:03	SW846 8270D	jlf	9083679
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	55 %					08/30/09 20:03	SW846 8270D	jlf	9083679

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

Work Order: NSH1908  
 Project Name: Laurel Bay Housing Project  
 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: NSH1908-04 (1485 Cardinal - Soil) Sampled: 08/17/09 15:45</b>									
General Chemistry Parameters									
% Dry Solids									
% Dry Solids	82.9		%	0.500	1	09/02/09 08:39	SW-846	DEA	9085103
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00233	1	08/28/09 18:44	SW846 8260B	SMS	9083572
Ethylbenzene	1.04		mg/kg dry	0.121	50	08/29/09 20:25	SW846 8260B	CMM	9084594
Naphthalene	31.7		mg/kg dry	3.02	500	08/31/09 12:49	SW846 8260B	CMM	9085066
Toluene	ND		mg/kg dry	0.121	50	08/29/09 20:25	SW846 8260B	CMM	9084594
Xylenes, total	ND		mg/kg dry	0.302	50	08/29/09 20:25	SW846 8260B	CMM	9084594
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	130 %					08/28/09 18:44	SW846 8260B	SMS	9083572
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	110 %					08/29/09 20:25	SW846 8260B	CMM	9084594
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	101 %					08/31/09 12:49	SW846 8260B	CMM	9085066
<i>Surr: Dibromoformmethane (75-125%)</i>	118 %					08/28/09 18:44	SW846 8260B	SMS	9083572
<i>Surr: Dibromoformmethane (75-125%)</i>	107 %					08/29/09 20:25	SW846 8260B	CMM	9084594
<i>Surr: Dibromoformmethane (75-125%)</i>	97 %					08/31/09 12:49	SW846 8260B	CMM	9085066
<i>Surr: Toluene-d8 (76-129%)</i>	544 %	ZX				08/28/09 18:44	SW846 8260B	SMS	9083572
<i>Surr: Toluene-d8 (76-129%)</i>	103 %					08/29/09 20:25	SW846 8260B	CMM	9084594
<i>Surr: Toluene-d8 (76-129%)</i>	101 %					08/31/09 12:49	SW846 8260B	CMM	9085066
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	651 %	ZV				08/28/09 18:44	SW846 8260B	SMS	9083572
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	151 %	ZV				08/29/09 20:25	SW846 8260B	CMM	9084594
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	107 %					08/31/09 12:49	SW846 8260B	CMM	9085066
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	6.30		mg/kg dry	0.788	10	08/31/09 15:18	SW846 8270D	jlf	9083679
Acenaphthylene	ND		mg/kg dry	0.788	10	08/31/09 15:18	SW846 8270D	jlf	9083679
Anthracene	12.1		mg/kg dry	0.788	10	08/31/09 15:18	SW846 8270D	jlf	9083679
Benzo (a) anthracene	14.5		mg/kg dry	0.788	10	08/31/09 15:18	SW846 8270D	jlf	9083679
Benzo (a) pyrene	5.27		mg/kg dry	0.788	10	08/31/09 15:18	SW846 8270D	jlf	9083679
Benzo (b) fluoranthene	6.13		mg/kg dry	0.788	10	08/31/09 15:18	SW846 8270D	jlf	9083679
Benzo (g,h,i) perylene	1.51		mg/kg dry	0.788	10	08/31/09 15:18	SW846 8270D	jlf	9083679
Benzo (k) fluoranthene	5.36		mg/kg dry	0.788	10	08/31/09 15:18	SW846 8270D	jlf	9083679
Chrysene	10.1		mg/kg dry	0.788	10	08/31/09 15:18	SW846 8270D	jlf	9083679
Dibenz (a,h) anthracene	ND		mg/kg dry	0.788	10	08/31/09 15:18	SW846 8270D	jlf	9083679
Fluoranthene	56.4		mg/kg dry	3.94	50	08/31/09 17:12	SW846 8270D	jlf	9083679
Fluorene	13.8		mg/kg dry	0.788	10	08/31/09 15:18	SW846 8270D	jlf	9083679
Indeno (1,2,3-cd) pyrene	1.57		mg/kg dry	0.788	10	08/31/09 15:18	SW846 8270D	jlf	9083679
Naphthalene	7.60		mg/kg dry	0.788	10	08/31/09 15:18	SW846 8270D	jlf	9083679
Phenanthrene	61.7		mg/kg dry	3.94	50	08/31/09 17:12	SW846 8270D	jlf	9083679
Pyrene	51.7		mg/kg dry	3.94	50	08/31/09 17:12	SW846 8270D	jlf	9083679
1-Methylnaphthalene	37.4		mg/kg dry	3.94	50	08/31/09 17:12	SW846 8270D	jlf	9083679
2-Methylnaphthalene	57.2		mg/kg dry	3.94	50	08/31/09 17:12	SW846 8270D	jlf	9083679
<i>Surr: Terphenyl-d14 (18-120%)</i>	84 %					08/31/09 15:18	SW846 8270D	jlf	9083679
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	76 %					08/31/09 15:18	SW846 8270D	jlf	9083679
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	44 %					08/31/09 15:18	SW846 8270D	jlf	9083679

