

**SUMMARY REPORT**  
**341 WEST DOVE LANE (FORMERLY 1382 WEST DOVE 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**  
**Norfolk, Virginia 23511-3095**

**JUNE 2021**

**SUMMARY REPORT**  
**341 WEST DOVE LANE (FORMERLY 1382 WEST DOVE 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**  
**Norfolk, Virginia 23511-3095**

**Prepared by:**



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

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

---

## Table of Contents

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

## Tables

Table 1	Laboratory Analytical Results - Soil
Table 2	Laboratory Analytical Results - Initial Groundwater
Table 3	Laboratory Analytical Results - Permanent Monitoring Well Groundwater

## Appendices

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

### List of Acronyms

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

## **1.0 INTRODUCTION**

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

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

This report summarizes the results the environmental investigation activities associated with the storage of home heating oil and the potential release of petroleum constituents at the referenced property. Based on the results of the investigation, a No Further Action (NFA) determination has been made by the South Carolina Department of Health and Environmental Control (SCDHEC) for 341 West Dove Lane (Formerly 1382 West Dove 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

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

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

During the UST removal process, a soil sample was collected from beneath the UST excavations (approximately 4 to 6 feet [ft] below ground surface [bgs]) and analyzed for a predetermined list of constituents of potential concern (COPCs) associated with the petroleum compounds found in home heating oil. These COPCs, derived from the *Quality Assurance Program Plan (QAPP) for the Underground Storage Tank Management Division, Revision 3.1* (SCDHEC, February 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, February 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, April 2013) and were revised again in Revision 3.0 (SCDHEC, May 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 IGWA sampling process utilizes temporary groundwater sampling points that are typically installed and sampled within the same day. The intent of the sampling point is to determine the presence or absence of the aforementioned COPCs in groundwater and identify whether former UST locations may require additional delineation of COPCs in groundwater. These sampling points are not subjected to the same installation standards as permanent monitoring wells and, as such; the data obtained from the IGWA wells can sometimes be biased high and is considered preliminary data. In order to confirm the presence of any impact to groundwater, a permanent well is installed where IGWA sampling has indicated the presence of COPCs is in excess of the SCDHEC RBSLs for groundwater. If COPCs are found to be present in the permanent well, additional permanent wells are installed to delineate the extent of impact to groundwater and a sampling program is established. Groundwater analytical results from permanent wells are also compared to the site specific groundwater vapor intrusion screening levels (VISLs) to evaluate the potential for vapor intrusion and the necessity for an investigation associated with this media. A multi-media investigation selection process tree, applicable to the LBMH UST investigations, is presented as Appendix A.

## **2.0 SAMPLING ACTIVITIES AND RESULTS**

The following section presents the sampling activities and associated results for 341 West Dove Lane (Formerly 1382 West Dove Lane). The sampling activities at 341 West Dove Lane (Formerly 1382 West Dove Lane) comprised a soil investigation, IGWA sampling and installation and sampling of a permanent well. Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1382 Dove 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 – May and June 2015* (Resolution Consultants, 2015). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C. Details regarding the

permanent well installation and sampling activities at this site are provided in the *Groundwater Assessment Report – November and December 2017* (Resolution Consultants, 2018). The laboratory report that includes the pertinent groundwater analytical results for this site is presented in Appendix D.

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

On July 13, 2009, a single 280 gallon heating oil UST was removed from the front grassed area at 341 West Dove Lane (Formerly 1382 West Dove 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 6'1" 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 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 341 West Dove Lane (Formerly 1382 West Dove Lane) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated May 15, 2014, SCDHEC requested an IGWA for 341 West Dove Lane (Formerly 1382 West Dove Lane) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix E.



### **2.3 Initial Groundwater Sampling**

On June 22, 2015, a temporary monitoring well was installed at 341 West Dove Lane (Formerly 1382 West Dove 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 – May and June 2015* (Resolution Consultants, 2015).

The sampling strategy for this phase of the investigation required a one-time sampling event of the temporarily installed monitoring 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.H-I (SCDHEC, 2016). Field forms are provided in the *Initial Groundwater Investigation Report – May and June 2015* (Resolution Consultants, 2015).

### **2.4 Initial Groundwater Analytical Results**

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

The groundwater results collected from 341 West Dove Lane (Formerly 1382 West Dove Lane) were greater than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated further investigation was required. In a letter dated February 22, 2016, SCDHEC requested a permanent well be installed for 341 West Dove Lane (Formerly 1382 West Dove Lane) to confirm the impact to groundwater detected in the temporary well sample. SCDHEC's request letter is provided in Appendix E.

### **2.5 Permanent Well Groundwater Sampling**

On December 4, 2017, a permanent monitoring well was installed at 341 West Dove Lane (Formerly 1382 West Dove 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 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 *Groundwater Assessment Report – November and December 2017* (Resolution Consultants, 2018).

The sampling strategy for this phase of the investigation required a one-time sampling event of the permanent 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. Field forms are provided in the *Groundwater Assessment Report – November and December 2017* (Resolution Consultants, 2018).

## **2.6 Permanent Well Groundwater Analytical Results**

A summary of the laboratory analytical results and SCDHEC RBSLs is presented in Table 3. A copy of the laboratory analytical data report is included in Appendix D.

The groundwater results collected from 341 West Dove Lane (Formerly 1382 West Dove Lane) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 3), which indicated that the groundwater was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

## **3.0 PROPERTY STATUS**

Based on the analytical results for groundwater collected from the permanent monitoring well, SCDHEC made the determination that NFA was required for 341 West Dove Lane (Formerly 1382 West Dove Lane). This NFA determination was obtained in a letter dated June 18, 2018. SCDHEC's NFA letter is 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 – 1382 Dove Lane, Laurel Bay Military Housing Area*, October 2009.

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

Resolution Consultants, 2018. *Groundwater Assessment Report – November and December 2017 for Laurel Bay Military Housing Area, Multiple Properties, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, March 2018.

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

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

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

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

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

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

## Tables

**Table 1**  
**Laboratory Analytical Results - Soil**  
**341 West Cardinal Lane (Formerly 1382 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 07/13/09
<b>Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)</b>		
Benzene	0.003	ND
Ethylbenzene	1.15	<b>0.201</b>
Naphthalene	0.036	<b>6.89</b>
Toluene	0.627	<b>0.0370</b>
Xylenes, Total	13.01	<b>1.52</b>
<b>Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)</b>		
Benzo(a)anthracene	0.066	<b>1.69</b>
Benzo(b)fluoranthene	0.066	<b>0.811</b>
Benzo(k)fluoranthene	0.066	ND
Chrysene	0.066	<b>1.43</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 - Initial Groundwater**  
**341 West Cardinal Lane (Formerly 1382 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 (µg/L) <sup>(2)</sup>	Results Sample Collected 06/22/15
<b>Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)</b>			
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	<b>15</b>
Naphthalene	25	29.33	<b>82</b>
Toluene	1000	105,445	<b>3.4</b>
Xylenes, Total	10,000	2,133	<b>57</b>
<b>Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)</b>			
Benzo(a)anthracene	10	NA	<b>0.11</b>
Benzo(b)fluoranthene	10	NA	<b>0.083</b>
Benzo(k)fluoranthene	10	NA	ND
Chrysene	10	NA	<b>0.084</b>
Dibenz(a,h)anthracene	10	NA	ND

**Notes:**

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

<sup>(2)</sup> Site-specific groundwater VISLs were calculated using the EPA JE Model Spreadsheets (Version 3.1, February 2004) and conservative modeling inputs representative of a small single-story house with an 8 foot ceiling. Site-specific groundwater VISLs were developed based on a target risk level of  $1 \times 10^{-6}$ , a target hazard quotient of 1 (per target organ), and a default residential exposure scenario, assuming exposure for 24 hours/day, 350 days/year, for 26 years. Modeling was performed for a range of depths to groundwater for application as appropriate in different areas of the Laurel Bay Military Housing Area. The most conservative levels are presented for comparison. Refer to Appendix H of the Uniform Federal Policy Sampling Analysis and Sampling Plan for Vapor Media, Revision 4 (Resolution Consultants, April 2017) for additional information.

Bold font indicates the analyte was detected.

Bold font and shading indicates the concentration exceeds the SCDHEC RBSL and/or the Site-Specific Groundwater VISL.

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - not applicable

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

**Table 3**  
**Laboratory Analytical Results - Permanent Well Groundwater**  
**341 West Cardinal Lane (Formerly 1382 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 (µg/L) <sup>(2)</sup>	Results Sample Collected 12/08/17
<b>Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)</b>			
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	ND
Naphthalene	25	29.33	<b>1.1</b>
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	ND
<b>Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)</b>			
Benzo(a)anthracene	10	NA	ND
Benzo(b)fluoranthene	10	NA	ND
Benzo(k)fluoranthene	10	NA	ND
Chrysene	10	NA	ND
Dibenz(a,h)anthracene	10	NA	ND

**Notes:**

<sup>(1)</sup> South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.1 (SCDHEC, February 2016).

<sup>(2)</sup> Site-specific groundwater VISLs were calculated using the EPA JE Model Spreadsheets (Version 3.1, February 2004) and conservative modeling inputs representative of a small single-story house with an 8 foot ceiling. Site-specific groundwater VISLs were developed based on a target risk level of  $1 \times 10^{-6}$ , a target hazard quotient of 1 (per target organ), and a default residential exposure scenario, assuming exposure for 24 hours/day, 350 days/year, for 26 years. Modeling was performed for a range of depths to groundwater for application as appropriate in different areas of the Laurel Bay Military Housing Area. The most conservative levels are presented for comparison. Refer to Appendix H of the Uniform Federal Policy Sampling Analysis and Sampling Plan for Vapor Media, Revision 4 (Resolution Consultants, April 2017) for additional information.

Bold font indicates the analyte was detected.

Bold font and shading indicates the concentration exceeds the SCDHEC RBSL and/or the Site-Specific Groundwater VISL.

