

SUMMARY REPORT
599 WEST CARDINAL LANE (FORMERLY 1456 WEST CARDINAL LANE)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC

Revision: 0
Prepared for:

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

and



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

JUNE 2021

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Prepared by:

CDM - AECOM
Multimedia Joint Venture

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10560 Arrowhead Drive, Suite 500
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Contract Number: N62470-14-D-9016
CTO WE52
JUNE 2021

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List of Acronyms

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

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 599 West Cardinal Lane (Formerly 1456 West Cardinal Lane). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

1.1 Background Information

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

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

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

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

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

1.2 UST Removal and Assessment Process

During the UST removal process, a soil sample was collected from beneath the UST excavations (approximately 4 to 6 feet [ft] below ground surface [bgs]) and analyzed for a predetermined list of constituents of potential concern (COPCs) associated with the petroleum compounds found in home heating oil. These COPCs, derived from the *Quality Assurance Program Plan*

(QAPP) for the *Underground Storage Tank Management Division, Revision 3.1* (SCDHEC, 2016) and the *Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service*, (SCDHEC, 2018), are as follows:

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

Soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form. In accordance with SCDHEC's *QAPP for the UST Management Division* (SCDHEC, 2016), the soil screening levels consists of SCDHEC risk-based screening levels (RBSLs). It should be noted that the RBSLs for select PAHs were revised in Revision 2.0 of the QAPP (SCDHEC, 2013) and were revised again in Revision 3.0 (SCDHEC, 2015). The screening levels used for evaluation at each site were those levels that were in effect at the time of reporting and review by SCDHEC.

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

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

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 599 West Cardinal Lane (Formerly 1456 West Cardinal Lane). The sampling activities at 599 West Cardinal Lane (Formerly 1456 West Cardinal Lane) comprised a soil investigation, IGWA sampling, and a soil gas investigation. Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1456 West Cardinal Lane* (MCAS Beaufort, 2009). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Initial Groundwater Investigation Report – February 2015* (Resolution Consultants, 2015). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C. Details regarding the vapor intrusion investigation at this site are provided in the *Technical Memorandum – Soil Gas Sampling Results – October* (Resolution Consultants, 2015). The laboratory report that includes the pertinent soil gas analytical results for this site is presented in Appendix D.

2.1 UST Removal and Soil Sampling

On August 10, 2009, a single 280 gallon heating oil UST was removed from the landscaped area adjacent to the driveway at 599 West Cardinal Lane (Formerly 1456 West Cardinal Lane). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The UST was removed and properly disposed of (i.e., shipped offsite for recycling or transported to a landfill). There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depth to the base of the UST was 5'8" bgs and a single soil sample was collected from that depth. The sample was collected from the fill port side of the former UST to represent a worst case scenario.

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

2.2 Soil Analytical Results

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

presented 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 599 West Cardinal Lane (Formerly 1456 West Cardinal Lane) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated April 1, 2014, SCDHEC requested an IGWA for 599 West Cardinal Lane (Formerly 1456 West Cardinal Lane) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix E.

2.3 Groundwater Sampling

On February 3, 2015, a temporary monitoring well was installed at 599 West Cardinal Lane (Formerly 1456 West Cardinal Lane), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST. The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report –February 2015* (Resolution Consultants, 2015).

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

2.4 Groundwater Analytical Results

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

The groundwater results collected from 599 West Cardinal Lane (Formerly 1456 West Cardinal Lane) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated that the groundwater was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

2.5 Soil Gas Sampling

On October 2, 2014, a temporary subsurface soil gas well was installed at 599 West Cardinal Lane (Formerly 1456 West Cardinal Lane) in accordance with the SCDHEC approved *Uniform Federal Policy Sampling and Analysis Plan (UFP SAP) for Vapor Media* (Resolution Consultants, 2015). Soil gas sampling was conducted at this property to assess the potential risk for vapor intrusion associated with the possible construction of a new home on top of former the UST location. The soil gas well was placed in the same general location as the former heating oil UST and the IGWA sample location. The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Technical Memorandum – Soil Gas Sampling Results – October 2014* (Resolution Consultants, 2015).

The sampling strategy for this phase of the investigation required a one-time sampling event of the soil gas well. The subsurface soil gas well at 599 West Cardinal Lane (Formerly 1456 West Cardinal Lane) was sampled on October 7, 2014. A soil gas sample was collected and shipped to an offsite laboratory for analysis of the petroleum COPCs. Upon completion of soil gas sampling, the temporary well was abandoned in accordance with the *UFP SAP for Vapor Media* (Resolution Consultants, 2015). Field forms are provided in the *Technical Memorandum – Soil Gas Sampling Results – October 2014* (Resolution Consultants, 2015).

2.6 Soil Gas Analytical Results

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

The soil gas results collected from 599 West Cardinal Lane (Formerly 1456 West Cardinal Lane) were below the USEPA VISLs, which indicated that subsurface soil gas was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

3.0 PROPERTY STATUS

The house at 599 West Cardinal Lane (Formerly 1456 West Cardinal Lane) was demolished and the property is an empty lot. There are no current plans for construction in this area. Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 599 West Cardinal Lane (Formerly 1456 West Cardinal Lane). The NFA determination for groundwater was obtained in a letter dated May 5, 2015. Based on the analytical results for soil gas, it was determined that there was not a vapor intrusion concern at this property and a recommendation was made for no additional vapor intrusion assessment activities. SCDHEC approved the no further vapor intrusion investigation recommendation for 599 West Cardinal Lane (Formerly 1456 West Cardinal Lane) in a letter dated March 10, 2015. SCDHEC's letters are provided in Appendix E.

4.0 REFERENCES

- Marine Corps Air Station Beaufort, 2009. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 1456 West Cardinal Lane, Laurel Bay Military Housing Area*, November 2009.
- Resolution Consultants, 2015. *Initial Groundwater Investigation Report – February 2015 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, April 2015.
- Resolution Consultants, 2015. *Technical Memorandum – Soil Gas Sampling – October 2014 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, January 2015.
- Resolution Consultants, 2015. *Uniform Federal Policy Sampling and Analysis Plan for Vapor Media, for Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, February 2015.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2013. *Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 2.0*, April 2013.

- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2015. *Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.0*, May 2015.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2016. *Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.1*, February 2016.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2017. *R.61-92, Part 280, Underground Storage Tank Control Regulations*, March 2017.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2018. *Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service*, March 2018.
- South Carolina Department of Health and Environmental Control Bureau of Water, 2016. *R.61-71, Well Standards*, June 2016.
- United States Environmental Protection Agency, 2014. *USEPA OSWER Vapor Intrusion Assessment, Vapor Intrusion Screening Level Calculator, Version 3.3.1*, May 2014.

Tables

Table 1
Laboratory Analytical Results - Soil
599 West Cardinal Lane (Formerly 1456 West Cardinal Lane)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Results Sample Collected 08/10/09
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)		
Benzene	0.007	ND
Ethylbenzene	1.15	0.669
Naphthalene	0.036	6.74
Toluene	1.45	ND
Xylenes, Total	14.5	1.71
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)		
Benzo(a)anthracene	0.066	1.98
Benzo(b)fluoranthene	0.066	1.13
Benzo(k)fluoranthene	0.066	0.957
Chrysene	0.066	2.14
Dibenz(a,h)anthracene	0.066	ND

Notes:

⁽¹⁾ South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 1.0 (SCDHEC, May 2001).