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSH1908
	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: NSH1908-05 (1176 Bobwhite - Soil) Sampled: 08/18/09 10:05</b>									
General Chemistry Parameters									
% Dry Solids	94.1		%	0.500	1	09/02/09 08:39	SW-846	DEA	9085103
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00247	1	08/31/09 16:36	SW846 8260B	SMS	9084596
Ethylbenzene	ND		mg/kg dry	0.00247	1	08/31/09 16:36	SW846 8260B	SMS	9084596
Naphthalene	ND		mg/kg dry	0.00618	1	08/31/09 16:36	SW846 8260B	SMS	9084596
Toluene	ND		mg/kg dry	0.00247	1	08/31/09 16:36	SW846 8260B	SMS	9084596
Xylenes, total	ND		mg/kg dry	0.00618	1	08/31/09 16:36	SW846 8260B	SMS	9084596
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	99 %					08/31/09 16:36	SW846 8260B	SMS	9084596
<i>Surr: Dibromoformmethane (75-125%)</i>	95 %					08/31/09 16:36	SW846 8260B	SMS	9084596
<i>Surr: Toluene-d8 (76-129%)</i>	96 %					08/31/09 16:36	SW846 8260B	SMS	9084596
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	99 %					08/31/09 16:36	SW846 8260B	SMS	9084596
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.0692	1	08/30/09 20:48	SW846 8270D	jlf	9083679
Acenaphthylene	ND		mg/kg dry	0.0692	1	08/30/09 20:48	SW846 8270D	jlf	9083679
Anthracene	ND		mg/kg dry	0.0692	1	08/30/09 20:48	SW846 8270D	jlf	9083679
Benzo (a) anthracene	ND		mg/kg dry	0.0692	1	08/30/09 20:48	SW846 8270D	jlf	9083679
Benzo (a) pyrene	ND		mg/kg dry	0.0692	1	08/30/09 20:48	SW846 8270D	jlf	9083679
Benzo (b) fluoranthene	ND		mg/kg dry	0.0692	1	08/30/09 20:48	SW846 8270D	jlf	9083679
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0692	1	08/30/09 20:48	SW846 8270D	jlf	9083679
Benzo (k) fluoranthene	ND		mg/kg dry	0.0692	1	08/30/09 20:48	SW846 8270D	jlf	9083679
Chrysene	ND		mg/kg dry	0.0692	1	08/30/09 20:48	SW846 8270D	jlf	9083679
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0692	1	08/30/09 20:48	SW846 8270D	jlf	9083679
Fluoranthene	ND		mg/kg dry	0.0692	1	08/30/09 20:48	SW846 8270D	jlf	9083679
Fluorene	ND		mg/kg dry	0.0692	1	08/30/09 20:48	SW846 8270D	jlf	9083679
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0692	1	08/30/09 20:48	SW846 8270D	jlf	9083679
Naphthalene	ND		mg/kg dry	0.0692	1	08/30/09 20:48	SW846 8270D	jlf	9083679
Phenanthrene	ND		mg/kg dry	0.0692	1	08/30/09 20:48	SW846 8270D	jlf	9083679
Pyrene	ND		mg/kg dry	0.0692	1	08/30/09 20:48	SW846 8270D	jlf	9083679
1-Methylnaphthalene	ND		mg/kg dry	0.0692	1	08/30/09 20:48	SW846 8270D	jlf	9083679
2-Methylnaphthalene	ND		mg/kg dry	0.0692	1	08/30/09 20:48	SW846 8270D	jlf	9083679
<i>Surr: Terphenyl-d14 (18-120%)</i>	75 %					08/30/09 20:48	SW846 8270D	jlf	9083679
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	56 %					08/30/09 20:48	SW846 8270D	jlf	9083679
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	53 %					08/30/09 20:48	SW846 8270D	jlf	9083679

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1908
		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: NSH1908-06 (1172 Bobwhite - Soil) Sampled: 08/18/09 09:45</b>									
General Chemistry Parameters									
% Dry Solids	76.4		%	0.500	1	09/02/09 08:39	SW-846	DEA	9085103
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00220	1	08/31/09 17:06	SW846 8260B	SMS	9084596
Ethylbenzene	ND		mg/kg dry	0.00220	1	08/31/09 17:06	SW846 8260B	SMS	9084596
Naphthalene	ND		mg/kg dry	0.00550	1	08/31/09 17:06	SW846 8260B	SMS	9084596
Toluene	ND		mg/kg dry	0.00220	1	08/31/09 17:06	SW846 8260B	SMS	9084596
Xylenes, total	ND		mg/kg dry	0.00550	1	08/31/09 17:06	SW846 8260B	SMS	9084596
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	105 %					08/31/09 17:06	SW846 8260B	SMS	9084596
<i>Surr: Dibromofluoromethane (75-125%)</i>	100 %					08/31/09 17:06	SW846 8260B	SMS	9084596
<i>Surr: Toluene-d8 (76-129%)</i>	99 %					08/31/09 17:06	SW846 8260B	SMS	9084596
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	104 %					08/31/09 17:06	SW846 8260B	SMS	9084596
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.0865	1	08/30/09 21:11	SW846 8270D	jlf	9083679
Acenaphthylene	ND		mg/kg dry	0.0865	1	08/30/09 21:11	SW846 8270D	jlf	9083679
Anthracene	ND		mg/kg dry	0.0865	1	08/30/09 21:11	SW846 8270D	jlf	9083679
Benzo (a) anthracene	ND		mg/kg dry	0.0865	1	08/30/09 21:11	SW846 8270D	jlf	9083679
Benzo (a) pyrene	ND		mg/kg dry	0.0865	1	08/30/09 21:11	SW846 8270D	jlf	9083679
Benzo (b) fluoranthene	ND		mg/kg dry	0.0865	1	08/30/09 21:11	SW846 8270D	jlf	9083679
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0865	1	08/30/09 21:11	SW846 8270D	jlf	9083679
Benzo (k) fluoranthene	ND		mg/kg dry	0.0865	1	08/30/09 21:11	SW846 8270D	jlf	9083679
Chrysene	ND		mg/kg dry	0.0865	1	08/30/09 21:11	SW846 8270D	jlf	9083679
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0865	1	08/30/09 21:11	SW846 8270D	jlf	9083679
Fluoranthene	ND		mg/kg dry	0.0865	1	08/30/09 21:11	SW846 8270D	jlf	9083679
Fluorene	ND		mg/kg dry	0.0865	1	08/30/09 21:11	SW846 8270D	jlf	9083679
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0865	1	08/30/09 21:11	SW846 8270D	jlf	9083679
Naphthalene	ND		mg/kg dry	0.0865	1	08/30/09 21:11	SW846 8270D	jlf	9083679
Phenanthrene	ND		mg/kg dry	0.0865	1	08/30/09 21:11	SW846 8270D	jlf	9083679
Pyrene	ND		mg/kg dry	0.0865	1	08/30/09 21:11	SW846 8270D	jlf	9083679
1-Methylnaphthalene	ND		mg/kg dry	0.0865	1	08/30/09 21:11	SW846 8270D	jlf	9083679
2-Methylnaphthalene	ND		mg/kg dry	0.0865	1	08/30/09 21:11	SW846 8270D	jlf	9083679
<i>Surr: Terphenyl-d14 (18-120%)</i>	81 %					08/30/09 21:11	SW846 8270D	jlf	9083679
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	37 %					08/30/09 21:11	SW846 8270D	jlf	9083679
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	54 %					08/30/09 21:11	SW846 8270D	jlf	9083679