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - not applicable

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

RBSL - Risk-Based Screening Level

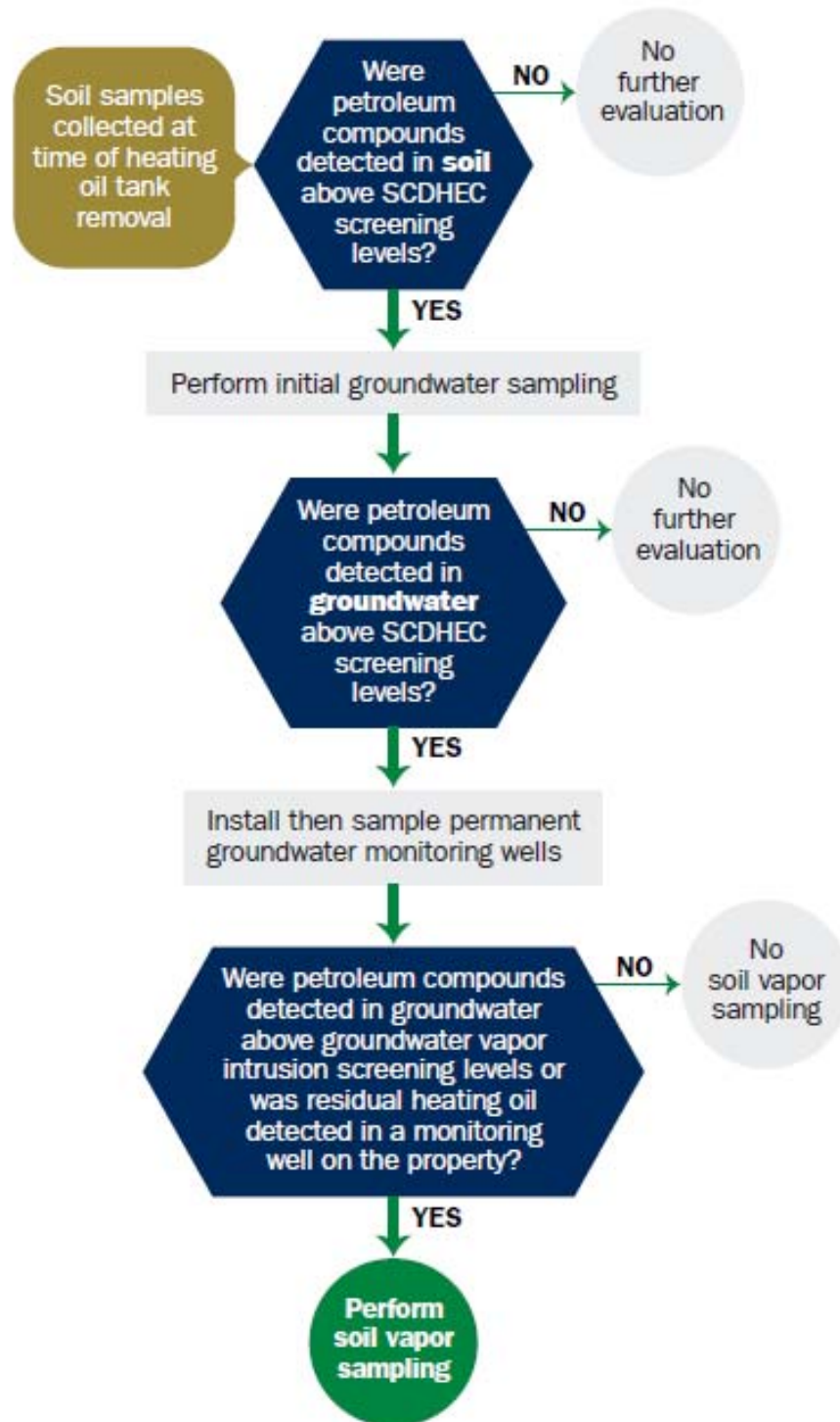
SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

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





Appendix A - Multi-Media Selection Process for LBMH

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

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



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

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

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

**II. SITE IDENTIFICATION AND LOCATION**

Permit I.D. #	
Laurel Bay Military Housing Area, Marine Corps Air Station, Beaufort, SC	
Facility Name or Company Site Identifier	
1382 Dove Lane, Laurel Bay Military Housing Area	
Street Address or State Road (as applicable)	
Beaufort,	Beaufort
City	County

### III. INSURANCE INFORMATION

#### Insurance Statement

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

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

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

My policy provider is: \_\_\_\_\_  
The policy deductible is: \_\_\_\_\_  
The policy limit is: \_\_\_\_\_

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

### IV. REQUEST FOR SUPERB FUNDING

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

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

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

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

\_\_\_\_\_  
Signature

#### To be completed by Notary Public:

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

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

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

## VI. UST INFORMATION

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

B. Capacity..(ex. 1k, 2k).....

C. Age.....

D. Construction Material..(ex. Steel, FRP).....

E. Month/Year of Last Use.....

F. Depth (ft.) To Base of Tank.....

G. Spill Prevention Equipment Y/N.....

H. Overfill Prevention Equipment Y/N.....

I. Method of Closure Removed/Filled.....

J. Date Tanks Removed/Filled.....

K. Visible Corrosion or Pitting Y/N.....

L. Visible Holes Y/N.....

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

UST 1382Dove was removed from the ground and disposed of at a  
Subtitle "D" landfill. See Attachment "A."

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

The tank had been previously filled with sand by others.

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

Corrosion, pitting and holes were found through out the tank.

1382Dove				
Heating oil				
280 gal				
Late 1950s				
Steel				
Mid 1980s				
6'1"				
No				
No				
Removed				
7/13/09				
Yes				
Yes				

## VII. PIPING INFORMATION

A. Construction Material..(ex. Steel, FRP).....

B. Distance from UST to Dispenser.....

C. Number of Dispensers.....

D. Type of System Pressure or Suction.....

E. Was Piping Removed from the Ground? Y/N

F. Visible Corrosion or Pitting Y/N.....

G. Visible Holes Y/N.....

H. Age.....

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

1382Dove				
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
<p>A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells?</p> <p>If yes, indicate depth and location on the site map.</p>		X	
<p>B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells?</p> <p>If yes, indicate location on site map and describe the odor (strong, mild, etc.)</p>		X	
<p>C. Was water present in the UST excavation, soil borings, or trenches?</p> <p>If yes, how far below land surface (indicate location and depth)?</p>		X	
<p>D. Did contaminated soils remain stockpiled on site after closure?</p> <p>If yes, indicate the stockpile location on the site map.</p> <p>Name of DHEC representative authorizing soil removal:</p>		X	
<p>E. Was a petroleum sheen or free product detected on any excavation or boring waters?</p> <p>If yes, indicate location and thickness.</p>		X	

## X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 96012001

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
1382 Dove	Excav at fill end	Soil	Sandy	6'1"	7/13/09 1330 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.

---

---

---

---

---

---

---

---

---

---

## XII. RECEPTORS

	Yes	No
<p>A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?      *Broad R. ~ 1,000 ft.</p> <p>If yes, indicate type of receptor, distance, and direction on site map.</p>	*X	
<p>B. Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?</p> <p>If yes, indicate type of well, distance, and direction on site map.</p>		X
<p>C. Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?</p> <p>If yes, indicate type of structure, distance, and direction on site map.</p>		X
<p>D. Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination?      *Sewer &amp; water</p> <p>If yes, indicate the type of utility, distance, and direction on the site map.</p>	*X	
<p>E. Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete?</p> <p>If yes, indicate the area of contaminated soil on the site map.</p>		X

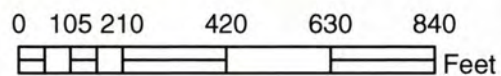
### **XIII. SITE MAP**

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

(Attach Site Map Here)



**1382 DOVE LANE**



**SBG-EEG, Inc.**


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

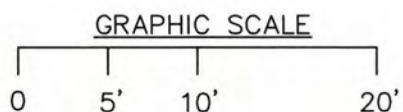
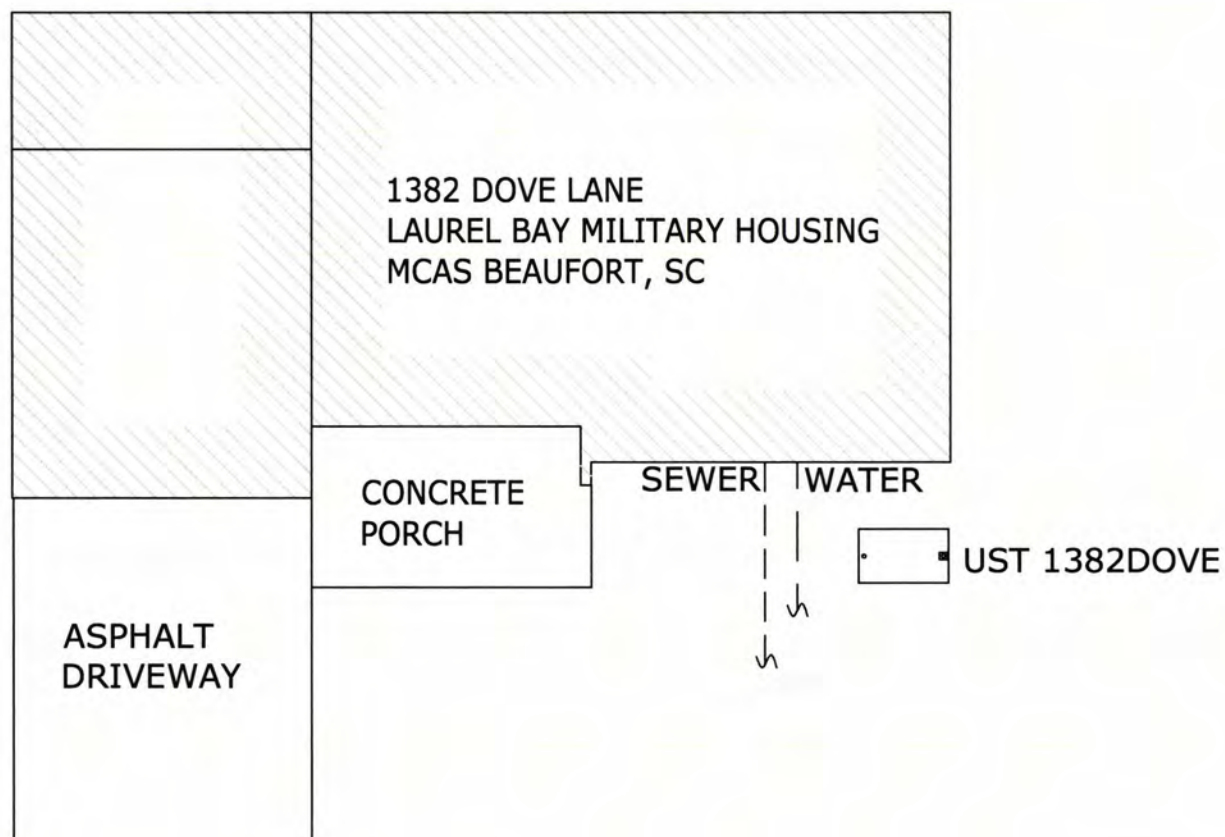
Ph. (843) 879-0400

Drawn By: L. DiAsio

Dwg Date: Aug 2009

**FIGURE 1: LOCATION MAP**  
**1382 DOVE LANE, LAUREL BAY**  
**MCAS BEAUFORT SC**

BROAD RIVER  $\approx 1,000'$  



***SBG-EEG***

10179 HWY 78  
LADSON, SC 29456

ph. (843) 879-0400


FIGURE 2 SITE MAP  
1382 DOVE LANE, LAUREL BAY  
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE AUG 2009



1382 DOVE LANE

BROAD RIVER  $\approx 1,000'$  

CONCRETE  
PORCH

GRASS

SEWER

WATER

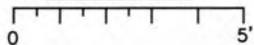
EXCAVATION

FILL END

SOIL SAMPLE  
1382 DOVE

UST 1382DOVE,  
280 GAL.

GRAPHIC SCALE



UST 1382DOVE WAS  
37" BELOW GRADE.

**SBG-EEG**

10179 HWY 78  
LADSON, SC 29456

ph. (843) 879-0400

FIGURE 3 UST SAMPLE LOCATIONS  
1382 DOVE LANE, LAUREL BAY  
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE AUG 2009



Picture 1: Location of UST 1382Dove prior to removal.



Picture 2: Site after completion of work.