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Table 2
Laboratory Analytical Results - Groundwater
599 West Cardinal Lane (Formerly 1456 West Cardinal Lane)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Site-Specific Groundwater VISLs (µg/L) ⁽²⁾	Results Sample Collected 02/05/15
Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)			
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	ND
Naphthalene	25	29.33	ND
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	ND
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)			
Benzo(a)anthracene	10	NA	ND
Benzo(b)fluoranthene	10	NA	ND
Benzo(k)fluoranthene	10	NA	ND
Chrysene	10	NA	ND
Dibenz(a,h)anthracene	10	NA	ND

Notes:

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

(2) Site-specific groundwater VISLs were calculated using the EPA JE Model Spreadsheets (Version 3.1, February 2004) and conservative modeling inputs representative of a small single-story house with an 8 foot ceiling. Site-specific groundwater VISLs were developed based on a target risk level of 1×10^{-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 - Vapor
599 West Cardinal Lane (Formerly 1456 West Cardinal Lane)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	USEPA VISL ⁽¹⁾	Results Sample Collected 10/07/14
Volatile Organic Compounds Analyzed by USEPA Method TO-15 (µg/m³)		
Benzene	12	ND
Toluene	17000	0.82
Ethylbenzene	37	ND
m,p-Xylenes	350	0.59
o-Xylene	350	ND
Naphthalene	2.8	ND

Notes:

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

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

Bold font indicates the analyte was detected.

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

USEPA - United States Environmental Protection Agency

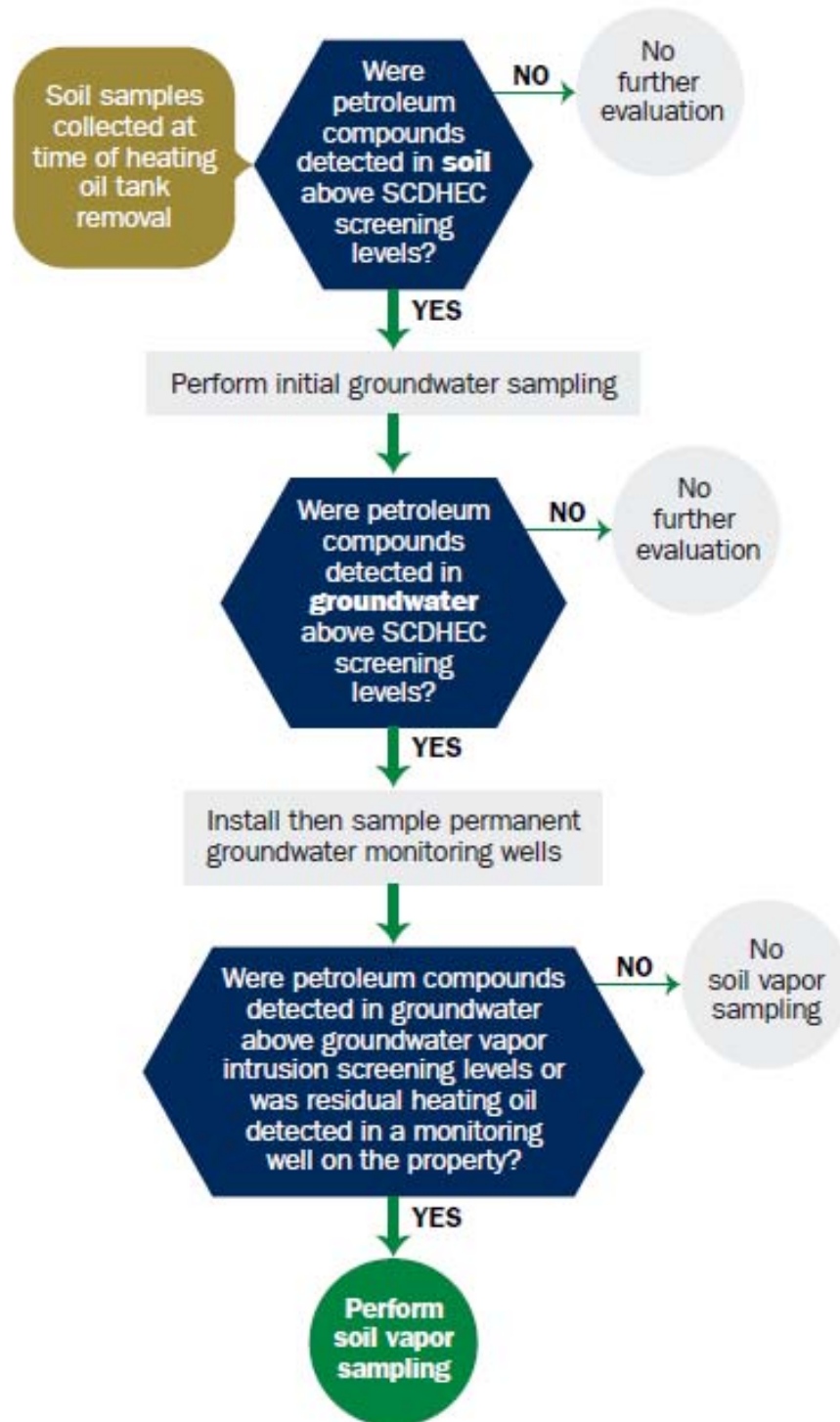
ND - not detected at the reporting limit (or method detection limit if shown on the laboratory report). The vapor laboratory report is provided in Appendix D.

RBSL - Risk-Based Screening Level

µg/m³ - micrograms per cubic meter

VISL - Vapor Intrusion Screening Level

Appendix A
Multi-Media Selection Process for LBMH



Appendix A - Multi-Media Selection Process for LBMH

Appendix B
UST Assessment Report

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

Date Received

State Use Only

RECEIVED

NOV 09 2009

SC DHEC - Bureau of
Land & Waste Management

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

I. OWNERSHIP OF UST (S)

MCAS Beaufort, Commanding Officer Attn: NREAO (Craig Ehde)

Owner Name (Corporation, Individual, Public Agency, Other)

P.O. Box 55001

Mailing Address

Beaufort,

South Carolina

29904-5001

City

State

Zip Code

843

228-7317

Craig Ehde

Area Code

Telephone Number

Contact Person

II. SITE IDENTIFICATION AND LOCATION

Permit I.D. #

Laurel Bay Military Housing Area, Marine Corps Air Station, Beaufort, SC
 Facility Name or Company Site Identifier

1456 Cardinal 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.....

1456Cardinal				
Heating oil				
280 gal				
Late 1950s				
Steel				
Mid 1980s				
5'8"				
No				
No				
Removed				
8/10/09				
Yes				
Yes				

- M. Method of disposal for any USTs removed from the ground (attach disposal manifests)
UST 1456Cardinal was removed from the ground and disposed of at a
Subtitle "D" landfill. See Attachment "A."
- N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)
UST 1456Cardinal had been previously filled with sand by others.
- O. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST
Corrosion, pitting and holes were found throughout the tank.

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.