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

Work Order: NSH1908  
 Project Name: Laurel Bay Housing Project  
 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: NSH1908-07 (1180 Bobwhite - Soil) Sampled: 08/18/09 13:45</b>									
General Chemistry Parameters									
% Dry Solids	88.1		%	0.500	1	09/02/09 08:39	SW-846	DEA	9085103
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00238	1	08/28/09 20:14	SW846 8260B	SMS	9083572
Ethylbenzene	ND		mg/kg dry	0.00238	1	08/28/09 20:14	SW846 8260B	SMS	9083572
Naphthalene	0.0164		mg/kg dry	0.00595	1	08/28/09 20:14	SW846 8260B	SMS	9083572
Toluene	ND		mg/kg dry	0.00238	1	08/28/09 20:14	SW846 8260B	SMS	9083572
Xylenes, total	ND		mg/kg dry	0.00595	1	08/28/09 20:14	SW846 8260B	SMS	9083572
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	108 %					08/28/09 20:14	SW846 8260B	SMS	9083572
<i>Surr: Dibromoformmethane (75-125%)</i>	93 %					08/28/09 20:14	SW846 8260B	SMS	9083572
<i>Surr: Toluene-d8 (76-129%)</i>	102 %					08/28/09 20:14	SW846 8260B	SMS	9083572
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	116 %					08/28/09 20:14	SW846 8260B	SMS	9083572
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.0745	1	08/30/09 21:33	SW846 8270D	jlf	9083679
Acenaphthylene	ND		mg/kg dry	0.0745	1	08/30/09 21:33	SW846 8270D	jlf	9083679
Anthracene	ND		mg/kg dry	0.0745	1	08/30/09 21:33	SW846 8270D	jlf	9083679
Benzo (a) anthracene	ND		mg/kg dry	0.0745	1	08/30/09 21:33	SW846 8270D	jlf	9083679
Benzo (a) pyrene	ND		mg/kg dry	0.0745	1	08/30/09 21:33	SW846 8270D	jlf	9083679
Benzo (b) fluoranthene	ND		mg/kg dry	0.0745	1	08/30/09 21:33	SW846 8270D	jlf	9083679
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0745	1	08/30/09 21:33	SW846 8270D	jlf	9083679
Benzo (k) fluoranthene	ND		mg/kg dry	0.0745	1	08/30/09 21:33	SW846 8270D	jlf	9083679
Chrysene	ND		mg/kg dry	0.0745	1	08/30/09 21:33	SW846 8270D	jlf	9083679
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0745	1	08/30/09 21:33	SW846 8270D	jlf	9083679
Fluoranthene	0.102		mg/kg dry	0.0745	1	08/30/09 21:33	SW846 8270D	jlf	9083679
Fluorene	ND		mg/kg dry	0.0745	1	08/30/09 21:33	SW846 8270D	jlf	9083679
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0745	1	08/30/09 21:33	SW846 8270D	jlf	9083679
Naphthalene	ND		mg/kg dry	0.0745	1	08/30/09 21:33	SW846 8270D	jlf	9083679
Phenanthrene	0.256		mg/kg dry	0.0745	1	08/30/09 21:33	SW846 8270D	jlf	9083679
Pyrene	0.127		mg/kg dry	0.0745	1	08/30/09 21:33	SW846 8270D	jlf	9083679
1-Methylnaphthalene	ND		mg/kg dry	0.0745	1	08/30/09 21:33	SW846 8270D	jlf	9083679
2-Methylnaphthalene	ND		mg/kg dry	0.0745	1	08/30/09 21:33	SW846 8270D	jlf	9083679
<i>Surr: Terphenyl-d14 (18-120%)</i>	86 %					08/30/09 21:33	SW846 8270D	jlf	9083679
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	67 %					08/30/09 21:33	SW846 8270D	jlf	9083679
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	62 %					08/30/09 21:33	SW846 8270D	jlf	9083679

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1908
		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: NSH1908-08 (1182 Bobwhite - Soil) Sampled: 08/18/09 14:05</b>									
General Chemistry Parameters									
% Dry Solids	80.6	%		0.500	1	09/02/09 08:39	SW-846	DEA	9085103
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	mg/kg dry	0.00230	1	08/28/09 20:44	SW846 8260B	SMS	9083572	
Ethylbenzene	ND	mg/kg dry	0.00230	1	08/28/09 20:44	SW846 8260B	SMS	9083572	
Naphthalene	ND	mg/kg dry	0.00575	1	08/28/09 20:44	SW846 8260B	SMS	9083572	
Toluene	ND	mg/kg dry	0.00230	1	08/28/09 20:44	SW846 8260B	SMS	9083572	
Xylenes, total	ND	mg/kg dry	0.00575	1	08/28/09 20:44	SW846 8260B	SMS	9083572	
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	96 %				08/28/09 20:44	SW846 8260B	SMS	9083572	
<i>Surr: Dibromofluoromethane (75-125%)</i>	90 %				08/28/09 20:44	SW846 8260B	SMS	9083572	
<i>Surr: Toluene-d8 (76-129%)</i>	103 %				08/28/09 20:44	SW846 8260B	SMS	9083572	
<i>Surr: 4-Bromoiodobenzene (67-147%)</i>	102 %				08/28/09 20:44	SW846 8260B	SMS	9083572	
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND	mg/kg dry	0.0818	1	08/30/09 21:56	SW846 8270D	jlf	9083679	
Acenaphthylene	ND	mg/kg dry	0.0818	1	08/30/09 21:56	SW846 8270D	jlf	9083679	
Anthracene	ND	mg/kg dry	0.0818	1	08/30/09 21:56	SW846 8270D	jlf	9083679	
Benzo (a) anthracene	ND	mg/kg dry	0.0818	1	08/30/09 21:56	SW846 8270D	jlf	9083679	
Benzo (a) pyrene	ND	mg/kg dry	0.0818	1	08/30/09 21:56	SW846 8270D	jlf	9083679	
Benzo (b) fluoranthene	ND	mg/kg dry	0.0818	1	08/30/09 21:56	SW846 8270D	jlf	9083679	
Benzo (g,h,i) perylene	ND	mg/kg dry	0.0818	1	08/30/09 21:56	SW846 8270D	jlf	9083679	
Benzo (k) fluoranthene	ND	mg/kg dry	0.0818	1	08/30/09 21:56	SW846 8270D	jlf	9083679	
Chrysene	ND	mg/kg dry	0.0818	1	08/30/09 21:56	SW846 8270D	jlf	9083679	
Dibenz (a,h) anthracene	ND	mg/kg dry	0.0818	1	08/30/09 21:56	SW846 8270D	jlf	9083679	
Fluoranthene	ND	mg/kg dry	0.0818	1	08/30/09 21:56	SW846 8270D	jlf	9083679	
Fluorene	ND	mg/kg dry	0.0818	1	08/30/09 21:56	SW846 8270D	jlf	9083679	
Indeno (1,2,3-cd) pyrene	ND	mg/kg dry	0.0818	1	08/30/09 21:56	SW846 8270D	jlf	9083679	
Naphthalene	ND	mg/kg dry	0.0818	1	08/30/09 21:56	SW846 8270D	jlf	9083679	
Phenanthrene	ND	mg/kg dry	0.0818	1	08/30/09 21:56	SW846 8270D	jlf	9083679	
Pyrene	ND	mg/kg dry	0.0818	1	08/30/09 21:56	SW846 8270D	jlf	9083679	
1-Methylnaphthalene	ND	mg/kg dry	0.0818	1	08/30/09 21:56	SW846 8270D	jlf	9083679	
2-Methylnaphthalene	ND	mg/kg dry	0.0818	1	08/30/09 21:56	SW846 8270D	jlf	9083679	
<i>Surr: Terphenyl-d14 (18-120%)</i>	84 %				08/30/09 21:56	SW846 8270D	jlf	9083679	
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	55 %				08/30/09 21:56	SW846 8270D	jlf	9083679	
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	32 %				08/30/09 21:56	SW846 8270D	jlf	9083679	