#### 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>	<b>1382Dove</b>						
<b>Benzene</b>		ND						
<b>Toluene</b>		0.0370 mg/kg						
<b>Ethylbenzene</b>		0.201 mg/kg						
<b>Xylenes</b>		1.52 mg/kg						
<b>Naphthalene</b>		6.89 mg/kg						
<b>Benzo (a) anthracene</b>		1.69 mg/kg						
<b>Benzo (b) fluoranthene</b>		0.811 mg/kg						
<b>Benzo (k) fluoranthene</b>		ND						
<b>Chrysene</b>		1.43 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 (µg/l)	W-1	W-2	W -3	W -4
Free Product Thickness	None				
Benzene	5				
Toluene	1,000				
Ethylbenzene	700				
Xylenes	10,000				
Total BTEX	N/A				
MTBE	40				
Naphthalene	25				
Benzo (a) anthracene	10				
Benzo (b) flouranthene	10				
Benzo (k) flouranthene	10				
Chrysene	10				
Dibenz (a, h) anthracene	10				
EDB	.05				
1,2-DCA	5				
Lead	Site specific				

## **XV. ANALYTICAL RESULTS**

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

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

July 30, 2009

6:49:11PM

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

Work Order: NSG1390  
Project Name: Laurel Bay Housing Project  
Project Nbr: [none]  
P/O Nbr: 08129  
Date Received: 07/17/09

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
1378 Dove	NSG1390-01	07/13/09 10:00
1377 Dove	NSG1390-02	07/13/09 09:50
1376 Dove	NSG1390-03	07/13/09 15:10
1382 Dove	NSG1390-04	07/13/09 13:30
1381 Dove	NSG1390-05	07/14/09 10:15
1385 Dove	NSG1390-06	07/14/09 15:10

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  
Attn Tom McElwee

Work Order: NSG1390  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 07/17/09 08:00

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
<b>Sample ID: NSG1390-01 (1378 Dove - Soil) Sampled: 07/13/09 10:00</b>								
General Chemistry Parameters								
% Dry Solids	78.8		%	0.500	1	07/28/09 08:49	SW-846	9073886
Selected Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00215	1	07/24/09 16:30	SW846 8260B	9072531
Ethylbenzene	ND		mg/kg dry	0.00215	1	07/24/09 16:30	SW846 8260B	9072531
Naphthalene	ND		mg/kg dry	0.00538	1	07/24/09 16:30	SW846 8260B	9072531
Toluene	ND		mg/kg dry	0.00215	1	07/24/09 16:30	SW846 8260B	9072531
Xylenes, total	ND		mg/kg dry	0.00538	1	07/24/09 16:30	SW846 8260B	9072531
Surr: 1,2-Dichloroethane-d4 (67-138%)	101 %					07/24/09 16:30	SW846 8260B	9072531
Surr: Dibromofluoromethane (75-125%)	100 %					07/24/09 16:30	SW846 8260B	9072531
Surr: Toluene-d8 (76-129%)	106 %					07/24/09 16:30	SW846 8260B	9072531
Surr: 4-Bromofluorobenzene (67-147%)	113 %					07/24/09 16:30	SW846 8260B	9072531
Polyaromatic Hydrocarbons by EPA 8270D								
Acenaphthene	ND		mg/kg dry	0.0845	1	07/19/09 20:39	SW846 8270D	9072561
Acenaphthylene	ND		mg/kg dry	0.0845	1	07/19/09 20:39	SW846 8270D	9072561
Anthracene	ND		mg/kg dry	0.0845	1	07/19/09 20:39	SW846 8270D	9072561
Benzo (a) anthracene	ND		mg/kg dry	0.0845	1	07/19/09 20:39	SW846 8270D	9072561
Benzo (a) pyrene	ND		mg/kg dry	0.0845	1	07/19/09 20:39	SW846 8270D	9072561
Benzo (b) fluoranthene	ND		mg/kg dry	0.0845	1	07/19/09 20:39	SW846 8270D	9072561
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0845	1	07/19/09 20:39	SW846 8270D	9072561
Benzo (k) fluoranthene	ND		mg/kg dry	0.0845	1	07/19/09 20:39	SW846 8270D	9072561
Chrysene	ND		mg/kg dry	0.0845	1	07/19/09 20:39	SW846 8270D	9072561
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0845	1	07/19/09 20:39	SW846 8270D	9072561
Fluoranthene	ND		mg/kg dry	0.0845	1	07/19/09 20:39	SW846 8270D	9072561
Fluorene	ND		mg/kg dry	0.0845	1	07/19/09 20:39	SW846 8270D	9072561
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0845	1	07/19/09 20:39	SW846 8270D	9072561
Naphthalene	ND		mg/kg dry	0.0845	1	07/19/09 20:39	SW846 8270D	9072561
Phenanthrene	ND		mg/kg dry	0.0845	1	07/19/09 20:39	SW846 8270D	9072561
Pyrene	ND		mg/kg dry	0.0845	1	07/19/09 20:39	SW846 8270D	9072561
1-Methylnaphthalene	ND		mg/kg dry	0.0845	1	07/19/09 20:39	SW846 8270D	9072561
2-Methylnaphthalene	ND		mg/kg dry	0.0845	1	07/19/09 20:39	SW846 8270D	9072561
Surr: Terphenyl-d14 (18-120%)	80 %					07/19/09 20:39	SW846 8270D	9072561
Surr: 2-Fluorobiphenyl (14-120%)	63 %					07/19/09 20:39	SW846 8270D	9072561
Surr: Nitrobenzene-d5 (17-120%)	59 %					07/19/09 20:39	SW846 8270D	9072561

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

Work Order: NSG1390  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 07/17/09 08:00

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
<b>Sample ID: NSG1390-02 (1377 Dove - Soil) Sampled: 07/13/09 09:50</b>								
General Chemistry Parameters								
% Dry Solids	83.5		%	0.500	1	07/28/09 08:49	SW-846	9073886
Selected Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00216	1	07/24/09 17:02	SW846 8260B	9072531
Ethylbenzene	0.0367		mg/kg dry	0.00216	1	07/24/09 17:02	SW846 8260B	9072531
Naphthalene	1.45		mg/kg dry	0.271	50	07/27/09 17:53	SW846 8260B	9074052
Toluene	0.00577		mg/kg dry	0.00216	1	07/24/09 17:02	SW846 8260B	9072531
Xylenes, total	0.0976		mg/kg dry	0.00539	1	07/24/09 17:02	SW846 8260B	9072531
Surr: 1,2-Dichloroethane-d4 (67-138%)	107 %					07/24/09 17:02	SW846 8260B	9072531
Surr: 1,2-Dichloroethane-d4 (67-138%)	97 %					07/27/09 17:53	SW846 8260B	9074052
Surr: Dibromofluoromethane (75-125%)	103 %					07/24/09 17:02	SW846 8260B	9072531
Surr: Dibromofluoromethane (75-125%)	94 %					07/27/09 17:53	SW846 8260B	9074052
Surr: Toluene-d8 (76-129%)	174 %	ZX				07/24/09 17:02	SW846 8260B	9072531
Surr: Toluene-d8 (76-129%)	112 %					07/27/09 17:53	SW846 8260B	9074052
Surr: 4-Bromofluorobenzene (67-147%)	651 %	ZX				07/24/09 17:02	SW846 8260B	9072531
Surr: 4-Bromofluorobenzene (67-147%)	111 %					07/27/09 17:53	SW846 8260B	9074052
Polyaromatic Hydrocarbons by EPA 8270D								
Acenaphthene	ND		mg/kg dry	0.801	10	07/20/09 20:34	SW846 8270D	9072561
Acenaphthylene	ND		mg/kg dry	0.801	10	07/20/09 20:34	SW846 8270D	9072561
Anthracene	ND		mg/kg dry	0.801	10	07/20/09 20:34	SW846 8270D	9072561
Benzo (a) anthracene	1.84		mg/kg dry	0.801	10	07/20/09 20:34	SW846 8270D	9072561
Benzo (a) pyrene	1.04		mg/kg dry	0.801	10	07/20/09 20:34	SW846 8270D	9072561
Benzo (b) fluoranthene	1.53		mg/kg dry	0.801	10	07/20/09 20:34	SW846 8270D	9072561
Benzo (g,h,i) perylene	ND		mg/kg dry	0.801	10	07/20/09 20:34	SW846 8270D	9072561
Benzo (k) fluoranthene	0.821		mg/kg dry	0.801	10	07/20/09 20:34	SW846 8270D	9072561
Chrysene	2.10		mg/kg dry	0.801	10	07/20/09 20:34	SW846 8270D	9072561
Dibenz (a,h) anthracene	ND		mg/kg dry	0.801	10	07/20/09 20:34	SW846 8270D	9072561
Fluoranthene	3.02		mg/kg dry	0.801	10	07/20/09 20:34	SW846 8270D	9072561
Fluorene	1.82		mg/kg dry	0.801	10	07/20/09 20:34	SW846 8270D	9072561
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.801	10	07/20/09 20:34	SW846 8270D	9072561
Naphthalene	1.14		mg/kg dry	0.801	10	07/20/09 20:34	SW846 8270D	9072561
Phenanthrene	4.41		mg/kg dry	0.801	10	07/20/09 20:34	SW846 8270D	9072561
Pyrene	4.06		mg/kg dry	0.801	10	07/20/09 20:34	SW846 8270D	9072561
1-Methylnaphthalene	6.55		mg/kg dry	0.801	10	07/20/09 20:34	SW846 8270D	9072561
2-Methylnaphthalene	6.57		mg/kg dry	0.801	10	07/20/09 20:34	SW846 8270D	9072561
Surr: Terphenyl-d14 (18-120%)	74 %					07/20/09 20:34	SW846 8270D	9072561
Surr: 2-Fluorobiphenyl (14-120%)	5 %	ZX				07/20/09 20:34	SW846 8270D	9072561
Surr: Nitrobenzene-d5 (17-120%)	64 %					07/20/09 20:34	SW846 8270D	9072561

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

Work Order: NSG1390  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 07/17/09 08:00

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
<b>Sample ID: NSG1390-03 (1376 Dove - Soil) Sampled: 07/13/09 15:10</b>								
General Chemistry Parameters								
% Dry Solids	88.8		%	0.500	1	07/28/09 08:49	SW-846	9073886
Selected Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00228	1	07/24/09 17:33	SW846 8260B	9072531
Ethylbenzene	ND		mg/kg dry	0.00228	1	07/24/09 17:33	SW846 8260B	9072531
Naphthalene	ND		mg/kg dry	0.00569	1	07/24/09 17:33	SW846 8260B	9072531
Toluene	ND		mg/kg dry	0.00228	1	07/24/09 17:33	SW846 8260B	9072531
Xylenes, total	ND		mg/kg dry	0.00569	1	07/24/09 17:33	SW846 8260B	9072531
Surr: 1,2-Dichloroethane-d4 (67-138%)	100 %					07/24/09 17:33	SW846 8260B	9072531
Surr: Dibromofluoromethane (75-125%)	97 %					07/24/09 17:33	SW846 8260B	9072531
Surr: Toluene-d8 (76-129%)	103 %					07/24/09 17:33	SW846 8260B	9072531
Surr: 4-Bromofluorobenzene (67-147%)	117 %					07/24/09 17:33	SW846 8260B	9072531
Polyaromatic Hydrocarbons by EPA 8270D								
Acenaphthene	ND		mg/kg dry	0.0736	1	07/19/09 21:22	SW846 8270D	9072561
Acenaphthylene	ND		mg/kg dry	0.0736	1	07/19/09 21:22	SW846 8270D	9072561
Anthracene	ND		mg/kg dry	0.0736	1	07/19/09 21:22	SW846 8270D	9072561
Benzo (a) anthracene	ND		mg/kg dry	0.0736	1	07/19/09 21:22	SW846 8270D	9072561
Benzo (a) pyrene	0.368		mg/kg dry	0.0736	1	07/19/09 21:22	SW846 8270D	9072561
Benzo (b) fluoranthene	0.202		mg/kg dry	0.0736	1	07/19/09 21:22	SW846 8270D	9072561
Benzo (g,h,i) perylene	0.142		mg/kg dry	0.0736	1	07/19/09 21:22	SW846 8270D	9072561
Benzo (k) fluoranthene	ND		mg/kg dry	0.0736	1	07/19/09 21:22	SW846 8270D	9072561
Chrysene	ND		mg/kg dry	0.0736	1	07/19/09 21:22	SW846 8270D	9072561
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0736	1	07/19/09 21:22	SW846 8270D	9072561
Fluoranthene	ND		mg/kg dry	0.0736	1	07/19/09 21:22	SW846 8270D	9072561
Fluorene	ND		mg/kg dry	0.0736	1	07/19/09 21:22	SW846 8270D	9072561
Indeno (1,2,3-cd) pyrene	0.111		mg/kg dry	0.0736	1	07/19/09 21:22	SW846 8270D	9072561
Naphthalene	ND		mg/kg dry	0.0736	1	07/19/09 21:22	SW846 8270D	9072561
Phenanthrene	ND		mg/kg dry	0.0736	1	07/19/09 21:22	SW846 8270D	9072561
Pyrene	ND		mg/kg dry	0.0736	1	07/19/09 21:22	SW846 8270D	9072561
1-Methylnaphthalene	ND		mg/kg dry	0.0736	1	07/19/09 21:22	SW846 8270D	9072561
2-Methylnaphthalene	ND		mg/kg dry	0.0736	1	07/19/09 21:22	SW846 8270D	9072561
Surr: Terphenyl-d14 (18-120%)	74 %					07/19/09 21:22	SW846 8270D	9072561
Surr: 2-Fluorobiphenyl (14-120%)	56 %					07/19/09 21:22	SW846 8270D	9072561
Surr: Nitrobenzene-d5 (17-120%)	58 %					07/19/09 21:22	SW846 8270D	9072561