1456Cardinal				
Steel & Copper				
N/A				
N/A				
Suction				
Yes				
Yes				
No				
Late 1950s				

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

VIII. BRIEF SITE DESCRIPTION AND HISTORY

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

IX. SITE CONDITIONS

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

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009001

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
1456 Cardinal	Excav at fill end	Soil	Sandy	5'8"	8/10/09 1030 hrs	P. Shaw	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

* = Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

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

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

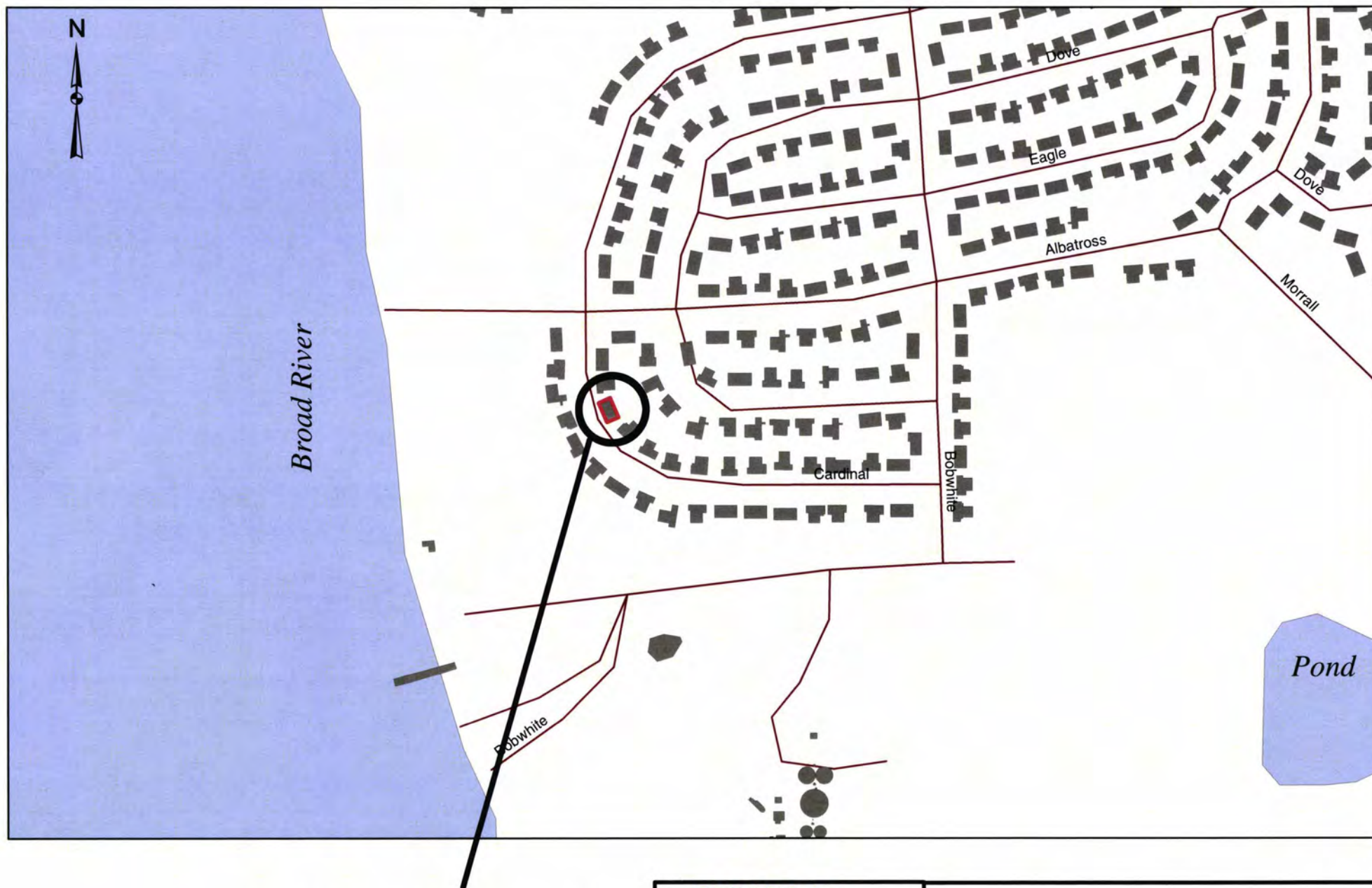
XII. RECEPTORS

	Yes	No
A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system? *Broad R. ~590' If yes, indicate type of receptor, distance, and direction on site map.	*X	
B. Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system? If yes, indicate type of well, distance, and direction on site map.		X
C. Are there any underground structures (e.g., basements) Located within 100 feet of the UST system? If yes, indicate type of structure, distance, and direction on site map.		X
D. Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination? *Sewer & water. If yes, indicate the type of utility, distance, and direction on the site map.	*X	
E. Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete? If yes, indicate the area of contaminated soil on the site map.		X

XIII. SITE MAP

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

(Attach Site Map Here)



1456 CARDINAL LANE

0 100 200 400 600 800 1,000
 Feet

SBG-EEG, Inc.

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

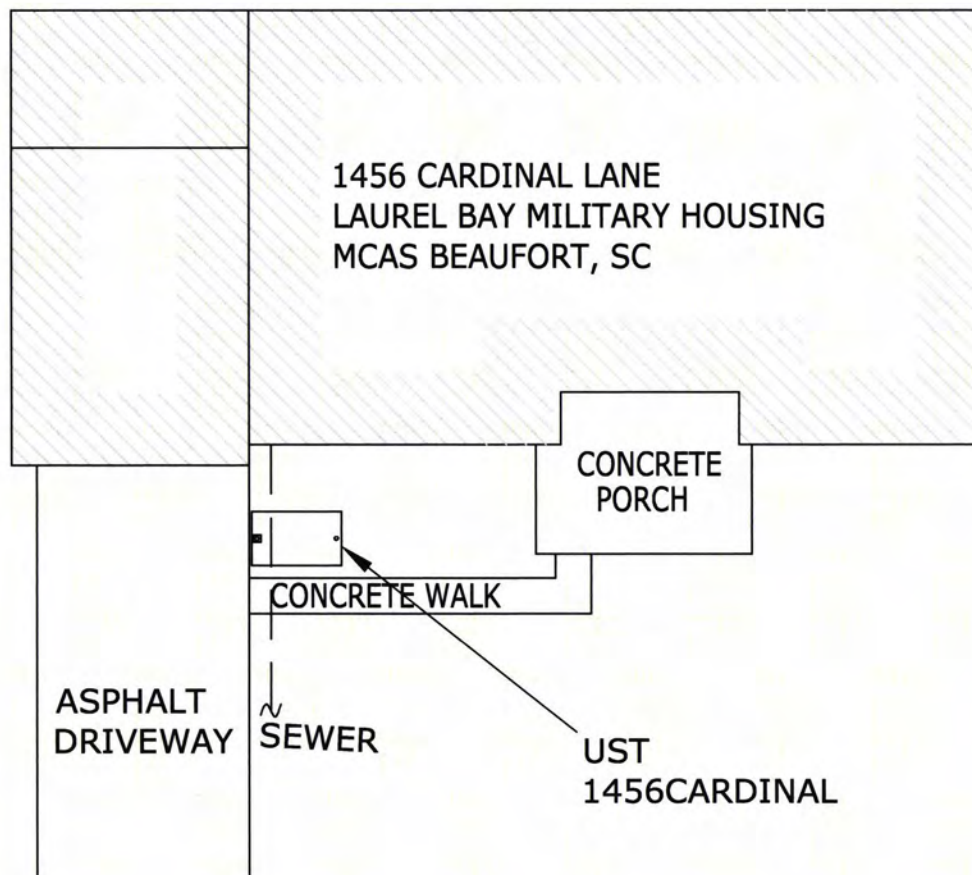
Ph. (843) 879-0400

Drawn By: L. DiAsio

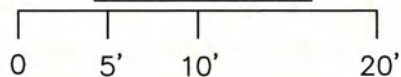
Dwg Date: Sept 2009

FIGURE 1: LOCATION MAP
1456 CARDINAL LANE, LAUREL BAY
MCAS BEAUFORT SC

BROAD RIVER ≈ 590'