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1908
Attn	Tom McElwee	Project Name:	Laurel Bay Housing Project
		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	NSH1908-01	30.39	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1908-02	30.57	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1908-02RE1	30.57	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1908-03	30.40	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1908-03RE1	30.40	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1908-03RE2	30.40	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1908-04	30.78	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1908-04RE1	30.78	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1908-04RE2	30.78	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1908-05	30.86	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1908-06	30.42	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1908-07	30.61	1.00	08/28/09 09:15	AJF	EPA 3550B
SW846 8270D	9083679	NSH1908-08	30.47	1.00	08/28/09 09:15	AJF	EPA 3550B
<b>Selected Volatile Organic Compounds by EPA Method 8260B</b>							
SW846 8260B	9083572	NSH1908-01	5.85	5.00	08/17/09 09:50	JRL	EPA 5035
SW846 8260B	9083572	NSH1908-02	5.59	5.00	08/17/09 10:40	JRL	EPA 5035
SW846 8260B	9084596	NSH1908-02RE1	5.54	5.00	08/17/09 10:40	JRL	EPA 5035
SW846 8260B	9083572	NSH1908-03	4.88	5.00	08/17/09 13:55	JRL	EPA 5035
SW846 8260B	9084596	NSH1908-03RE1	4.60	5.00	08/17/09 13:55	JRL	EPA 5035
SW846 8260B	9083572	NSH1908-04	5.18	5.00	08/17/09 15:45	JRL	EPA 5035
SW846 8260B	9084594	NSH1908-04RE1	4.99	5.00	08/17/09 15:45	JRL	EPA 5035
SW846 8260B	9085066	NSH1908-04RE2	4.99	5.00	08/17/09 15:45	JRL	EPA 5035
SW846 8260B	9083572	NSH1908-05	4.64	5.00	08/18/09 10:05	JRL	EPA 5035
SW846 8260B	9084596	NSH1908-05RE1	4.30	5.00	08/18/09 10:05	JRL	EPA 5035
SW846 8260B	9083572	NSH1908-06	5.52	5.00	08/18/09 09:45	JRL	EPA 5035
SW846 8260B	9084596	NSH1908-06RE1	5.95	5.00	08/18/09 09:45	JRL	EPA 5035
SW846 8260B	9083572	NSH1908-07	4.77	5.00	08/18/09 13:45	JRL	EPA 5035
SW846 8260B	9083572	NSH1908-08	5.39	5.00	08/18/09 14:05	JRL	EPA 5035

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1908
		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

##### 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
Surrogate: 1,2-Dichloroethane-d4	107%			9083572	9083572-BLK1	08/28/09 15:43
Surrogate: Dibromofluoromethane	99%			9083572	9083572-BLK1	08/28/09 15:43
Surrogate: Toluene-d8	96%			9083572	9083572-BLK1	08/28/09 15:43
Surrogate: 4-Bromofluorobenzene	95%			9083572	9083572-BLK1	08/28/09 15:43

##### 9084594-BLK1

Benzene	<0.000670		mg/kg wet	9084594	9084594-BLK1	08/29/09 15:47
Ethylbenzene	<0.000670		mg/kg wet	9084594	9084594-BLK1	08/29/09 15:47
Naphthalene	<0.00170		mg/kg wet	9084594	9084594-BLK1	08/29/09 15:47
Toluene	<0.000400		mg/kg wet	9084594	9084594-BLK1	08/29/09 15:47
Xylenes, total	<0.00130		mg/kg wet	9084594	9084594-BLK1	08/29/09 15:47
Surrogate: 1,2-Dichloroethane-d4	101%			9084594	9084594-BLK1	08/29/09 15:47
Surrogate: Dibromofluoromethane	103%			9084594	9084594-BLK1	08/29/09 15:47
Surrogate: Toluene-d8	104%			9084594	9084594-BLK1	08/29/09 15:47
Surrogate: 4-Bromofluorobenzene	104%			9084594	9084594-BLK1	08/29/09 15:47

##### 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
Surrogate: 1,2-Dichloroethane-d4	106%			9084596	9084596-BLK1	08/31/09 15:00
Surrogate: Dibromofluoromethane	96%			9084596	9084596-BLK1	08/31/09 15:00
Surrogate: Toluene-d8	97%			9084596	9084596-BLK1	08/31/09 15:00
Surrogate: 4-Bromofluorobenzene	95%			9084596	9084596-BLK1	08/31/09 15:00