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

Work Order: NSG1390  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 07/17/09 08:00

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
<b>Sample ID: NSG1390-04 (1382 Dove - Soil) Sampled: 07/13/09 13:30</b>								
General Chemistry Parameters								
% Dry Solids	84.0		%	0.500	1	07/28/09 08:49	SW-846	9073886
Selected Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00224	1	07/24/09 18:08	SW846 8260B	9072531
Ethylbenzene	0.201		mg/kg dry	0.00224	1	07/24/09 18:08	SW846 8260B	9072531
Naphthalene	6.89		mg/kg dry	0.299	50	07/27/09 18:24	SW846 8260B	9074052
Toluene	0.0370		mg/kg dry	0.00224	1	07/24/09 18:08	SW846 8260B	9072531
Xylenes, total	1.52		mg/kg dry	0.299	50	07/27/09 18:24	SW846 8260B	9074052
Surr: 1,2-Dichloroethane-d4 (67-138%)	101 %					07/24/09 18:08	SW846 8260B	9072531
Surr: 1,2-Dichloroethane-d4 (67-138%)	96 %					07/27/09 18:24	SW846 8260B	9074052
Surr: Dibromofluoromethane (75-125%)	99 %					07/24/09 18:08	SW846 8260B	9072531
Surr: Dibromofluoromethane (75-125%)	94 %					07/27/09 18:24	SW846 8260B	9074052
Surr: Toluene-d8 (76-129%)	129 %					07/24/09 18:08	SW846 8260B	9072531
Surr: Toluene-d8 (76-129%)	106 %					07/27/09 18:24	SW846 8260B	9074052
Surr: 4-Bromofluorobenzene (67-147%)	670 %	ZX				07/24/09 18:08	SW846 8260B	9072531
Surr: 4-Bromofluorobenzene (67-147%)	109 %					07/27/09 18:24	SW846 8260B	9074052
Polyaromatic Hydrocarbons by EPA 8270D								
Acenaphthene	ND		mg/kg dry	0.787	10	07/20/09 20:55	SW846 8270D	9072561
Acenaphthylene	ND		mg/kg dry	0.787	10	07/20/09 20:55	SW846 8270D	9072561
Anthracene	ND		mg/kg dry	0.787	10	07/20/09 20:55	SW846 8270D	9072561
Benzo (a) anthracene	1.69		mg/kg dry	0.787	10	07/20/09 20:55	SW846 8270D	9072561
Benzo (a) pyrene	ND		mg/kg dry	0.787	10	07/20/09 20:55	SW846 8270D	9072561
Benzo (b) fluoranthene	0.811		mg/kg dry	0.787	10	07/20/09 20:55	SW846 8270D	9072561
Benzo (g,h,i) perylene	ND		mg/kg dry	0.787	10	07/20/09 20:55	SW846 8270D	9072561
Benzo (k) fluoranthene	ND		mg/kg dry	0.787	10	07/20/09 20:55	SW846 8270D	9072561
Chrysene	1.43		mg/kg dry	0.787	10	07/20/09 20:55	SW846 8270D	9072561
Dibenz (a,h) anthracene	ND		mg/kg dry	0.787	10	07/20/09 20:55	SW846 8270D	9072561
Fluoranthene	4.62		mg/kg dry	0.787	10	07/20/09 20:55	SW846 8270D	9072561
Fluorene	1.31		mg/kg dry	0.787	10	07/20/09 20:55	SW846 8270D	9072561
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.787	10	07/20/09 20:55	SW846 8270D	9072561
Naphthalene	2.31		mg/kg dry	0.787	10	07/20/09 20:55	SW846 8270D	9072561
Phenanthrene	4.02		mg/kg dry	0.787	10	07/20/09 20:55	SW846 8270D	9072561
Pyrene	3.81		mg/kg dry	0.787	10	07/20/09 20:55	SW846 8270D	9072561
1-Methylnaphthalene	6.27		mg/kg dry	0.787	10	07/20/09 20:55	SW846 8270D	9072561
2-Methylnaphthalene	8.85		mg/kg dry	0.787	10	07/20/09 20:55	SW846 8270D	9072561
Surr: Terphenyl-d14 (18-120%)	75 %					07/20/09 20:55	SW846 8270D	9072561
Surr: 2-Fluorobiphenyl (14-120%)	4 %	ZX				07/20/09 20:55	SW846 8270D	9072561
Surr: Nitrobenzene-d5 (17-120%)	60 %					07/20/09 20:55	SW846 8270D	9072561

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

Work Order: NSG1390  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 07/17/09 08:00

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
<b>Sample ID: NSG1390-05 (1381 Dove - Soil) Sampled: 07/14/09 10:15</b>								
General Chemistry Parameters								
% Dry Solids	79.1		%	0.500	1	07/28/09 08:49	SW-846	9073886
Selected Volatile Organic Compounds by EPA Method 8260B								
Benzene	0.00527		mg/kg dry	0.00212	1	07/25/09 18:10	SW846 8260B	9074033
Ethylbenzene	2.07		mg/kg dry	0.107	50	07/28/09 15:51	SW846 8260B	9073642
Naphthalene	23.7		mg/kg dry	5.33	1000	07/28/09 16:22	SW846 8260B	9073642
Toluene	ND		mg/kg dry	0.00212	1	07/25/09 18:10	SW846 8260B	9074033
Xylenes, total	0.0383		mg/kg dry	0.00531	1	07/25/09 18:10	SW846 8260B	9074033
Surr: 1,2-Dichloroethane-d4 (67-138%)	119 %					07/25/09 18:10	SW846 8260B	9074033
Surr: 1,2-Dichloroethane-d4 (67-138%)	94 %					07/28/09 15:51	SW846 8260B	9073642
Surr: 1,2-Dichloroethane-d4 (67-138%)	99 %					07/28/09 16:22	SW846 8260B	9073642
Surr: Dibromofluoromethane (75-125%)	108 %					07/25/09 18:10	SW846 8260B	9074033
Surr: Dibromofluoromethane (75-125%)	94 %					07/28/09 15:51	SW846 8260B	9073642
Surr: Dibromofluoromethane (75-125%)	98 %					07/28/09 16:22	SW846 8260B	9073642
Surr: Toluene-d8 (76-129%)	566 %	ZX				07/25/09 18:10	SW846 8260B	9074033
Surr: Toluene-d8 (76-129%)	117 %					07/28/09 15:51	SW846 8260B	9073642
Surr: Toluene-d8 (76-129%)	105 %					07/28/09 16:22	SW846 8260B	9073642
Surr: 4-Bromofluorobenzene (67-147%)	553 %	ZX				07/25/09 18:10	SW846 8260B	9074033
Surr: 4-Bromofluorobenzene (67-147%)	117 %					07/28/09 15:51	SW846 8260B	9073642
Surr: 4-Bromofluorobenzene (67-147%)	110 %					07/28/09 16:22	SW846 8260B	9073642
Polyaromatic Hydrocarbons by EPA 8270D								
Acenaphthene	ND		mg/kg dry	0.835	10	07/20/09 21:16	SW846 8270D	9072561
Acenaphthylene	ND		mg/kg dry	0.835	10	07/20/09 21:16	SW846 8270D	9072561
Anthracene	ND		mg/kg dry	0.835	10	07/20/09 21:16	SW846 8270D	9072561
Benzo (a) anthracene	ND		mg/kg dry	0.835	10	07/20/09 21:16	SW846 8270D	9072561
Benzo (a) pyrene	ND		mg/kg dry	0.835	10	07/20/09 21:16	SW846 8270D	9072561
Benzo (b) fluoranthene	ND		mg/kg dry	0.835	10	07/20/09 21:16	SW846 8270D	9072561
Benzo (g,h,i) perylene	ND		mg/kg dry	0.835	10	07/20/09 21:16	SW846 8270D	9072561
Benzo (k) fluoranthene	ND		mg/kg dry	0.835	10	07/20/09 21:16	SW846 8270D	9072561
Chrysene	ND		mg/kg dry	0.835	10	07/20/09 21:16	SW846 8270D	9072561
Dibenz (a,h) anthracene	ND		mg/kg dry	0.835	10	07/20/09 21:16	SW846 8270D	9072561
Fluoranthene	ND		mg/kg dry	0.835	10	07/20/09 21:16	SW846 8270D	9072561
Fluorene	4.60		mg/kg dry	0.835	10	07/20/09 21:16	SW846 8270D	9072561
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.835	10	07/20/09 21:16	SW846 8270D	9072561
Naphthalene	8.57		mg/kg dry	0.835	10	07/20/09 21:16	SW846 8270D	9072561
Phenanthrene	10.2		mg/kg dry	0.835	10	07/20/09 21:16	SW846 8270D	9072561
Pyrene	ND		mg/kg dry	0.835	10	07/20/09 21:16	SW846 8270D	9072561
1-Methylnaphthalene	36.1		mg/kg dry	0.835	10	07/20/09 21:16	SW846 8270D	9072561
2-Methylnaphthalene	56.3		mg/kg dry	4.18	50	07/21/09 15:40	SW846 8270D	9072561
Surr: Terphenyl-d14 (18-120%)	59 %					07/20/09 21:16	SW846 8270D	9072561
Surr: 2-Fluorobiphenyl (14-120%)	43 %					07/20/09 21:16	SW846 8270D	9072561
Surr: Nitrobenzene-d5 (17-120%)	45 %					07/20/09 21:16	SW846 8270D	9072561



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

Work Order: NSG1390  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 07/17/09 08:00