GRAPHIC SCALE



SBG-EEG

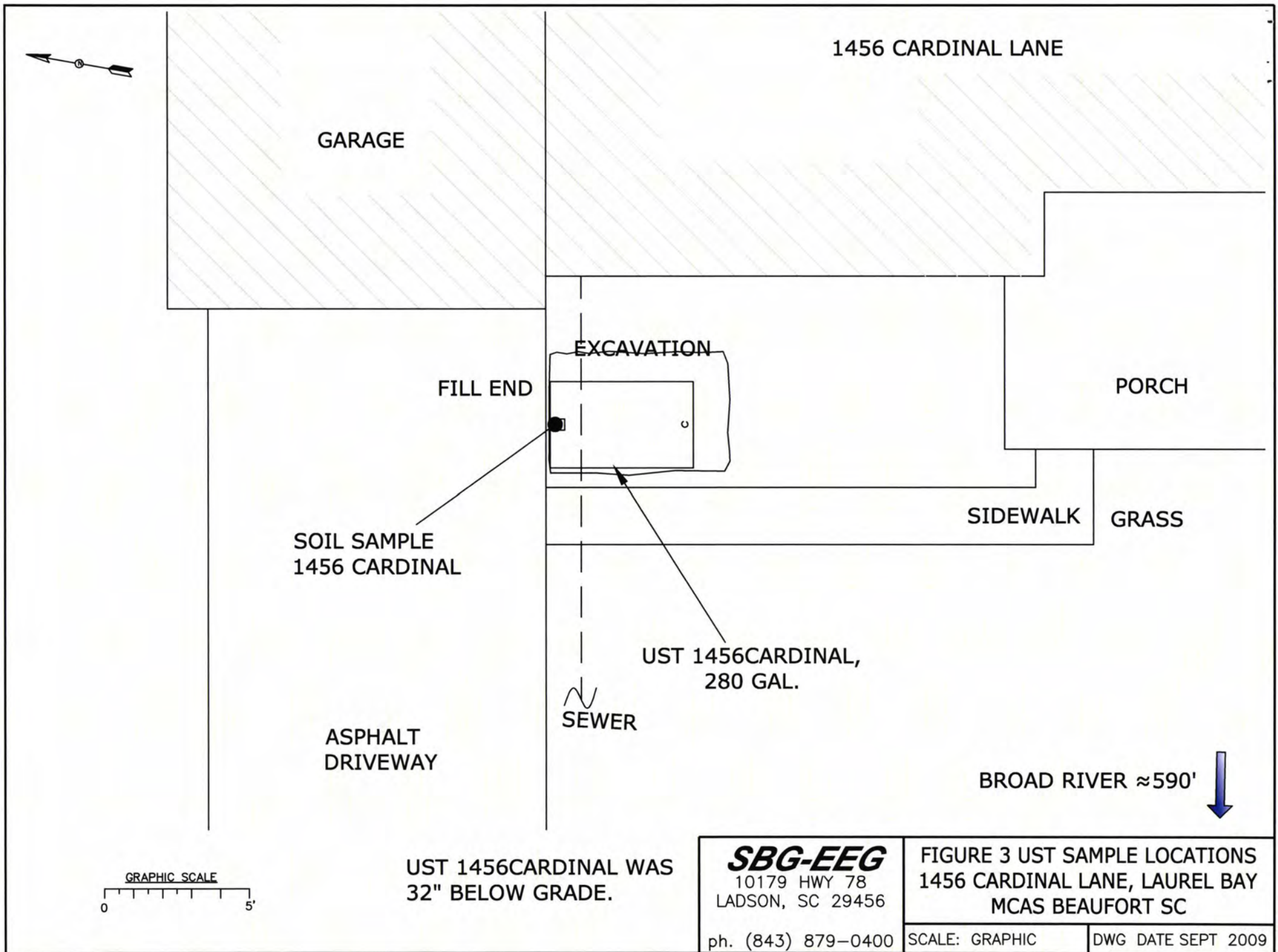
10179 HWY 78
LADSON, SC 29456

ph. (843) 879-0400

FIGURE 2 SITE MAP
1456 CARDINAL LANE, LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE SEPT 2009





Picture 1: Location of UST 1456Cardinal.



Picture 2: UST 1456Cardinal removal in progress.

XIV. SUMMARY OF ANALYSIS RESULTS

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

CoC	UST	1456Cardinal						
Benzene		ND						
Toluene		ND						
Ethylbenzene		0.669 mg/kg						
Xylenes		1.71 mg/kg						
Naphthalene		6.74 mg/kg						
Benzo (a) anthracene		1.98 mg/kg						
Benzo (b) fluoranthene		1.13 mg/kg						
Benzo (k) fluoranthene		0.957 mg/kg						
Chrysene		2.14 mg/kg						
Dibenz (a, h) anthracene		ND						
TPH (EPA 3550)								

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

SUMMARY OF ANALYSIS RESULTS (cont'd)

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

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

XV. ANALYTICAL RESULTS

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

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

September 09, 2009 1:17:54PM

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Nbr: [none]
P/O Nbr: 08087
Date Received: 08/14/09

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
1461 Cardinal	NSH1232-01	08/10/09 13:15
1456 Cardinal	NSH1232-02	08/10/09 10:30
1465 Cardinal	NSH1232-03	08/10/09 15:30
1469 Cardinal	NSH1232-04	08/11/09 09:15
1471 Cardinal	NSH1232-05	08/11/09 12:00
1466 Cardinal	NSH1232-06	08/11/09 15:15
1475 Cardinal	NSH1232-07	08/12/09 10:30
1473 Cardinal	NSH1232-08	08/12/09 14:30
1470 Cardinal	NSH1232-09	08/13/09 10:30

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

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

Additional Laboratory Comments:

REVISED REPORT: 09/09/09 KAH - To correct sample ID for NSH1232-03 from 1565 Cardinal to 1465 Cardinal as shown on the COC. This report replaces the one generated on 08/28/09 @ 16:02.
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: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSH1232-01 (1461 Cardinal - Soil) Sampled: 08/10/09 13:15									
General Chemistry Parameters									
% Dry Solids	81.4		%	0.500	1	08/21/09 09:35	SW-846	BJM	9083242
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00212	1	08/21/09 16:32	SW846 8260B	SMS	9082342
Ethylbenzene	0.0228		mg/kg dry	0.00212	1	08/21/09 16:32	SW846 8260B	SMS	9082342
Naphthalene	0.0673		mg/kg dry	0.00530	1	08/21/09 16:32	SW846 8260B	SMS	9082342
Toluene	ND		mg/kg dry	0.00212	1	08/21/09 16:32	SW846 8260B	SMS	9082342
Xylenes, total	0.0755		mg/kg dry	0.00530	1	08/21/09 16:32	SW846 8260B	SMS	9082342
Surr: 1,2-Dichloroethane-d4 (67-138%)	133 %					08/21/09 16:32	SW846 8260B	SMS	9082342
Surr: Dibromofluoromethane (75-125%)	112 %					08/21/09 16:32	SW846 8260B	SMS	9082342
Surr: Toluene-d8 (76-129%)	129 %					08/21/09 16:32	SW846 8260B	SMS	9082342
Surr: 4-Bromofluorobenzene (67-147%)	336 %	ZX				08/21/09 16:32	SW846 8260B	SMS	9082342
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.810	10	08/22/09 05:57	SW846 8270D	JLS	9082465
Acenaphthylene	ND		mg/kg dry	0.810	10	08/22/09 05:57	SW846 8270D	JLS	9082465
Anthracene	2.14		mg/kg dry	0.810	10	08/22/09 05:57	SW846 8270D	JLS	9082465
Benzo (a) anthracene	10.5		mg/kg dry	0.810	10	08/22/09 05:57	SW846 8270D	JLS	9082465
Benzo (a) pyrene	4.71		mg/kg dry	0.810	10	08/22/09 05:57	SW846 8270D	JLS	9082465
Benzo (b) fluoranthene	5.56		mg/kg dry	0.810	10	08/22/09 05:57	SW846 8270D	JLS	9082465
Benzo (g,h,i) perylene	1.17		mg/kg dry	0.810	10	08/22/09 05:57	SW846 8270D	JLS	9082465
Benzo (k) fluoranthene	4.48		mg/kg dry	0.810	10	08/22/09 05:57	SW846 8270D	JLS	9082465
Chrysene	9.62		mg/kg dry	0.810	10	08/22/09 05:57	SW846 8270D	JLS	9082465
Dibenz (a,h) anthracene	ND		mg/kg dry	0.810	10	08/22/09 05:57	SW846 8270D	JLS	9082465
Fluoranthene	23.9		mg/kg dry	0.810	10	08/22/09 05:57	SW846 8270D	JLS	9082465
Fluorene	2.77		mg/kg dry	0.810	10	08/22/09 05:57	SW846 8270D	JLS	9082465
Indeno (1,2,3-cd) pyrene	1.37		mg/kg dry	0.810	10	08/22/09 05:57	SW846 8270D	JLS	9082465
Naphthalene	ND		mg/kg dry	0.810	10	08/22/09 05:57	SW846 8270D	JLS	9082465
Phenanthrene	7.63		mg/kg dry	0.810	10	08/22/09 05:57	SW846 8270D	JLS	9082465
Pyrene	22.6		mg/kg dry	0.810	10	08/22/09 05:57	SW846 8270D	JLS	9082465
1-Methylnaphthalene	6.05		mg/kg dry	0.810	10	08/22/09 05:57	SW846 8270D	JLS	9082465
2-Methylnaphthalene	7.79		mg/kg dry	0.810	10	08/22/09 05:57	SW846 8270D	JLS	9082465
Surr: Terphenyl-d14 (18-120%)	110 %					08/22/09 05:57	SW846 8270D	JLS	9082465
Surr: 2-Fluorobiphenyl (14-120%)	103 %					08/22/09 05:57	SW846 8270D	JLS	9082465
Surr: Nitrobenzene-d5 (17-120%)	144 %	ZX				08/22/09 05:57	SW846 8270D	JLS	9082465

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSH1232-02 (1456 Cardinal - Soil) Sampled: 08/10/09 10:30									
General Chemistry Parameters									
% Dry Solids	80.6		%	0.500	1	08/21/09 09:35	SW-846	BJM	9083242
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00217	1	08/21/09 17:02	SW846 8260B	SMS	9082342
Ethylbenzene	0.669		mg/kg dry	0.106	50	08/24/09 17:09	SW846 8260B	SMS	9083618
Naphthalene	6.74		mg/kg dry	0.265	50	08/24/09 17:09	SW846 8260B	SMS	9083618
Toluene	ND		mg/kg dry	0.00217	1	08/21/09 17:02	SW846 8260B	SMS	9082342
Xylenes, total	1.71		mg/kg dry	0.265	50	08/24/09 17:09	SW846 8260B	SMS	9083618
Surr: 1,2-Dichloroethane-d4 (67-138%)	121 %					08/21/09 17:02	SW846 8260B	SMS	9082342
Surr: 1,2-Dichloroethane-d4 (67-138%)	118 %					08/24/09 17:09	SW846 8260B	SMS	9083618
Surr: Dibromofluoromethane (75-125%)	104 %					08/21/09 17:02	SW846 8260B	SMS	9082342
Surr: Dibromofluoromethane (75-125%)	95 %					08/24/09 17:09	SW846 8260B	SMS	9083618
Surr: Toluene-d8 (76-129%)	145 %	ZX				08/21/09 17:02	SW846 8260B	SMS	9082342
Surr: Toluene-d8 (76-129%)	105 %					08/24/09 17:09	SW846 8260B	SMS	9083618
Surr: 4-Bromofluorobenzene (67-147%)	245 %	ZX				08/21/09 17:02	SW846 8260B	SMS	9082342
Surr: 4-Bromofluorobenzene (67-147%)	101 %					08/24/09 17:09	SW846 8260B	SMS	9083618
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.414	5	08/22/09 06:21	SW846 8270D	JLS	9082465
Acenaphthylene	ND		mg/kg dry	0.414	5	08/22/09 06:21	SW846 8270D	JLS	9082465
Anthracene	0.589		mg/kg dry	0.414	5	08/22/09 06:21	SW846 8270D	JLS	9082465
Benzo (a) anthracene	1.98		mg/kg dry	0.414	5	08/22/09 06:21	SW846 8270D	JLS	9082465
Benzo (a) pyrene	0.914		mg/kg dry	0.414	5	08/22/09 06:21	SW846 8270D	JLS	9082465
Benzo (b) fluoranthene	1.13		mg/kg dry	0.414	5	08/22/09 06:21	SW846 8270D	JLS	9082465
Benzo (g,h,i) perylene	ND		mg/kg dry	0.414	5	08/22/09 06:21	SW846 8270D	JLS	9082465
Benzo (k) fluoranthene	0.957		mg/kg dry	0.414	5	08/22/09 06:21	SW846 8270D	JLS	9082465
Chrysene	2.14		mg/kg dry	0.414	5	08/22/09 06:21	SW846 8270D	JLS	9082465
Dibenz (a,h) anthracene	ND		mg/kg dry	0.414	5	08/22/09 06:21	SW846 8270D	JLS	9082465
Fluoranthene	4.21		mg/kg dry	0.414	5	08/22/09 06:21	SW846 8270D	JLS	9082465
Fluorene	1.16		mg/kg dry	0.414	5	08/22/09 06:21	SW846 8270D	JLS	9082465
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.414	5	08/22/09 06:21	SW846 8270D	JLS	9082465
Naphthalene	1.19		mg/kg dry	0.414	5	08/22/09 06:21	SW846 8270D	JLS	9082465
Phenanthrene	2.99		mg/kg dry	0.414	5	08/22/09 06:21	SW846 8270D	JLS	9082465
Pyrene	3.64		mg/kg dry	0.414	5	08/22/09 06:21	SW846 8270D	JLS	9082465
1-Methylnaphthalene	5.07		mg/kg dry	0.414	5	08/22/09 06:21	SW846 8270D	JLS	9082465
2-Methylnaphthalene	6.50		mg/kg dry	0.414	5	08/22/09 06:21	SW846 8270D	JLS	9082465
Surr: Terphenyl-d14 (18-120%)	94 %					08/22/09 06:21	SW846 8270D	JLS	9082465
Surr: 2-Fluorobiphenyl (14-120%)	82 %					08/22/09 06:21	SW846 8270D	JLS	9082465
Surr: Nitrobenzene-d5 (17-120%)	104 %					08/22/09 06:21	SW846 8270D	JLS	9082465