##### 9085066-BLK1

Benzene	<0.000670		mg/kg wet	9085066	9085066-BLK1	08/31/09 09:09
Ethylbenzene	<0.000670		mg/kg wet	9085066	9085066-BLK1	08/31/09 09:09
Naphthalene	<0.00170		mg/kg wet	9085066	9085066-BLK1	08/31/09 09:09
Toluene	<0.000400		mg/kg wet	9085066	9085066-BLK1	08/31/09 09:09
Xylenes, total	<0.00130		mg/kg wet	9085066	9085066-BLK1	08/31/09 09:09
Surrogate: 1,2-Dichloroethane-d4	109%			9085066	9085066-BLK1	08/31/09 09:09
Surrogate: Dibromofluoromethane	104%			9085066	9085066-BLK1	08/31/09 09:09
Surrogate: Toluene-d8	100%			9085066	9085066-BLK1	08/31/09 09:09
Surrogate: 4-Bromofluorobenzene	108%			9085066	9085066-BLK1	08/31/09 09:09

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSH1908
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	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	Work Order:	NSH1908
Attn	Tom McElwee	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>9085103-DUP1</b>										
% Dry Solids	82.9	88.6		%	7	20	9085103	NSH1908-04		09/02/09 08:39
<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)	Work Order:	NSH1908
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	Received:	08/21/09 08:00

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

Analyte	Known Val.	Analyzed Val	Q	Units	% Recv.	Target Range	Batch	Analyzed Date/Time
<b>Selected Volatile Organic Compounds by EPA Method 8260B</b>								
<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>9084594-BS1</b>								
Benzene	50.0	44.6		ug/kg	89%	78 - 126	9084594	08/29/09 14:14
Ethylbenzene	50.0	46.6		ug/kg	93%	79 - 130	9084594	08/29/09 14:14
Naphthalene	50.0	63.0		ug/kg	126%	72 - 150	9084594	08/29/09 14:14
Toluene	50.0	46.3		ug/kg	93%	76 - 126	9084594	08/29/09 14:14
Xylenes, total	150	143		ug/kg	96%	80 - 130	9084594	08/29/09 14:14
<i>Surrogate: 1,2-Dichloroethane-d4</i>	25.0	27.4			109%	67 - 138	9084594	08/29/09 14:14
<i>Surrogate: Dibromofluoromethane</i>	25.0	25.5			102%	75 - 125	9084594	08/29/09 14:14
<i>Surrogate: Toluene-d8</i>	25.0	26.0			104%	76 - 129	9084594	08/29/09 14:14
<i>Surrogate: 4-Bromofluorobenzene</i>	25.0	24.4			98%	67 - 147	9084594	08/29/09 14:14
<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>9085066-BS1</b>								
Benzene	50.0	44.9		ug/kg	90%	78 - 126	9085066	08/31/09 07:31
Ethylbenzene	50.0	47.2		ug/kg	94%	79 - 130	9085066	08/31/09 07:31
Naphthalene	50.0	63.5		ug/kg	127%	72 - 150	9085066	08/31/09 07:31
Toluene	50.0	45.4		ug/kg	91%	76 - 126	9085066	08/31/09 07:31
Xylenes, total	150	144		ug/kg	96%	80 - 130	9085066	08/31/09 07:31
<i>Surrogate: 1,2-Dichloroethane-d4</i>	25.0	27.4			110%	67 - 138	9085066	08/31/09 07:31
<i>Surrogate: Dibromofluoromethane</i>	25.0	24.8			99%	75 - 125	9085066	08/31/09 07:31
<i>Surrogate: Toluene-d8</i>	25.0	25.3			101%	76 - 129	9085066	08/31/09 07:31
<i>Surrogate: 4-Bromofluorobenzene</i>	25.0	25.4			102%	67 - 147	9085066	08/31/09 07:31

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

Work Order: NSH1908  
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:	NSH1908
		Project Name:	Laurel Bay Housing Project
Attn	Tom McElwee	Project Number:	[none]
		Received:	08/21/09 08:00

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

Analytic	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>9084594-BSD1</b>												
Benzene	47.2			ug/kg	50.0	94%	78 - 126	6	50	9084594		08/29/09 14:45
Ethylbenzene	48.4			ug/kg	50.0	97%	79 - 130	4	50	9084594		08/29/09 14:45
Naphthalene	67.6			ug/kg	50.0	135%	72 - 150	7	50	9084594		08/29/09 14:45
Toluene	47.9			ug/kg	50.0	96%	76 - 126	3	50	9084594		08/29/09 14:45
Xylenes, total	150			ug/kg	150	100%	80 - 130	4	50	9084594		08/29/09 14:45
Surrogate: 1,2-Dichloroethane-d4	26.8			ug/kg	25.0	107%	67 - 138			9084594		08/29/09 14:45
Surrogate: Dibromofluoromethane	24.9			ug/kg	25.0	100%	75 - 125			9084594		08/29/09 14:45
Surrogate: Toluene-d8	25.5			ug/kg	25.0	102%	76 - 129			9084594		08/29/09 14:45
Surrogate: 4-Bromofluorobenzene	25.4			ug/kg	25.0	102%	67 - 147			9084594		08/29/09 14:45
<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>9085066-BSD1</b>												
Benzene	46.5			ug/kg	50.0	93%	78 - 126	4	50	9085066		08/31/09 08:01
Ethylbenzene	48.6			ug/kg	50.0	97%	79 - 130	3	50	9085066		08/31/09 08:01
Naphthalene	69.6			ug/kg	50.0	139%	72 - 150	9	50	9085066		08/31/09 08:01
Toluene	47.1			ug/kg	50.0	94%	76 - 126	4	50	9085066		08/31/09 08:01
Xylenes, total	148			ug/kg	150	99%	80 - 130	3	50	9085066		08/31/09 08:01
Surrogate: 1,2-Dichloroethane-d4	27.5			ug/kg	25.0	110%	67 - 138			9085066		08/31/09 08:01
Surrogate: Dibromofluoromethane	25.4			ug/kg	25.0	101%	75 - 125			9085066		08/31/09 08:01
Surrogate: Toluene-d8	25.7			ug/kg	25.0	103%	76 - 129			9085066		08/31/09 08:01
Surrogate: 4-Bromofluorobenzene	26.3			ug/kg	25.0	105%	67 - 147			9085066		08/31/09 08:01