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
<b>Sample ID: NSG1390-06 (1385 Dove - Soil) Sampled: 07/14/09 15:10</b>								
General Chemistry Parameters								
% Dry Solids	82.0		%	0.500	1	07/28/09 08:49	SW-846	9073886
Selected Volatile Organic Compounds by EPA Method 8260B								
Benzene	0.00500		mg/kg dry	0.00197	1	07/25/09 18:41	SW846 8260B	9074033
Ethylbenzene	2.90		mg/kg dry	0.110	50	07/28/09 16:53	SW846 8260B	9073642
Naphthalene	20.6		mg/kg dry	5.51	1000	07/28/09 17:24	SW846 8260B	9073642
Toluene	ND		mg/kg dry	0.00197	1	07/25/09 18:41	SW846 8260B	9074033
Xylenes, total	3.75		mg/kg dry	0.276	50	07/28/09 16:53	SW846 8260B	9073642
Surr: 1,2-Dichloroethane-d4 (67-138%)	92 %					07/25/09 18:41	SW846 8260B	9074033
Surr: 1,2-Dichloroethane-d4 (67-138%)	96 %					07/28/09 16:53	SW846 8260B	9073642
Surr: 1,2-Dichloroethane-d4 (67-138%)	98 %					07/28/09 17:24	SW846 8260B	9073642
Surr: Dibromofluoromethane (75-125%)	92 %					07/25/09 18:41	SW846 8260B	9074033
Surr: Dibromofluoromethane (75-125%)	94 %					07/28/09 16:53	SW846 8260B	9073642
Surr: Dibromofluoromethane (75-125%)	97 %					07/28/09 17:24	SW846 8260B	9073642
Surr: Toluene-d8 (76-129%)	219 %	ZX				07/25/09 18:41	SW846 8260B	9074033
Surr: Toluene-d8 (76-129%)	119 %					07/28/09 16:53	SW846 8260B	9073642
Surr: Toluene-d8 (76-129%)	105 %					07/28/09 17:24	SW846 8260B	9073642
Surr: 4-Bromofluorobenzene (67-147%)	352 %	ZX				07/25/09 18:41	SW846 8260B	9074033
Surr: 4-Bromofluorobenzene (67-147%)	117 %					07/28/09 16:53	SW846 8260B	9073642
Surr: 4-Bromofluorobenzene (67-147%)	108 %					07/28/09 17:24	SW846 8260B	9073642
Polyaromatic Hydrocarbons by EPA 8270D								
Accenaphthene	ND		mg/kg dry	0.797	10	07/20/09 21:37	SW846 8270D	9072561
Accenaphthylene	ND		mg/kg dry	0.797	10	07/20/09 21:37	SW846 8270D	9072561
Anthracene	ND		mg/kg dry	0.797	10	07/20/09 21:37	SW846 8270D	9072561
Benzo (a) anthracene	1.17		mg/kg dry	0.797	10	07/20/09 21:37	SW846 8270D	9072561
Benzo (a) pyrene	ND		mg/kg dry	0.797	10	07/20/09 21:37	SW846 8270D	9072561
Benzo (b) fluoranthene	ND		mg/kg dry	0.797	10	07/20/09 21:37	SW846 8270D	9072561
Benzo (g,h,i) perylene	ND		mg/kg dry	0.797	10	07/20/09 21:37	SW846 8270D	9072561
Benzo (k) fluoranthene	ND		mg/kg dry	0.797	10	07/20/09 21:37	SW846 8270D	9072561
Chrysene	1.36		mg/kg dry	0.797	10	07/20/09 21:37	SW846 8270D	9072561
Dibenz (a,h) anthracene	ND		mg/kg dry	0.797	10	07/20/09 21:37	SW846 8270D	9072561
Fluoranthene	2.83		mg/kg dry	0.797	10	07/20/09 21:37	SW846 8270D	9072561
Fluorene	5.11		mg/kg dry	0.797	10	07/20/09 21:37	SW846 8270D	9072561
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.797	10	07/20/09 21:37	SW846 8270D	9072561
Naphthalene	14.5		mg/kg dry	0.797	10	07/20/09 21:37	SW846 8270D	9072561
Phenanthrene	11.8		mg/kg dry	0.797	10	07/20/09 21:37	SW846 8270D	9072561
Pyrene	2.98		mg/kg dry	0.797	10	07/20/09 21:37	SW846 8270D	9072561
1-Methylnaphthalene	32.2		mg/kg dry	3.98	50	07/22/09 14:50	SW846 8270D	9072561
2-Methylnaphthalene	49.2		mg/kg dry	3.98	50	07/22/09 14:50	SW846 8270D	9072561
Surr: Terphenyl-d14 (18-120%)	80 %					07/20/09 21:37	SW846 8270D	9072561
Surr: 2-Fluorobiphenyl (14-120%)	7 %	ZX				07/20/09 21:37	SW846 8270D	9072561
Surr: Nitrobenzene-d5 (17-120%)	83 %					07/20/09 21:37	SW846 8270D	9072561

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

Work Order: NSG1390  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 07/17/09 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	9072561	NSG1390-01	30.19	1.00	07/18/09 12:25	AJK	EPA 3550B
SW846 8270D	9072561	NSG1390-02	30.06	1.00	07/18/09 12:25	AJK	EPA 3550B
SW846 8270D	9072561	NSG1390-02RE1	30.06	1.00	07/18/09 12:25	AJK	EPA 3550B
SW846 8270D	9072561	NSG1390-03	30.76	1.00	07/18/09 12:25	AJK	EPA 3550B
SW846 8270D	9072561	NSG1390-04	30.40	1.00	07/18/09 12:25	AJK	EPA 3550B
SW846 8270D	9072561	NSG1390-04RE1	30.40	1.00	07/18/09 12:25	AJK	EPA 3550B
SW846 8270D	9072561	NSG1390-05	30.42	1.00	07/18/09 12:25	AJK	EPA 3550B
SW846 8270D	9072561	NSG1390-05RE1	30.42	1.00	07/18/09 12:25	AJK	EPA 3550B
SW846 8270D	9072561	NSG1390-05RE2	30.42	1.00	07/18/09 12:25	AJK	EPA 3550B
SW846 8270D	9072561	NSG1390-06	30.77	1.00	07/18/09 12:25	AJK	EPA 3550B
SW846 8270D	9072561	NSG1390-06RE1	30.77	1.00	07/18/09 12:25	AJK	EPA 3550B
SW846 8270D	9072561	NSG1390-06RE2	30.77	1.00	07/18/09 12:25	AJK	EPA 3550B
<b>Selected Volatile Organic Compounds by EPA Method 8260B</b>							
SW846 8260B	9072531	NSG1390-01	5.90	5.00	07/13/09 10:00	JRL	EPA 5035
SW846 8260B	9072531	NSG1390-02	5.55	5.00	07/13/09 09:50	JRL	EPA 5035
SW846 8260B	9074052	NSG1390-02RE1	5.52	5.00	07/13/09 09:50	JRL	EPA 5035
SW846 8260B	9072531	NSG1390-03	4.95	5.00	07/13/09 15:10	JRL	EPA 5035
SW846 8260B	9072531	NSG1390-04	5.32	5.00	07/13/09 13:30	JRL	EPA 5035
SW846 8260B	9074052	NSG1390-04RE1	4.98	5.00	07/13/09 13:30	JRL	EPA 5035
SW846 8260B	9074052	NSG1390-04RE2	4.98	5.00	07/13/09 13:30	JRL	EPA 5035
SW846 8260B	9074033	NSG1390-05	5.95	5.00	07/14/09 10:15	JRL	EPA 5035
SW846 8260B	9074052	NSG1390-05RE1	5.93	5.00	07/14/09 10:15	JRL	EPA 5035
SW846 8260B	9073642	NSG1390-05RE2	5.93	5.00	07/14/09 10:15	JRL	EPA 5035
SW846 8260B	9073642	NSG1390-05RE3	5.93	5.00	07/14/09 10:15	JRL	EPA 5035
SW846 8260B	9074033	NSG1390-06	6.19	5.00	07/14/09 15:10	JRL	EPA 5035
SW846 8260B	9073642	NSG1390-06RE1	5.53	5.00	07/14/09 15:10	JRL	EPA 5035
SW846 8260B	9073642	NSG1390-06RE2	5.53	5.00	07/14/09 15:10	JRL	EPA 5035

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

Work Order: NSG1390  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 07/17/09 08:00

## PROJECT QUALITY CONTROL DATA

### Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
---------	-------------	---	-------	------------	------------	--------------------

#### Selected Volatile Organic Compounds by EPA Method 8260B

##### 9072531-BLK1

Benzene	<0.000670		mg/kg wet	9072531	9072531-BLK1	07/24/09 15:59
Ethylbenzene	<0.000670		mg/kg wet	9072531	9072531-BLK1	07/24/09 15:59
Naphthalene	<0.00170		mg/kg wet	9072531	9072531-BLK1	07/24/09 15:59
Toluene	<0.000400		mg/kg wet	9072531	9072531-BLK1	07/24/09 15:59
Xylenes, total	<0.00130		mg/kg wet	9072531	9072531-BLK1	07/24/09 15:59
Surrogate: 1,2-Dichloroethane-d4	100%			9072531	9072531-BLK1	07/24/09 15:59
Surrogate: Dibromofluoromethane	98%			9072531	9072531-BLK1	07/24/09 15:59
Surrogate: Toluene-d8	105%			9072531	9072531-BLK1	07/24/09 15:59
Surrogate: 4-Bromofluorobenzene	104%			9072531	9072531-BLK1	07/24/09 15:59

##### 9073642-BLK1

Benzene	<0.000670		mg/kg wet	9073642	9073642-BLK1	07/28/09 15:16
Ethylbenzene	<0.000670		mg/kg wet	9073642	9073642-BLK1	07/28/09 15:16
Naphthalene	<0.00170		mg/kg wet	9073642	9073642-BLK1	07/28/09 15:16
Toluene	<0.000400		mg/kg wet	9073642	9073642-BLK1	07/28/09 15:16
Xylenes, total	<0.00130		mg/kg wet	9073642	9073642-BLK1	07/28/09 15:16
Surrogate: 1,2-Dichloroethane-d4	102%			9073642	9073642-BLK1	07/28/09 15:16
Surrogate: Dibromofluoromethane	98%			9073642	9073642-BLK1	07/28/09 15:16
Surrogate: Toluene-d8	108%			9073642	9073642-BLK1	07/28/09 15:16
Surrogate: 4-Bromofluorobenzene	110%			9073642	9073642-BLK1	07/28/09 15:16

##### 9074033-BLK1

Benzene	<0.000670		mg/kg wet	9074033	9074033-BLK1	07/25/09 17:34
Ethylbenzene	<0.000670		mg/kg wet	9074033	9074033-BLK1	07/25/09 17:34
Naphthalene	<0.00170		mg/kg wet	9074033	9074033-BLK1	07/25/09 17:34
Toluene	<0.000400		mg/kg wet	9074033	9074033-BLK1	07/25/09 17:34
Xylenes, total	<0.00130		mg/kg wet	9074033	9074033-BLK1	07/25/09 17:34
Surrogate: 1,2-Dichloroethane-d4	99%			9074033	9074033-BLK1	07/25/09 17:34
Surrogate: Dibromofluoromethane	99%			9074033	9074033-BLK1	07/25/09 17:34
Surrogate: Toluene-d8	105%			9074033	9074033-BLK1	07/25/09 17:34
Surrogate: 4-Bromofluorobenzene	110%			9074033	9074033-BLK1	07/25/09 17:34

##### 9074052-BLK1

Benzene	<0.000670		mg/kg wet	9074052	9074052-BLK1	07/27/09 16:19
Ethylbenzene	<0.000670		mg/kg wet	9074052	9074052-BLK1	07/27/09 16:19
Naphthalene	<0.00170		mg/kg wet	9074052	9074052-BLK1	07/27/09 16:19
Toluene	<0.000400		mg/kg wet	9074052	9074052-BLK1	07/27/09 16:19
Xylenes, total	<0.00130		mg/kg wet	9074052	9074052-BLK1	07/27/09 16:19
Surrogate: 1,2-Dichloroethane-d4	101%			9074052	9074052-BLK1	07/27/09 16:19
Surrogate: Dibromofluoromethane	97%			9074052	9074052-BLK1	07/27/09 16:19
Surrogate: Toluene-d8	107%			9074052	9074052-BLK1	07/27/09 16:19
Surrogate: 4-Bromofluorobenzene	109%			9074052	9074052-BLK1	07/27/09 16:19