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSH1232-03 (1465 Cardinal - Soil) Sampled: 08/10/09 15:30									
General Chemistry Parameters									
% Dry Solids	83.6		%	0.500	1	08/21/09 09:35	SW-846	BJM	9083242
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00206	1	08/21/09 17:31	SW846 8260B	SMS	9082342
Ethylbenzene	0.404		mg/kg dry	0.110	50	08/24/09 17:38	SW846 8260B	SMS	9083618
Naphthalene	4.97		mg/kg dry	0.276	50	08/24/09 17:38	SW846 8260B	SMS	9083618
Toluene	0.0106		mg/kg dry	0.00206	1	08/21/09 17:31	SW846 8260B	SMS	9082342
Xylenes, total	1.58		mg/kg dry	0.276	50	08/24/09 17:38	SW846 8260B	SMS	9083618
Surr: 1,2-Dichloroethane-d4 (67-138%)	113 %					08/21/09 17:31	SW846 8260B	SMS	9082342
Surr: 1,2-Dichloroethane-d4 (67-138%)	130 %					08/24/09 17:38	SW846 8260B	SMS	9083618
Surr: Dibromofluoromethane (75-125%)	99 %					08/21/09 17:31	SW846 8260B	SMS	9082342
Surr: Dibromofluoromethane (75-125%)	101 %					08/24/09 17:38	SW846 8260B	SMS	9083618
Surr: Toluene-d8 (76-129%)	341 %	ZX				08/21/09 17:31	SW846 8260B	SMS	9082342
Surr: Toluene-d8 (76-129%)	97 %					08/24/09 17:38	SW846 8260B	SMS	9083618
Surr: 4-Bromofluorobenzene (67-147%)	4670 %	ZX				08/21/09 17:31	SW846 8260B	SMS	9082342
Surr: 4-Bromofluorobenzene (67-147%)	118 %					08/24/09 17:38	SW846 8260B	SMS	9083618
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.779	10	08/22/09 06:45	SW846 8270D	JLS	9082465
Acenaphthylene	ND		mg/kg dry	0.779	10	08/22/09 06:45	SW846 8270D	JLS	9082465
Anthracene	1.22		mg/kg dry	0.779	10	08/22/09 06:45	SW846 8270D	JLS	9082465
Benzo (a) anthracene	1.16		mg/kg dry	0.779	10	08/22/09 06:45	SW846 8270D	JLS	9082465
Benzo (a) pyrene	ND		mg/kg dry	0.779	10	08/22/09 06:45	SW846 8270D	JLS	9082465
Benzo (b) fluoranthene	ND		mg/kg dry	0.779	10	08/22/09 06:45	SW846 8270D	JLS	9082465
Benzo (g,h,i) perylene	ND		mg/kg dry	0.779	10	08/22/09 06:45	SW846 8270D	JLS	9082465
Benzo (k) fluoranthene	ND		mg/kg dry	0.779	10	08/22/09 06:45	SW846 8270D	JLS	9082465
Chrysene	1.21		mg/kg dry	0.779	10	08/22/09 06:45	SW846 8270D	JLS	9082465
Dibenz (a,h) anthracene	ND		mg/kg dry	0.779	10	08/22/09 06:45	SW846 8270D	JLS	9082465
Fluoranthene	2.95		mg/kg dry	0.779	10	08/22/09 06:45	SW846 8270D	JLS	9082465
Fluorene	4.60		mg/kg dry	0.779	10	08/22/09 06:45	SW846 8270D	JLS	9082465
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.779	10	08/22/09 06:45	SW846 8270D	JLS	9082465
Naphthalene	4.08		mg/kg dry	0.779	10	08/22/09 06:45	SW846 8270D	JLS	9082465
Phenanthrene	8.05		mg/kg dry	0.779	10	08/22/09 06:45	SW846 8270D	JLS	9082465
Pyrene	2.93		mg/kg dry	0.779	10	08/22/09 06:45	SW846 8270D	JLS	9082465
1-Methylnaphthalene	19.3		mg/kg dry	0.779	10	08/22/09 06:45	SW846 8270D	JLS	9082465
2-Methylnaphthalene	23.6		mg/kg dry	0.779	10	08/22/09 06:45	SW846 8270D	JLS	9082465
Surr: Terphenyl-d14 (18-120%)	94 %					08/22/09 06:45	SW846 8270D	JLS	9082465
Surr: 2-Fluorobiphenyl (14-120%)	97 %					08/22/09 06:45	SW846 8270D	JLS	9082465
Surr: Nitrobenzene-d5 (17-120%)	152 %	ZX				08/22/09 06:45	SW846 8270D	JLS	9082465

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSH1232-04 (1469 Cardinal - Soil) Sampled: 08/11/09 09:15									
General Chemistry Parameters									
% Dry Solids	84.0		%	0.500	1	08/21/09 09:35	SW-846	BJM	9083242
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00212	1	08/21/09 18:01	SW846 8260B	SMS	9082342
Ethylbenzene	0.721		mg/kg dry	0.109	50	08/24/09 18:37	SW846 8260B	SMS	9083618
Naphthalene	6.55		mg/kg dry	0.273	50	08/24/09 18:37	SW846 8260B	SMS	9083618
Toluene	ND		mg/kg dry	0.00212	1	08/21/09 18:01	SW846 8260B	SMS	9082342
Xylenes, total	0.427		mg/kg dry	0.273	50	08/24/09 18:37	SW846 8260B	SMS	9083618
Surr: 1,2-Dichloroethane-d4 (67-138%)	111 %					08/21/09 18:01	SW846 8260B	SMS	9082342
Surr: 1,2-Dichloroethane-d4 (67-138%)	116 %					08/24/09 18:37	SW846 8260B	SMS	9083618
Surr: Dibromofluoromethane (75-125%)	104 %					08/21/09 18:01	SW846 8260B	SMS	9082342
Surr: Dibromofluoromethane (75-125%)	98 %					08/24/09 18:37	SW846 8260B	SMS	9083618
Surr: Toluene-d8 (76-129%)	168 %	ZX				08/21/09 18:01	SW846 8260B	SMS	9082342
Surr: Toluene-d8 (76-129%)	105 %					08/24/09 18:37	SW846 8260B	SMS	9083618
Surr: 4-Bromofluorobenzene (67-147%)	350 %	ZX				08/21/09 18:01	SW846 8260B	SMS	9082342
Surr: 4-Bromofluorobenzene (67-147%)	106 %					08/24/09 18:37	SW846 8260B	SMS	9083618
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.782	10	08/22/09 07:09	SW846 8270D	JLS	9082465
Acenaphthylene	ND		mg/kg dry	0.782	10	08/22/09 07:09	SW846 8270D	JLS	9082465
Anthracene	0.817		mg/kg dry	0.782	10	08/22/09 07:09	SW846 8270D	JLS	9082465
Benzo (a) anthracene	ND		mg/kg dry	0.782	10	08/22/09 07:09	SW846 8270D	JLS	9082465
Benzo (a) pyrene	ND		mg/kg dry	0.782	10	08/22/09 07:09	SW846 8270D	JLS	9082465
Benzo (b) fluoranthene	ND		mg/kg dry	0.782	10	08/22/09 07:09	SW846 8270D	JLS	9082465
Benzo (g,h,i) perylene	ND		mg/kg dry	0.782	10	08/22/09 07:09	SW846 8270D	JLS	9082465
Benzo (k) fluoranthene	ND		mg/kg dry	0.782	10	08/22/09 07:09	SW846 8270D	JLS	9082465
Chrysene	ND		mg/kg dry	0.782	10	08/22/09 07:09	SW846 8270D	JLS	9082465
Dibenz (a,h) anthracene	ND		mg/kg dry	0.782	10	08/22/09 07:09	SW846 8270D	JLS	9082465
Fluoranthene	ND		mg/kg dry	0.782	10	08/22/09 07:09	SW846 8270D	JLS	9082465
Fluorene	3.90		mg/kg dry	0.782	10	08/22/09 07:09	SW846 8270D	JLS	9082465
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.782	10	08/22/09 07:09	SW846 8270D	JLS	9082465
Naphthalene	6.18		mg/kg dry	0.782	10	08/22/09 07:09	SW846 8270D	JLS	9082465
Phenanthrene	6.28		mg/kg dry	0.782	10	08/22/09 07:09	SW846 8270D	JLS	9082465
Pyrene	ND		mg/kg dry	0.782	10	08/22/09 07:09	SW846 8270D	JLS	9082465
1-Methylnaphthalene	20.4		mg/kg dry	0.782	10	08/22/09 07:09	SW846 8270D	JLS	9082465
2-Methylnaphthalene	28.4		mg/kg dry	0.782	10	08/22/09 07:09	SW846 8270D	JLS	9082465
Surr: Terphenyl-d14 (18-120%)	113 %					08/22/09 07:09	SW846 8270D	JLS	9082465
Surr: 2-Fluorobiphenyl (14-120%)	92 %					08/22/09 07:09	SW846 8270D	JLS	9082465
Surr: Nitrobenzene-d5 (17-120%)	166 %	ZX				08/22/09 07:09	SW846 8270D	JLS	9082465