Client	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456	Work Order:	NSH1908
		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 Cone	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
<b>Selected Volatile Organic Compounds by EPA Method 8260B</b>										
<b>9083572-MS1</b>										
Benzene										
Benzene	ND	2.28		mg/kg wet	2.50	91%	42 - 141	9083572	NSH1890-02RE 1	08/28/09 22:44
Ethylbenzene	0.0739	2.56		mg/kg wet	2.50	99%	21 - 165	9083572	NSH1890-02RE 1	08/28/09 22:44
Naphthalene	0.732	2.65		mg/kg wet	2.50	77%	10 - 160	9083572	NSH1890-02RE 1	08/28/09 22:44
Toluene	0.0728	2.34		mg/kg wet	2.50	91%	45 - 145	9083572	NSH1890-02RE 1	08/28/09 22:44
Xylenes, total	0.274	7.65		mg/kg wet	7.50	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>9084594-MS1</b>										
Benzene										
Benzene	ND	2.30		mg/kg wet	5.00	46%	42 - 141	9084594	NSH2207-01RE 1	08/30/09 00:31
Ethylbenzene	ND	2.56		mg/kg wet	5.00	51%	21 - 165	9084594	NSH2207-01RE 1	08/30/09 00:31
Naphthalene	0.117	2.34		mg/kg wet	5.00	45%	10 - 160	9084594	NSH2207-01RE 1	08/30/09 00:31
Toluene	ND	2.46		mg/kg wet	5.00	49%	45 - 145	9084594	NSH2207-01RE 1	08/30/09 00:31
Xylenes, total	0.0622	7.94		mg/kg wet	15.0	53%	31 - 159	9084594	NSH2207-01RE 1	08/30/09 00:31
<i>Surrogate: 1,2-Dichloroethane-d4</i>		24.6		ug/kg	25.0	98%	67 - 138	9084594	NSH2207-01RE 1	08/30/09 00:31
<i>Surrogate: Dibromoformmethane</i>		23.9		ug/kg	25.0	96%	75 - 125	9084594	NSH2207-01RE 1	08/30/09 00:31
<i>Surrogate: Toluene-d8</i>		26.0		ug/kg	25.0	104%	76 - 129	9084594	NSH2207-01RE 1	08/30/09 00:31
<i>Surrogate: 4-Bromofluorobenzene</i>		25.0		ug/kg	25.0	100%	67 - 147	9084594	NSH2207-01RE 1	08/30/09 00:31
<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  
 Attn Tom McElwee

Work Order: NSH1908  
 Project Name: Laurel Bay Housing Project  
 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
<i>Surrogate: 1,2-Dichloroethane-d4</i>		49.6		ug/kg	50.0	99%	67 - 138	9084596	NSH1986-01RE 1	08/31/09 23:34
<i>Surrogate: Dibromoiodomethane</i>		49.2		ug/kg	50.0	98%	75 - 125	9084596	NSH1986-01RE 1	08/31/09 23:34
<i>Surrogate: Toluene-d8</i>		47.3		ug/kg	50.0	95%	76 - 129	9084596	NSH1986-01RE 1	08/31/09 23:34
<i>Surrogate: 4-Bromofluorobenzene</i>		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) perlylene	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
<i>Surrogate: Terphenyl-d14</i>		1.25		mg/kg dry	1.74	72%	18 - 120	9083679	NSH1908-05	08/30/09 15:32
<i>Surrogate: 2-Fluorobiphenyl</i>		1.24		mg/kg dry	1.74	71%	14 - 120	9083679	NSH1908-05	08/30/09 15:32
<i>Surrogate: Nitrobenzene-d5</i>		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:	NSH1908
		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>9083572-MSD1</b>												
Benzene	ND	2.03		mg/kg wet	2.50	81%	42 - 141	11	50	9083572	NSH1890-02R E1	08/28/09 23:14
Ethylbenzene	0.0739	2.21		mg/kg wet	2.50	86%	21 - 165	14	50	9083572	NSH1890-02R E1	08/28/09 23:14
Naphthalene	0.732	2.20		mg/kg wet	2.50	59%	10 - 160	18	50	9083572	NSH1890-02R E1	08/28/09 23:14
Toluene	0.0728	2.02		mg/kg wet	2.50	78%	45 - 145	14	50	9083572	NSH1890-02R E1	08/28/09 23:14
Xylenes, total	0.274	6.53		mg/kg wet	7.50	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: Dibromoformmethane</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>9084594-MSD1</b>												
Benzene	ND	2.40		mg/kg wet	5.00	48%	42 - 141	4	50	9084594	NSH2207-01R E1	08/30/09 01:02
Ethylbenzene	ND	2.62		mg/kg wet	5.00	52%	21 - 165	2	50	9084594	NSH2207-01R E1	08/30/09 01:02
Naphthalene	0.117	2.44		mg/kg wet	5.00	46%	10 - 160	4	50	9084594	NSH2207-01R E1	08/30/09 01:02
Toluene	ND	2.53		mg/kg wet	5.00	51%	45 - 145	3	50	9084594	NSH2207-01R E1	08/30/09 01:02
Xylenes, total	0.0622	8.04		mg/kg wet	15.0	53%	31 - 159	1	50	9084594	NSH2207-01R E1	08/30/09 01:02
<i>Surrogate: 1,2-Dichloroethane-d4</i>		24.7		ug/kg	25.0	99%	67 - 138			9084594	NSH2207-01R E1	08/30/09 01:02
<i>Surrogate: Dibromoformmethane</i>		24.2		ug/kg	25.0	97%	75 - 125			9084594	NSH2207-01R E1	08/30/09 01:02
<i>Surrogate: Toluene-d8</i>		25.9		ug/kg	25.0	103%	76 - 129			9084594	NSH2207-01R E1	08/30/09 01:02
<i>Surrogate: 4-Bromofluorobenzene</i>		25.0		ug/kg	25.0	100%	67 - 147			9084594	NSH2207-01R E1	08/30/09 01:02
<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)	Work Order:	NSH1908
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	Received:	08/21/09 08:00