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

Work Order: NSG1390  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 07/17/09 08:00

## PROJECT QUALITY CONTROL DATA

### Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
---------	-------------	---	-------	------------	------------	--------------------

### Selected Volatile Organic Compounds by EPA Method 8260B

### Polyaromatic Hydrocarbons by EPA 8270D

#### 9072561-BLK1

Acenaphthene	<0.0320		mg/kg wet	9072561	9072561-BLK1	07/19/09 17:27
Acenaphthylene	<0.0310		mg/kg wet	9072561	9072561-BLK1	07/19/09 17:27
Anthracene	<0.0330		mg/kg wet	9072561	9072561-BLK1	07/19/09 17:27
Benzo (a) anthracene	<0.0380		mg/kg wet	9072561	9072561-BLK1	07/19/09 17:27
Benzo (a) pyrene	<0.0300		mg/kg wet	9072561	9072561-BLK1	07/19/09 17:27
Benzo (b) fluoranthene	<0.0300		mg/kg wet	9072561	9072561-BLK1	07/19/09 17:27
Benzo (g,h,i) perylene	<0.0300		mg/kg wet	9072561	9072561-BLK1	07/19/09 17:27
Benzo (k) fluoranthene	<0.0300		mg/kg wet	9072561	9072561-BLK1	07/19/09 17:27
Chrysene	<0.0400		mg/kg wet	9072561	9072561-BLK1	07/19/09 17:27
Dibenz (a,h) anthracene	<0.0310		mg/kg wet	9072561	9072561-BLK1	07/19/09 17:27
Fluoranthene	<0.0340		mg/kg wet	9072561	9072561-BLK1	07/19/09 17:27
Fluorene	<0.0360		mg/kg wet	9072561	9072561-BLK1	07/19/09 17:27
Indeno (1,2,3-cd) pyrene	<0.0310		mg/kg wet	9072561	9072561-BLK1	07/19/09 17:27
Naphthalene	<0.0410		mg/kg wet	9072561	9072561-BLK1	07/19/09 17:27
Phenanthrene	<0.0340		mg/kg wet	9072561	9072561-BLK1	07/19/09 17:27
Pyrene	<0.0410		mg/kg wet	9072561	9072561-BLK1	07/19/09 17:27
1-Methylnaphthalene	<0.0320		mg/kg wet	9072561	9072561-BLK1	07/19/09 17:27
2-Methylnaphthalene	<0.0330		mg/kg wet	9072561	9072561-BLK1	07/19/09 17:27
Surrogate: Terphenyl-d14	101%			9072561	9072561-BLK1	07/19/09 17:27
Surrogate: 2-Fluorobiphenyl	71%			9072561	9072561-BLK1	07/19/09 17:27
Surrogate: Nitrobenzene-d5	68%			9072561	9072561-BLK1	07/19/09 17:27

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

Work Order: NSG1390  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 07/17/09 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>9073886-DUP1</b>										
% Dry Solids	78.8	79.6		%	1	20	9073886	NSG1390-01		07/28/09 08:49

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

Work Order: NSG1390  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 07/17/09 08:00

## PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
<b>Selected Volatile Organic Compounds by EPA Method 8260B</b>								
<b>9072531-BS1</b>								
Benzene	50.0	49.5		ug/kg	99%	78 - 126	9072531	07/24/09 13:38
Ethylbenzene	50.0	62.7		ug/kg	125%	79 - 130	9072531	07/24/09 13:38
Naphthalene	50.0	63.2		ug/kg	126%	72 - 150	9072531	07/24/09 13:38
Toluene	50.0	57.1		ug/kg	114%	76 - 126	9072531	07/24/09 13:38
Xylenes, total	150	191		ug/kg	128%	80 - 130	9072531	07/24/09 13:38
Surrogate: 1,2-Dichloroethane-d4	50.0	47.7			95%	67 - 138	9072531	07/24/09 13:38
Surrogate: Dibromofluoromethane	50.0	49.1			98%	75 - 125	9072531	07/24/09 13:38
Surrogate: Toluene-d8	50.0	52.7			105%	76 - 129	9072531	07/24/09 13:38
Surrogate: 4-Bromofluorobenzene	50.0	50.4			101%	67 - 147	9072531	07/24/09 13:38
<b>9073642-BS1</b>								
Benzene	50.0	49.6		ug/kg	99%	78 - 126	9073642	07/28/09 13:41
Ethylbenzene	50.0	59.2		ug/kg	118%	79 - 130	9073642	07/28/09 13:41
Naphthalene	50.0	66.9		ug/kg	134%	72 - 150	9073642	07/28/09 13:41
Toluene	50.0	55.5		ug/kg	111%	76 - 126	9073642	07/28/09 13:41
Xylenes, total	150	177		ug/kg	118%	80 - 130	9073642	07/28/09 13:41
Surrogate: 1,2-Dichloroethane-d4	50.0	52.3			105%	67 - 138	9073642	07/28/09 13:41
Surrogate: Dibromofluoromethane	50.0	49.9			100%	75 - 125	9073642	07/28/09 13:41
Surrogate: Toluene-d8	50.0	53.1			106%	76 - 129	9073642	07/28/09 13:41
Surrogate: 4-Bromofluorobenzene	50.0	53.8			108%	67 - 147	9073642	07/28/09 13:41
<b>9074033-BS1</b>								
Benzene	50.0	50.6		ug/kg	101%	78 - 126	9074033	07/25/09 15:10
Ethylbenzene	50.0	50.0		ug/kg	100%	79 - 130	9074033	07/25/09 15:10
Naphthalene	50.0	54.8		ug/kg	110%	72 - 150	9074033	07/25/09 15:10
Toluene	50.0	51.8		ug/kg	104%	76 - 126	9074033	07/25/09 15:10
Xylenes, total	150	145		ug/kg	97%	80 - 130	9074033	07/25/09 15:10
Surrogate: 1,2-Dichloroethane-d4	50.0	51.1			102%	67 - 138	9074033	07/25/09 15:10
Surrogate: Dibromofluoromethane	50.0	51.2			102%	75 - 125	9074033	07/25/09 15:10
Surrogate: Toluene-d8	50.0	52.6			105%	76 - 129	9074033	07/25/09 15:10
Surrogate: 4-Bromofluorobenzene	50.0	57.8			116%	67 - 147	9074033	07/25/09 15:10
<b>9074052-BS1</b>								
Benzene	50.0	50.0		ug/kg	100%	78 - 126	9074052	07/27/09 14:10
Ethylbenzene	50.0	57.8		ug/kg	116%	79 - 130	9074052	07/27/09 14:10
Naphthalene	50.0	60.8		ug/kg	122%	72 - 150	9074052	07/27/09 14:10
Toluene	50.0	53.8		ug/kg	108%	76 - 126	9074052	07/27/09 14:10
Xylenes, total	150	172		ug/kg	115%	80 - 130	9074052	07/27/09 14:10
Surrogate: 1,2-Dichloroethane-d4	50.0	52.2			104%	67 - 138	9074052	07/27/09 14:10
Surrogate: Dibromofluoromethane	50.0	49.8			100%	75 - 125	9074052	07/27/09 14:10
Surrogate: Toluene-d8	50.0	52.4			105%	76 - 129	9074052	07/27/09 14:10
Surrogate: 4-Bromofluorobenzene	50.0	52.0			104%	67 - 147	9074052	07/27/09 14:10

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

Work Order: NSG1390  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 07/17/09 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>9072561-BS1</b>								
Acenaphthene	1.67	1.43		mg/kg wet	86%	49 - 120	9072561	07/19/09 17:48
Acenaphthylene	1.67	1.52		mg/kg wet	91%	52 - 120	9072561	07/19/09 17:48
Anthracene	1.67	1.72		mg/kg wet	103%	58 - 120	9072561	07/19/09 17:48
Benzo (a) anthracene	1.67	1.64		mg/kg wet	98%	57 - 120	9072561	07/19/09 17:48
Benzo (a) pyrene	1.67	1.69		mg/kg wet	102%	55 - 120	9072561	07/19/09 17:48
Benzo (b) fluoranthene	1.67	1.50		mg/kg wet	90%	51 - 123	9072561	07/19/09 17:48
Benzo (g,h,i) perylene	1.67	1.72		mg/kg wet	103%	49 - 121	9072561	07/19/09 17:48
Benzo (k) fluoranthene	1.67	1.62		mg/kg wet	97%	42 - 129	9072561	07/19/09 17:48
Chrysene	1.67	1.59		mg/kg wet	95%	55 - 120	9072561	07/19/09 17:48
Dibenz (a,h) anthracene	1.67	1.76		mg/kg wet	106%	50 - 123	9072561	07/19/09 17:48
Fluoranthene	1.67	1.54		mg/kg wet	92%	58 - 120	9072561	07/19/09 17:48
Fluorene	1.67	1.48		mg/kg wet	89%	54 - 120	9072561	07/19/09 17:48
Indeno (1,2,3-cd) pyrene	1.67	1.77		mg/kg wet	106%	50 - 122	9072561	07/19/09 17:48
Naphthalene	1.67	1.38		mg/kg wet	83%	28 - 107	9072561	07/19/09 17:48
Phenanthrene	1.67	1.56		mg/kg wet	94%	56 - 120	9072561	07/19/09 17:48
Pyrene	1.67	1.61		mg/kg wet	97%	56 - 120	9072561	07/19/09 17:48
1-Methylnaphthalene	1.67	1.23		mg/kg wet	74%	36 - 120	9072561	07/19/09 17:48
2-Methylnaphthalene	1.67	1.27		mg/kg wet	76%	36 - 120	9072561	07/19/09 17:48
Surrogate: Terphenyl-d14	1.67	1.60			96%	18 - 120	9072561	07/19/09 17:48
Surrogate: 2-Fluorobiphenyl	1.67	1.50			90%	14 - 120	9072561	07/19/09 17:48
Surrogate: Nitrobenzene-d5	1.67	1.21			72%	17 - 120	9072561	07/19/09 17:48

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

Work Order: NSG1390  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 07/17/09 08:00