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSH1232-05 (1471 Cardinal - Soil) Sampled: 08/11/09 12:00									
General Chemistry Parameters									
% Dry Solids	82.1		%	0.500	1	08/21/09 09:35	SW-846	BJM	9083242
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	0.00635		mg/kg dry	0.00206	1	08/21/09 18:30	SW846 8260B	SMS	9082342
Ethylbenzene	0.118		mg/kg dry	0.00206	1	08/21/09 18:30	SW846 8260B	SMS	9082342
Naphthalene	0.393		mg/kg dry	0.268	50	08/24/09 19:06	SW846 8260B	SMS	9083618
Toluene	0.00316		mg/kg dry	0.00206	1	08/21/09 18:30	SW846 8260B	SMS	9082342
Xylenes, total	0.497		mg/kg dry	0.268	50	08/24/09 19:06	SW846 8260B	SMS	9083618
Surr: 1,2-Dichloroethane-d4 (67-138%)	112 %					08/21/09 18:30	SW846 8260B	SMS	9082342
Surr: 1,2-Dichloroethane-d4 (67-138%)	110 %					08/24/09 19:06	SW846 8260B	SMS	9083618
Surr: Dibromofluoromethane (75-125%)	101 %					08/21/09 18:30	SW846 8260B	SMS	9082342
Surr: Dibromofluoromethane (75-125%)	92 %					08/24/09 19:06	SW846 8260B	SMS	9083618
Surr: Toluene-d8 (76-129%)	136 %	ZY				08/21/09 18:30	SW846 8260B	SMS	9082342
Surr: Toluene-d8 (76-129%)	102 %					08/24/09 19:06	SW846 8260B	SMS	9083618
Surr: 4-Bromofluorobenzene (67-147%)	202 %	ZY				08/21/09 18:30	SW846 8260B	SMS	9082342
Surr: 4-Bromofluorobenzene (67-147%)	102 %					08/24/09 19:06	SW846 8260B	SMS	9083618
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.0794	1	08/21/09 21:29	SW846 8270D	JLS	9082465
Acenaphthylene	ND		mg/kg dry	0.0794	1	08/21/09 21:29	SW846 8270D	JLS	9082465
Anthracene	0.193		mg/kg dry	0.0794	1	08/21/09 21:29	SW846 8270D	JLS	9082465
Benzo (a) anthracene	ND		mg/kg dry	0.0794	1	08/21/09 21:29	SW846 8270D	JLS	9082465
Benzo (a) pyrene	0.344		mg/kg dry	0.0794	1	08/21/09 21:29	SW846 8270D	JLS	9082465
Benzo (b) fluoranthene	ND		mg/kg dry	0.0794	1	08/21/09 21:29	SW846 8270D	JLS	9082465
Benzo (g,h,i) perylene	0.135		mg/kg dry	0.0794	1	08/21/09 21:29	SW846 8270D	JLS	9082465
Benzo (k) fluoranthene	ND		mg/kg dry	0.0794	1	08/21/09 21:29	SW846 8270D	JLS	9082465
Chrysene	ND		mg/kg dry	0.0794	1	08/21/09 21:29	SW846 8270D	JLS	9082465
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0794	1	08/21/09 21:29	SW846 8270D	JLS	9082465
Fluoranthene	0.220		mg/kg dry	0.0794	1	08/21/09 21:29	SW846 8270D	JLS	9082465
Fluorene	ND		mg/kg dry	0.0794	1	08/21/09 21:29	SW846 8270D	JLS	9082465
Indeno (1,2,3-cd) pyrene	0.137		mg/kg dry	0.0794	1	08/21/09 21:29	SW846 8270D	JLS	9082465
Naphthalene	ND		mg/kg dry	0.0794	1	08/21/09 21:29	SW846 8270D	JLS	9082465
Phenanthrene	0.758		mg/kg dry	0.0794	1	08/21/09 21:29	SW846 8270D	JLS	9082465
Pyrene	0.102		mg/kg dry	0.0794	1	08/21/09 21:29	SW846 8270D	JLS	9082465
1-Methylnaphthalene	0.183		mg/kg dry	0.0794	1	08/21/09 21:29	SW846 8270D	JLS	9082465
2-Methylnaphthalene	0.246		mg/kg dry	0.0794	1	08/21/09 21:29	SW846 8270D	JLS	9082465
Surr: Terphenyl-d14 (18-120%)	64 %					08/21/09 21:29	SW846 8270D	JLS	9082465
Surr: 2-Fluorobiphenyl (14-120%)	76 %					08/21/09 21:29	SW846 8270D	JLS	9082465
Surr: Nitrobenzene-d5 (17-120%)	63 %					08/21/09 21:29	SW846 8270D	JLS	9082465