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

Analytic	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>												
<i>Surrogate: Dibromofluoromethane</i>	48.9			ug/kg	50.0	98%	75 - 125			9084596	NSH1986-01R E1	09/01/09 00:04
<i>Surrogate: Toluene-d8</i>	46.6			ug/kg	50.0	93%	76 - 129			9084596	NSH1986-01R E1	09/01/09 00:04
<i>Surrogate: 4-Bromofluorobenzene</i>	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-ed) 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
<i>Surrogate: Terphenyl-d14</i>	1.37			mg/kg dry	1.73	79%	18 - 120			9083679	NSH1908-05	08/30/09 15:55
<i>Surrogate: 2-Fluorobiphenyl</i>	1.35			mg/kg dry	1.73	78%	14 - 120			9083679	NSH1908-05	08/30/09 15:55
<i>Surrogate: Nitrobenzene-d5</i>	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	Work Order:	NSH1908
Attn	Tom McElwee	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			

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Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSH1908
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	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**



## COOLER RECEI

NSH1908

Cooler Received/Opened On 8/21/09 @ 08:001. Tracking # Co735 (last 4 digits, FedEx)Courier: FedEx IR Gun ID 967101662. Temperature of rep. sample or temp blank when opened: 26 Degrees Celsius3. If item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler?

If yes, how many and where:

2 TRACT

YES...NO...NA

5. Were the seals intact, signed, and dated correctly?

YES...NO...NA

6. Were custody papers inside cooler?

YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) (initial)7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly?

YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received?

YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES NO If multiple coolers, sequence # (initial)I certify that I unloaded the cooler and answered questions 7-14 (initial) (initial)

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) (initial)

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) (initial)I certify that I attached a label with the unique LIMS number to each container (initial) (initial)21. Were there Non-Conformance issues at login? YES NO Was a PIPE generated? YES NO # 54341  
#19 1474 (coldint) - the MeOH preserved vial was empty. The septum was dislodged  
and the sample leaked out.

NSH1908

09/04/09 23:59



Nashville Division  
2960 Foster Creighton  
Nashville, TN 37204

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

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

Client Name/Account #: EEG # 2449

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29456

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

Telephone Number: 843.412.2097

Fax No.: 843-879-0401

Sampler Name: (Print) *Picayune Shaw*Sampler Signature: *Picayune Shaw*Compliance Monitoring? Yes  No Enforcement Action? Yes  No 

Site State: SC

PO#: 0829

TA Quote #:

Project ID: Laurel Bay Housing Project

Project #:

RUSH/TAT (Pre-Schedule)

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Ice	Preservative	Matrix	Analyze For:				
										Other (Specify)	Methane	BTEX + Naph	PAH - 8270D	PCP
1474 Cardin 4	8/17/09	0950	5	X				HNO <sub>3</sub> (Red Label)	Groundwater		1	2		NSH1908-01
1477 Cardin 1	8/17/09	1040	5	X				HCl (Blue Label)	Wastewater		1	2		02
1478 Cardin 1	8/17/09	1355	5	X				NaOH (Orange Label)	Drinking Water		1	2		03
1485 Cardin 1	8/17/09	1545	5	X				H <sub>2</sub> SO <sub>4</sub> , Plastic (Yellow Label)	Sludge		1	2		04
1126 Bobwhite	8/18/09	1005	5	X				H <sub>2</sub> SO <sub>4</sub> , Glass (Yellow Label)	Soil		1	2		05
1172 Bobwhite	8/18/09	0945	5	X				None (Black Label)	Other (Specify)		1	2		06
1180 Bobwhite	8/18/09	1345	5	X							1	2		07
1182 Bobwhite 2	8/18/09	1405	5	X							1	2		08

## Special Instructions:

## Method of Shipment: FEDEX

## Laboratory Comments:

Temperature Upon Receipt:  
VOCs Free of Headspace?

24C

Y

Relinquished by: <i>Tom McElwee</i>	Date: 8/20/09	Time: 1900	Received by: FedEx	Date: 8/21/09	Time: 0800
Relinquished by: <i>Tom McElwee</i>	Date: 8/20/09	Time: 1900	Received by TestAmerica: <i>Tom McElwee</i>	Date: 8/21/09	Time: 0800

ATTACHMENT A



# NON-HAZARDOUS MANIFEST

CWM

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 10885474</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 RIDGELELAND SC 29936</b>		10. US EPA ID Number	E. State Transporter's ID			
			F. Transporter's Phone			
			G. State Facility's ID			
			H. Facility's Phone <b>843 987-4643</b>			
G E N E R A T O R	11. Description of Waste Materials <b>a Heating Oil Tank filled with Sand</b>		12. Containers No.	13. Total Quantity	14. Unit Wt./Vol	I. Misc. Comments
	WM Profile # <b>102655SC</b>		<b>0 0 1</b>	<b>853</b>	<b>TN</b>	
	b. WM Profile #					
	c. WM Profile #					
	d. 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 <b>GCA UST's from Y1473 CARDINAL</b>		<b>2) Y1470 Cardinal / 4) Y1477 Cardinal / 3) Y1474 Cardinal / 5) Y1478 Cardinal / 6) Y1985 Cardinal /</b>				
Purchase Order #		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 <b>W.B. Jones, Jr.</b>		Signature "On behalf of" 			Month Day Year <b>08/26/09</b>	
T R A N S P O R T E R	17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <b>James Baldwin</b>		Signature 			Month Day Year <b>10/8/2019</b>
	18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature			Month Day Year
A C I T Y	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 <b>J Collins</b>		Signature 			Month Day Year <b>08/27/09</b>

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

# Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Laboratory ID: QB07013-004

Description: BEALB1477TW01WG20150206

Matrix: Aqueous

Date Sampled: 02/06/2015 0840

Date Received: 02/07/2015

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	02/12/2015 1728	EH1		67618			
Parameter		CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene		71-43-2	8260B	0.40	U	1.0	0.40	0.13	ug/L	1
Ethylbenzene		100-41-4	8260B	1.9		1.0	0.50	0.33	ug/L	1
Naphthalene		91-20-3	8260B	1.7		1.0	0.20	0.40	ug/L	1
Toluene		108-88-3	8260B	0.50	U	1.0	0.50	0.33	ug/L	1
Xylenes (total)		1330-20-7	8260B	0.40	U	1.0	0.40	0.33	ug/L	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits							
1,2-Dichloroethane-d4	94		70-120							
Bromofluorobenzene	99		75-120							
Toluene-d8	98		85-120							
Dibromofluoromethane	96		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: QB07013-004