## PROJECT QUALITY CONTROL DATA

### LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
<b>Selected Volatile Organic Compounds by EPA Method 8260B</b>												
<b>9072531-BSD1</b>												
Benzene		48.7		ug/kg	50.0	97%	78 - 126	2	50	9072531		07/24/09 14:10
Ethylbenzene		60.9		ug/kg	50.0	122%	79 - 130	3	50	9072531		07/24/09 14:10
Naphthalene		67.7		ug/kg	50.0	135%	72 - 150	7	50	9072531		07/24/09 14:10
Toluene		54.9		ug/kg	50.0	110%	76 - 126	4	50	9072531		07/24/09 14:10
Xylenes, total		187		ug/kg	150	124%	80 - 130	3	50	9072531		07/24/09 14:10
Surrogate: 1,2-Dichloroethane-d4		50.6		ug/kg	50.0	101%	67 - 138			9072531		07/24/09 14:10
Surrogate: Dibromofluoromethane		49.6		ug/kg	50.0	99%	75 - 125			9072531		07/24/09 14:10
Surrogate: Toluene-d8		51.9		ug/kg	50.0	104%	76 - 129			9072531		07/24/09 14:10
Surrogate: 4-Bromofluorobenzene		50.6		ug/kg	50.0	101%	67 - 147			9072531		07/24/09 14:10
<b>9073642-BSD1</b>												
Benzene		49.1		ug/kg	50.0	98%	78 - 126	1	50	9073642		07/28/09 14:12
Ethylbenzene		59.0		ug/kg	50.0	118%	79 - 130	0.4	50	9073642		07/28/09 14:12
Naphthalene		54.7		ug/kg	50.0	109%	72 - 150	20	50	9073642		07/28/09 14:12
Toluene		54.2		ug/kg	50.0	108%	76 - 126	2	50	9073642		07/28/09 14:12
Xylenes, total		175		ug/kg	150	117%	80 - 130	1	50	9073642		07/28/09 14:12
Surrogate: 1,2-Dichloroethane-d4		49.8		ug/kg	50.0	100%	67 - 138			9073642		07/28/09 14:12
Surrogate: Dibromofluoromethane		48.7		ug/kg	50.0	97%	75 - 125			9073642		07/28/09 14:12
Surrogate: Toluene-d8		52.4		ug/kg	50.0	105%	76 - 129			9073642		07/28/09 14:12
Surrogate: 4-Bromofluorobenzene		53.1		ug/kg	50.0	106%	67 - 147			9073642		07/28/09 14:12
<b>9074033-BSD1</b>												
Benzene		51.8		ug/kg	50.0	104%	78 - 126	2	50	9074033		07/25/09 15:58
Ethylbenzene		53.0		ug/kg	50.0	106%	79 - 130	6	50	9074033		07/25/09 15:58
Naphthalene		49.0		ug/kg	50.0	98%	72 - 150	11	50	9074033		07/25/09 15:58
Toluene		53.0		ug/kg	50.0	106%	76 - 126	2	50	9074033		07/25/09 15:58
Xylenes, total		155		ug/kg	150	103%	80 - 130	6	50	9074033		07/25/09 15:58
Surrogate: 1,2-Dichloroethane-d4		49.7		ug/kg	50.0	99%	67 - 138			9074033		07/25/09 15:58
Surrogate: Dibromofluoromethane		49.4		ug/kg	50.0	99%	75 - 125			9074033		07/25/09 15:58
Surrogate: Toluene-d8		52.0		ug/kg	50.0	104%	76 - 129			9074033		07/25/09 15:58
Surrogate: 4-Bromofluorobenzene		52.4		ug/kg	50.0	105%	67 - 147			9074033		07/25/09 15:58
<b>9074052-BSD1</b>												
Benzene		49.3		ug/kg	50.0	99%	78 - 126	1	50	9074052		07/27/09 14:41
Ethylbenzene		56.9		ug/kg	50.0	114%	79 - 130	2	50	9074052		07/27/09 14:41
Naphthalene		60.1		ug/kg	50.0	120%	72 - 150	1	50	9074052		07/27/09 14:41
Toluene		52.6		ug/kg	50.0	105%	76 - 126	2	50	9074052		07/27/09 14:41
Xylenes, total		170		ug/kg	150	113%	80 - 130	1	50	9074052		07/27/09 14:41
Surrogate: 1,2-Dichloroethane-d4		50.5		ug/kg	50.0	101%	67 - 138			9074052		07/27/09 14:41
Surrogate: Dibromofluoromethane		49.1		ug/kg	50.0	98%	75 - 125			9074052		07/27/09 14:41
Surrogate: Toluene-d8		51.9		ug/kg	50.0	104%	76 - 129			9074052		07/27/09 14:41



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

Work Order: NSG1390  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 07/17/09 08:00

## PROJECT QUALITY CONTROL DATA

### LCS Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
<b>Selected Volatile Organic Compounds by EPA Method 8260B</b>												
<b>9074052-BSD1</b>												
<i>Surrogate: 4-Bromofluorobenzene</i>		51.7		ug/kg	50.0	103%	67 - 147			9074052		07/27/09 14:41

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

Work Order: NSG1390  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 07/17/09 08:00

## PROJECT QUALITY CONTROL DATA

### Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
<b>Selected Volatile Organic Compounds by EPA Method 8260B</b>										
<b>9073642-MS1</b>										
Benzene	16.9	66.8		ug/kg	50.0	100%	42 - 141	9073642	NSG2001-03	07/28/09 22:49
Ethylbenzene	280	502	M7	ug/kg	50.0	445%	21 - 165	9073642	NSG2001-03	07/28/09 22:49
Naphthalene	356	755	M7	ug/kg	50.0	798%	10 - 160	9073642	NSG2001-03	07/28/09 22:49
Toluene	14.7	66.3		ug/kg	50.0	103%	45 - 145	9073642	NSG2001-03	07/28/09 22:49
Xylenes, total	32.4	230		ug/kg	150	132%	31 - 159	9073642	NSG2001-03	07/28/09 22:49
Surrogate: 1,2-Dichloroethane-d4		45.0		ug/kg	50.0	90%	67 - 138	9073642	NSG2001-03	07/28/09 22:49
Surrogate: Dibromofluoromethane		40.1		ug/kg	50.0	80%	75 - 125	9073642	NSG2001-03	07/28/09 22:49
Surrogate: Toluene-d8		85.1	ZX	ug/kg	50.0	170%	76 - 129	9073642	NSG2001-03	07/28/09 22:49
Surrogate: 4-Bromofluorobenzene		110	ZX	ug/kg	50.0	220%	67 - 147	9073642	NSG2001-03	07/28/09 22:49

## Polyaromatic Hydrocarbons by EPA 8270D

### 9072561-MS1

Acenaphthene	ND	1.29		mg/kg dry	1.85	70%	42 - 120	9072561	NSG1390-03	07/19/09 18:09
Acenaphthylene	ND	1.30		mg/kg dry	1.85	70%	32 - 120	9072561	NSG1390-03	07/19/09 18:09
Anthracene	ND	1.60		mg/kg dry	1.85	86%	10 - 200	9072561	NSG1390-03	07/19/09 18:09
Benzo (a) anthracene	ND	1.40		mg/kg dry	1.85	76%	41 - 120	9072561	NSG1390-03	07/19/09 18:09
Benzo (a) pyrene	0.368	1.50		mg/kg dry	1.85	61%	33 - 121	9072561	NSG1390-03	07/19/09 18:09
Benzo (b) fluoranthene	0.202	1.71		mg/kg dry	1.85	82%	26 - 137	9072561	NSG1390-03	07/19/09 18:09
Benzo (g,h,i) perylene	0.142	1.57		mg/kg dry	1.85	77%	21 - 124	9072561	NSG1390-03	07/19/09 18:09
Benzo (k) fluoranthene	ND	1.61		mg/kg dry	1.85	87%	14 - 140	9072561	NSG1390-03	07/19/09 18:09
Chrysene	0.0670	1.56		mg/kg dry	1.85	81%	28 - 123	9072561	NSG1390-03	07/19/09 18:09
Dibenz (a,h) anthracene	ND	1.50		mg/kg dry	1.85	81%	25 - 127	9072561	NSG1390-03	07/19/09 18:09
Fluoranthene	ND	1.52		mg/kg dry	1.85	82%	38 - 120	9072561	NSG1390-03	07/19/09 18:09
Fluorene	ND	1.51		mg/kg dry	1.85	81%	41 - 120	9072561	NSG1390-03	07/19/09 18:09
Indeno (1,2,3-cd) pyrene	0.111	1.63		mg/kg dry	1.85	82%	25 - 123	9072561	NSG1390-03	07/19/09 18:09
Naphthalene	ND	1.19		mg/kg dry	1.85	64%	25 - 120	9072561	NSG1390-03	07/19/09 18:09
Phenanthrene	ND	1.51		mg/kg dry	1.85	81%	37 - 120	9072561	NSG1390-03	07/19/09 18:09
Pyrene	ND	1.55		mg/kg dry	1.85	84%	29 - 125	9072561	NSG1390-03	07/19/09 18:09
1-Methylnaphthalene	ND	1.14		mg/kg dry	1.85	62%	19 - 120	9072561	NSG1390-03	07/19/09 18:09
2-Methylnaphthalene	ND	1.15		mg/kg dry	1.85	62%	11 - 120	9072561	NSG1390-03	07/19/09 18:09
Surrogate: Terphenyl-d14		1.52		mg/kg dry	1.85	82%	18 - 120	9072561	NSG1390-03	07/19/09 18:09
Surrogate: 2-Fluorobiphenyl		1.15		mg/kg dry	1.85	62%	14 - 120	9072561	NSG1390-03	07/19/09 18:09
Surrogate: Nitrobenzene-d5		1.08		mg/kg dry	1.85	58%	17 - 120	9072561	NSG1390-03	07/19/09 18:09

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

Work Order: NSG1390  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 07/17/09 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>9073642-MSD1</b>												
Benzene	18.7	57.0		ug/kg	50.0	77%	42 - 141	16	50	9073642	NSG2001-03	07/28/09 23:20
Ethylbenzene	310	431	M7	ug/kg	50.0	243%	21 - 165	15	50	9073642	NSG2001-03	07/28/09 23:20
Naphthalene	394	403	R2	ug/kg	50.0	19%	10 - 160	61	50	9073642	NSG2001-03	07/28/09 23:20
Toluene	16.2	58.2		ug/kg	50.0	84%	45 - 145	13	50	9073642	NSG2001-03	07/28/09 23:20
Xylenes, total	35.9	186		ug/kg	150	100%	31 - 159	21	50	9073642	NSG2001-03	07/28/09 23:20
Surrogate: 1,2-Dichloroethane-d4		46.1		ug/kg	50.0	92%	67 - 138			9073642	NSG2001-03	07/28/09 23:20
Surrogate: Dibromofluoromethane		41.2		ug/kg	50.0	82%	75 - 125			9073642	NSG2001-03	07/28/09 23:20
Surrogate: Toluene-d8		86.4	ZX	ug/kg	50.0	173%	76 - 129			9073642	NSG2001-03	07/28/09 23:20
Surrogate: 4-Bromofluorobenzene		106	ZX	ug/kg	50.0	212%	67 - 147			9073642	NSG2001-03	07/28/09 23:20

## Polyaromatic Hydrocarbons by EPA 8270D

### 9072561-MSD1

Acenaphthene	ND	1.33		mg/kg dry	1.86	71%	42 - 120	3	40	9072561	NSG1390-03	07/19/09 18:31
Acenaphthylene	ND	1.32		mg/kg dry	1.86	71%	32 - 120	2	30	9072561	NSG1390-03	07/19/09 18:31
Anthracene	ND	1.62		mg/kg dry	1.86	87%	10 - 200	2	50	9072561	NSG1390-03	07/19/09 18:31
Benzo (a) anthracene	ND	1.46		mg/kg dry	1.86	78%	41 - 120	4	30	9072561	NSG1390-03	07/19/09 18:31
Benzo (a) pyrene	0.368	1.49		mg/kg dry	1.86	60%	33 - 121	1	33	9072561	NSG1390-03	07/19/09 18:31
Benzo (b) fluoranthene	0.202	1.77		mg/kg dry	1.86	84%	26 - 137	3	42	9072561	NSG1390-03	07/19/09 18:31
Benzo (g,h,i) perylene	0.142	1.60		mg/kg dry	1.86	78%	21 - 124	2	32	9072561	NSG1390-03	07/19/09 18:31
Benzo (k) fluoranthene	ND	1.50		mg/kg dry	1.86	80%	14 - 140	7	39	9072561	NSG1390-03	07/19/09 18:31
Chrysene	0.0670	1.50		mg/kg dry	1.86	77%	28 - 123	3	34	9072561	NSG1390-03	07/19/09 18:31
Dibenz (a,h) anthracene	ND	1.51		mg/kg dry	1.86	81%	25 - 127	0.8	31	9072561	NSG1390-03	07/19/09 18:31
Fluoranthene	ND	1.60		mg/kg dry	1.86	86%	38 - 120	5	35	9072561	NSG1390-03	07/19/09 18:31
Fluorene	ND	1.48		mg/kg dry	1.86	79%	41 - 120	2	37	9072561	NSG1390-03	07/19/09 18:31
Indeno (1,2,3-cd) pyrene	0.111	1.65		mg/kg dry	1.86	83%	25 - 123	1	32	9072561	NSG1390-03	07/19/09 18:31
Naphthalene	ND	1.21		mg/kg dry	1.86	65%	25 - 120	2	42	9072561	NSG1390-03	07/19/09 18:31
Phenanthrene	ND	1.52		mg/kg dry	1.86	81%	37 - 120	0.7	32	9072561	NSG1390-03	07/19/09 18:31
Pyrene	ND	1.49		mg/kg dry	1.86	80%	29 - 125	4	40	9072561	NSG1390-03	07/19/09 18:31
1-Methylnaphthalene	ND	1.16		mg/kg dry	1.86	62%	19 - 120	1	45	9072561	NSG1390-03	07/19/09 18:31
2-Methylnaphthalene	ND	1.16		mg/kg dry	1.86	62%	11 - 120	0.5	50	9072561	NSG1390-03	07/19/09 18:31
Surrogate: Terphenyl-d14		1.46		mg/kg dry	1.86	78%	18 - 120			9072561	NSG1390-03	07/19/09 18:31
Surrogate: 2-Fluorobiphenyl		1.24		mg/kg dry	1.86	67%	14 - 120			9072561	NSG1390-03	07/19/09 18:31
Surrogate: Nitrobenzene-d5		1.09		mg/kg dry	1.86	59%	17 - 120			9072561	NSG1390-03	07/19/09 18:31

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

Work Order: NSG1390  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 07/17/09 08:00

## CERTIFICATION SUMMARY

### TestAmerica Nashville

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

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

Work Order: NSG1390  
Project Name: Laurel Bay Housing Project  
Project Number: [none]  
Received: 07/17/09 08:00

## DATA QUALIFIERS AND DEFINITIONS

**M7** The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).  
**R2** The RPD exceeded the acceptance limit.  
**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

NSG1390  
07/31/09 23:59

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Nashville Division  
2960 Foster Creighton  
Nashville, TN 37204

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

Client Name/Account #: EEG # 2449

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29456

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

Telephone Number: 843.412.2087

Fax No.: 843-879-0401

Sampler Name: (Print) *Dr. H. Shaw*

Sampler Signature: *H. Shaw*

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

Compliance Monitoring? Yes ☐ No ☐

Enforcement Action? Yes ☐ No ☐

Site State: SC

PO#: 0829

TA Quote #:

Project ID: Laurel Bay Housing Project

Project #:

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative								Matrix						Analyze For:										RUSH TAT (Pre-Schedule)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
							Ice	HNO <sub>3</sub> (Red Label)	HCl (Blue Label)	NaOH (Orange Label)	H <sub>2</sub> SO <sub>4</sub> Plastic (Yellow Label)	H <sub>2</sub> SO <sub>4</sub> Glass (Yellow Label)	None (Black Label)	Other (Specify)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify)	BTEX + Naph - 82605	PAH - 8270D																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

Special Instructions:

Relinquished by: *[Signature]*

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

Received by Test America:

Date

Time

Method of Shipment:

FEDEX

Laboratory Comments:

Temperature Upon Receipt:

VOCs Free of Headspace?

Y

ATTACHMENT A



# NON-HAZARDOUS MANIFEST

CWMH

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

NON-HAZARDOUS MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page of 1
3. Generator's Name and Mailing Address <b>MCAS, Beaufort Laurel Bay Housing Beaufort SC 29904</b>		A. Manifest Number <b>WMNA 10835462</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 RIDGELAND SC 29836</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>843 967-4543</b>		
11. Description of Waste Materials		12. Containers No.	13. Total Quantity	14. Unit, Wt./Vol.
a. <b>Heating Oil Tank filled with Sand</b>		Type		
WM Profile # <b>102655SC</b>		<b>0 0 1</b>	<b>6.45</b>	
b. WM Profile #				
c. WM Profile #				
WM Profile #				
J. Additional Descriptions for Materials Listed Above		K. Disposal Location		
Landfill _____ Solidification _____		Cell _____ Level _____		
Bio Remediation _____		Grid _____		
15. Special Handling Instructions and Additional Information <b>SEA UST's 1) 1385 DOOR 3) 1382 DOOR ✓ 5) 1387 DOOR ✓ 2) 1381 DOOR 4) 1376 DOOR ✓</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>Charles H. Herron</b>		Signature "On behalf of" <b>Charles H. Herron</b>		Month Day Year <b>07/11/09</b>
17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed/Typed Name <b>Joseph Weston</b>		Signature		Month Day Year <b>11/23/09</b>
18. Transporter 2 Acknowledgement of Receipt of Materials				
Printed/Typed Name <b>Joseph Weston</b>		Signature		Month Day Year <b>11/23/09</b>
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>Jan Collins</b>		Signature <b>Jan Collins</b>		Month Day Year 



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

# Volatile Organic Compounds by GC/MS

Client: <b>AECOM - Resolution Consultants</b>				Laboratory ID: <b>QF24009-003</b>			
Description: <b>BEALB1382TW01WG20150622</b>				Matrix: <b>Aqueous</b>			
Date Sampled: <b>06/22/2015 1345</b>							
Date Received: <b>06/24/2015</b>							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	07/06/2015 1801	EH1		78858

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	2.3	U	25	2.3	1.1	ug/L	1
Ethylbenzene	100-41-4	8260B	15	J	25	2.6	1.1	ug/L	1
Naphthalene	91-20-3	8260B	82		25	4.8	0.70	ug/L	1
Toluene	108-88-3	8260B	3.4	J	25	2.4	1.2	ug/L	1
Xylenes (total)	1330-20-7	8260B	57		25	2.9	0.95	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		104	75-120
1,2-Dichloroethane-d4		94	70-120
Toluene-d8		108	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 ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria      L = LCS/LCSD failure  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"      S = MS/MSD failure

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

# Semivolatile Organic Compounds by GC/MS (SIM)

Client: <b>AECOM - Resolution Consultants</b>	Laboratory ID: <b>QF24009-003</b>
Description: <b>BEALB1382TW01WG20150622</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>06/22/2015 1345</b>	
Date Received: <b>06/24/2015</b>	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D (SIM)	1	07/08/2015 1114	DRB1	06/25/2015 1604	78141

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
<b>Benzo(a)anthracene</b>	<b>56-55-3</b>	<b>8270D (SIM)</b>	<b>0.11</b>	<b>J</b>	<b>0.20</b>	0.040	<b>0.019</b>	ug/L	<b>1</b>
<b>Benzo(b)fluoranthene</b>	<b>205-99-2</b>	<b>8270D (SIM)</b>	<b>0.083</b>	<b>J</b>	<b>0.20</b>	0.040	<b>0.019</b>	ug/L	<b>1</b>
Benzo(k)fluoranthene	207-08-9	8270D (SIM)	0.040	U	0.20	0.040	0.024	ug/L	1
<b>Chrysene</b>	<b>218-01-9</b>	<b>8270D (SIM)</b>	<b>0.084</b>	<b>J</b>	<b>0.20</b>	0.040	<b>0.021</b>	ug/L	<b>1</b>
Dibenzo(a,h)anthracene	53-70-3	8270D (SIM)	0.080	U	0.20	0.080	0.040	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Methylnaphthalene-d10		119	15-139
Fluoranthene-d10		102	23-154

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

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

**Appendix D**  
**Laboratory Analytical Report – Permanent Well Groundwater**

# Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants				Laboratory ID: SL09005-020			
Description: BEALB1382MW01WG20171208				Matrix: Aqueous			
Date Sampled: 12/08/2017 1150							
Date Received: 12/09/2017							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	12/14/2017 1316	JJG		59644		

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Naphthalene	91-20-3	8260B	1.1		1.0	0.80	0.40	ug/L	1
Toluene	108-88-3	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	0.80	U	1.0	0.80	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	85-114
Dibromofluoromethane		98	80-119
1,2-Dichloroethane-d4		94	81-118
Toluene-d8		100	89-112

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOQ	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

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

## Semivolatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Laboratory ID: SL09005-020

Description: BEALB1382MW01WG20171208

Matrix: Aqueous

Date Sampled: 12/08/2017 1150

Date Received: 12/09/2017

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/29/2017 1113	CMP2	12/15/2017 1035	59757

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzo(a)anthracene	56-55-3	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	0.10	US	0.20	0.10	0.040	ug/L	1
Chrysene	218-01-9	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	0.10	US	0.20	0.10	0.040	ug/L	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Nitrobenzene-d5		65	44-120						
2-Fluorobiphenyl		64	44-119						
Terphenyl-d14		82	50-134						

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
U = Not detected at or above the LOQ	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis	LOD = Limit of Detection		S = MS/MSD failure

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

## **Appendix E**

### **Regulatory Correspondence**

# D H E C

PROMOTE PROTECT PROSPER

Catherine B. Templeton, Director

May 15, 2014

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

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

Dear Mr. Drawdy,

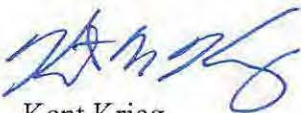
The South Carolina Department of Health and Environmental Control (the Department) received the above referenced Underground Storage Tank Assessment Reports for the addresses listed above. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina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

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

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

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

Sincerely,



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

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



# D H E C

PROMOTE PROTECT PROSPER

Catherine B. Templeton, Director

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

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

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

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

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





Catherine E. Heigel, Director

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

Division of Waste Management  
Bureau of Land and Waste Management

February 22, 2016

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

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

Dear Mr. Drawdy,

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

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

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

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

Sincerely,

Laurel Petrus  
RCRA Federal Facilities Section

*Attachment: Specific Property Recommendations*

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

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

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

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

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

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

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

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



June 18, 2018

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

RE: Approved  
Draft Groundwater Assessment Report November and December 2017  
Laurel Bay Military Housing Area

Dear Mr. Drawdy:

The South Carolina Department of Health and Environmental Control (DHEC) received the above referenced report on April 4, 2018. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

DHEC has reviewed the report and based on this review, DHEC has not generated any comments. DHEC agrees with the recommendations in the report including the NFA recommendations shown on the list on the attached page. Please note that DHEC's decision is based on information provided by the Marine Corps Air Station (MCAS) to date. Any information found to be contradictory to this decision may require additional action. Furthermore, DHEC retains the right to request further investigation if deemed necessary. If you have any questions, please contact me at [petruslb@dhec.sc.gov](mailto:petruslb@dhec.sc.gov) or 803-898-0294.

Sincerely,

Laurel Petrus  
Department of Defense Corrective Action Section

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

Attachment

Approval Draft Final Groundwater Assessment Report  
November and December 2017  
Laurel Bay Military Housing Area

June 18, 2018

The addresses approved for NFA are:

- 1186 Bobwhite Drive
- 1192 Bobwhite Drive
- 1194 Bobwhite Drive
- 1352 Cardinal Lane
- 1356 Cardinal Lane
- 1382 Dove Lane
- 1384 Dove Lane
- 1411 Eagle Lane
- 1418 Albatross Drive
- 1426 Albatross Drive
- 1434 Dove Lane
- 1436 Dove Lane
- 1440 Dove Lane
- 1442 Dove Lane
- 1444 Dove Lane