Description: BEALB1477TW01WG20150206

Matrix: Aqueous

Date Sampled: 02/06/2015 0840

Date Received: 02/07/2015

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D (SIM)	1	02/19/2015 2102	RBH	02/10/2015 1621	67396

Parameter	CAS	Analytical		Result	Q	LOQ	LOD	DL	Units	Run
	Number	Method								
Benzo(a)anthracene	56-55-3	8270D (SIM)		0.13	J	0.20	0.040	0.019	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D (SIM)		0.091	J	0.20	0.040	0.019	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D (SIM)		0.032	J	0.20	0.040	0.024	ug/L	1
Chrysene	218-01-9	8270D (SIM)		0.13	J	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
<b>Surrogate</b>		<b>Q</b>	<b>Run 1 % Recovery</b>	<b>Acceptance Limits</b>						
2-Methylnaphthalene-d10		55		15-139						
Fluoranthene-d10		81		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 **ALS Project ID:** P1404131  
**Client Sample ID:** BEALB1477SG01GS20141007 **ALS Sample ID:** P1404131-005  
**Client Project ID:** JM30- Laurel Bay Military Housing Area, MCAS Beauf / 60272162.FI.WS

Test Code: EPA TO-15 Date Collected: 10/7/14  
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 10/9/14  
Analyst: Simon Cao Date Analyzed: 10/11/14  
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)  
Test Notes:  
Container ID: SC02011

Initial Pressure (psig): -2.21 Final Pressure (psig): 3.59

Canister Dilution Factor: 1.46

CAS #	Compound	Result µg/m³	LOQ µg/m³	LOD µg/m³	MDL µg/m³	Data Qualifier
71-43-2	Benzene	0.64	0.73	0.64	0.23	U
108-88-3	Toluene	<b>0.81</b>	0.73	0.61	0.25	
100-41-4	Ethylbenzene	0.63	0.73	0.63	0.23	U
179601-23-1	m,p-Xylenes	1.2	1.5	1.2	0.44	U
95-47-6	o-Xylene	0.60	0.73	0.60	0.22	U
91-20-3	Naphthalene	0.60	0.73	0.60	0.26	U

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.

**Appendix E**  
**Regulatory Correspondence**

April 1, 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,

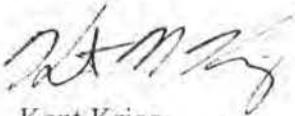
The South Carolina Department of Health and Environmental Control (the Department) received the above referenced Underground Storage Tank Assessment Reports for the addresses listed above. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina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

Attachment to: Krieg to Drawdy  
Subject: IGWA  
Dated 4/1/2014

**Laurel Bay Underground Storage Tank Assessment Reports for: (25 addresses/26 tanks)**

1187 Bobwhite	1456 Cardinal
1431 Dove	1457 Cardinal
1433 Dove	1461 Cardinal
1435 Dove Tank #1	1465 Cardinal
1435 Dove Tank #2	1467 Cardinal
1437 Dove	1469 Cardinal
1439 Dove	1470 Cardinal
1441 Dove	1471 Cardinal
1447 Dove	1473 Cardinal
1449 Dove	1477 Cardinal
1451 Dove	1478 Cardinal
1452 Cardinal	1479 Cardinal
1454 Cardinal	1485 Cardinal



May 5, 2015

W. Marshall Taylor Jr., Acting Director

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

Commanding Officer

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

RE: Correction - Recommendation Concurrence  
Draft Final Initial Groundwater Investigation Report  
Dated April 2015

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received groundwater data in the above referenced Groundwater Investigation Report for the 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 3 stated addresses. For the remaining 23 addresses, there is no indication of contamination on the property and therefore no further investigation is required at this time. *Note the correction to the attachment, properly referencing 1431 Dove and 1435 Dove Tank 1 and Tank 2 in the Permanent Monitoring Well Investigation recommendation section.*

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

*Attachment: Specific Property Recommendations*

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



W. Marshall Taylor Jr., Acting Director

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

**Attachment to:** Krieg to Drawdy  
**Subject:** Draft Final Initial Groundwater Investigation Report - April 2015  
Specific Property Recommendations  
Dated 5/5/2015

**Draft Final Initial Groundwater Investigation Report for: (26 addresses/28 tanks)**

<b>Permanent Monitoring Well Investigation recommendation (3 addresses/4 tanks):</b>	
1431 Dove	1435 Dove Tank 2
1435 Dove Tank 1	1452 Cardinal
<b>No Further Action recommendation (23 addresses/24 tanks):</b>	
1187 Bobwhite	1463 Cardinal
1433 Dove	1465 Cardinal
1437 Dove	1467 Cardinal
1439 Dove	1469 Cardinal
1441 Dove	1470 Cardinal
1447 Dove	1473 Cardinal
1449 Dove	1471 Cardinal
1451 Dove	1477 Cardinal
1454 Cardinal	1478 Cardinal
1456 Cardinal	1479 Cardinal Tank 1
1457 Cardinal	1479 Cardinal Tank 2
1461 Cardinal	1485 Cardinal



W. Marshall Taylor Jr., Acting Director  
*Promoting and protecting the health of the public and the environment*

Bureau of Land and Waste Management  
South Carolina Department of Health and Environmental Control

March 10, 2015

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

RE: Approval  
Draft Final Technical Memorandum-Soil Gas Sampling Results  
October 2014  
Laurel Bay Military Housing Area

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received the above referenced soil gas sampling results for multiple former heating oil tank sites on February 2, 2015. During tank removal, contaminated soil had been observed at the former tank sites selected for this study. The purpose of this study was to evaluate whether the constituents observed in soil have potential for exposure and risk to residents through impacted vapor intrusion pathways. Sampling was performed at fourteen (14) former heating oil tank sites with a range of VOCs present in the soil at the time of tank removal. 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 soil gas sampling results. The Department has generated no comments on this report. 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  
Department of Defense Corrective Action Section

Cc: Russell Berry, EQC Region 8  
Shawn Dolan, Resolution Consultants