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSH1232-06 (1466 Cardinal - Soil) Sampled: 08/11/09 15:15									
General Chemistry Parameters									
% Dry Solids	82.7		%	0.500	1	08/21/09 09:35	SW-846	BJM	9083242
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00221	1	08/24/09 16:19	SW846 8260B	SMS	9083623
Ethylbenzene	ND		mg/kg dry	0.00221	1	08/24/09 16:19	SW846 8260B	SMS	9083623
Naphthalene	ND		mg/kg dry	0.00553	1	08/24/09 16:19	SW846 8260B	SMS	9083623
Toluene	ND		mg/kg dry	0.00221	1	08/24/09 16:19	SW846 8260B	SMS	9083623
Xylenes, total	ND		mg/kg dry	0.00553	1	08/24/09 16:19	SW846 8260B	SMS	9083623
Surr: 1,2-Dichloroethane-d4 (67-138%)	106 %					08/24/09 16:19	SW846 8260B	SMS	9083623
Surr: Dibromofluoromethane (75-125%)	97 %					08/24/09 16:19	SW846 8260B	SMS	9083623
Surr: Toluene-d8 (76-129%)	99 %					08/24/09 16:19	SW846 8260B	SMS	9083623
Surr: 4-Bromofluorobenzene (67-147%)	120 %					08/24/09 16:19	SW846 8260B	SMS	9083623
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND	RL1	mg/kg dry	0.399	5	08/22/09 07:33	SW846 8270D	JLS	9082465
Acenaphthylene	ND	RL1	mg/kg dry	0.399	5	08/22/09 07:33	SW846 8270D	JLS	9082465
Anthracene	ND	RL1	mg/kg dry	0.399	5	08/22/09 07:33	SW846 8270D	JLS	9082465
Benzo (a) anthracene	ND	RL1	mg/kg dry	0.399	5	08/22/09 07:33	SW846 8270D	JLS	9082465
Benzo (a) pyrene	ND	RL1	mg/kg dry	0.399	5	08/22/09 07:33	SW846 8270D	JLS	9082465
Benzo (b) fluoranthene	ND	RL1	mg/kg dry	0.399	5	08/22/09 07:33	SW846 8270D	JLS	9082465
Benzo (g,h,i) perylene	ND	RL1	mg/kg dry	0.399	5	08/22/09 07:33	SW846 8270D	JLS	9082465
Benzo (k) fluoranthene	ND	RL1	mg/kg dry	0.399	5	08/22/09 07:33	SW846 8270D	JLS	9082465
Chrysene	ND	RL1	mg/kg dry	0.399	5	08/22/09 07:33	SW846 8270D	JLS	9082465
Dibenz (a,h) anthracene	ND	RL1	mg/kg dry	0.399	5	08/22/09 07:33	SW846 8270D	JLS	9082465
Fluoranthene	ND	RL1	mg/kg dry	0.399	5	08/22/09 07:33	SW846 8270D	JLS	9082465
Fluorene	ND	RL1	mg/kg dry	0.399	5	08/22/09 07:33	SW846 8270D	JLS	9082465
Indeno (1,2,3-cd) pyrene	ND	RL1	mg/kg dry	0.399	5	08/22/09 07:33	SW846 8270D	JLS	9082465
Naphthalene	ND	RL1	mg/kg dry	0.399	5	08/22/09 07:33	SW846 8270D	JLS	9082465
Phenanthrene	ND	RL1	mg/kg dry	0.399	5	08/22/09 07:33	SW846 8270D	JLS	9082465
Pyrene	ND	RL1	mg/kg dry	0.399	5	08/22/09 07:33	SW846 8270D	JLS	9082465
1-Methylnaphthalene	ND	RL1	mg/kg dry	0.399	5	08/22/09 07:33	SW846 8270D	JLS	9082465
2-Methylnaphthalene	ND	RL1	mg/kg dry	0.399	5	08/22/09 07:33	SW846 8270D	JLS	9082465
Surr: Terphenyl-d14 (18-120%)	95 %					08/22/09 07:33	SW846 8270D	JLS	9082465
Surr: 2-Fluorobiphenyl (14-120%)	81 %					08/22/09 07:33	SW846 8270D	JLS	9082465
Surr: Nitrobenzene-d5 (17-120%)	85 %					08/22/09 07:33	SW846 8270D	JLS	9082465

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSH1232-07 (1475 Cardinal - Soil) Sampled: 08/12/09 10:30									
General Chemistry Parameters									
% Dry Solids	85.8		%	0.500	1	08/21/09 09:35	SW-846	BJM	9083242
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00214	1	08/24/09 16:49	SW846 8260B	SMS	9083623
Ethylbenzene	ND		mg/kg dry	0.00214	1	08/24/09 16:49	SW846 8260B	SMS	9083623
Naphthalene	ND		mg/kg dry	0.00536	1	08/24/09 16:49	SW846 8260B	SMS	9083623
Toluene	ND		mg/kg dry	0.00214	1	08/24/09 16:49	SW846 8260B	SMS	9083623
Xylenes, total	ND		mg/kg dry	0.00536	1	08/24/09 16:49	SW846 8260B	SMS	9083623
Surr: 1,2-Dichloroethane-d4 (67-138%)	93 %					08/24/09 16:49	SW846 8260B	SMS	9083623
Surr: Dibromofluoromethane (75-125%)	91 %					08/24/09 16:49	SW846 8260B	SMS	9083623
Surr: Toluene-d8 (76-129%)	103 %					08/24/09 16:49	SW846 8260B	SMS	9083623
Surr: 4-Bromofluorobenzene (67-147%)	108 %					08/24/09 16:49	SW846 8260B	SMS	9083623
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.0780	1	08/21/09 22:29	SW846 8270D	JLS	9082465
Acenaphthylene	ND		mg/kg dry	0.0780	1	08/21/09 22:29	SW846 8270D	JLS	9082465
Anthracene	ND		mg/kg dry	0.0780	1	08/21/09 22:29	SW846 8270D	JLS	9082465
Benzo (a) anthracene	ND		mg/kg dry	0.0780	1	08/21/09 22:29	SW846 8270D	JLS	9082465
Benzo (a) pyrene	ND		mg/kg dry	0.0780	1	08/21/09 22:29	SW846 8270D	JLS	9082465
Benzo (b) fluoranthene	ND		mg/kg dry	0.0780	1	08/21/09 22:29	SW846 8270D	JLS	9082465
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0780	1	08/21/09 22:29	SW846 8270D	JLS	9082465
Benzo (k) fluoranthene	ND		mg/kg dry	0.0780	1	08/21/09 22:29	SW846 8270D	JLS	9082465
Chrysene	ND		mg/kg dry	0.0780	1	08/21/09 22:29	SW846 8270D	JLS	9082465
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0780	1	08/21/09 22:29	SW846 8270D	JLS	9082465
Fluoranthene	ND		mg/kg dry	0.0780	1	08/21/09 22:29	SW846 8270D	JLS	9082465
Fluorene	ND		mg/kg dry	0.0780	1	08/21/09 22:29	SW846 8270D	JLS	9082465
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0780	1	08/21/09 22:29	SW846 8270D	JLS	9082465
Naphthalene	ND		mg/kg dry	0.0780	1	08/21/09 22:29	SW846 8270D	JLS	9082465
Phenanthrene	ND		mg/kg dry	0.0780	1	08/21/09 22:29	SW846 8270D	JLS	9082465
Pyrene	ND		mg/kg dry	0.0780	1	08/21/09 22:29	SW846 8270D	JLS	9082465
1-Methylnaphthalene	ND		mg/kg dry	0.0780	1	08/21/09 22:29	SW846 8270D	JLS	9082465
2-Methylnaphthalene	ND		mg/kg dry	0.0780	1	08/21/09 22:29	SW846 8270D	JLS	9082465
Surr: Terphenyl-d14 (18-120%)	71 %					08/21/09 22:29	SW846 8270D	JLS	9082465
Surr: 2-Fluorobiphenyl (14-120%)	59 %					08/21/09 22:29	SW846 8270D	JLS	9082465
Surr: Nitrobenzene-d5 (17-120%)	58 %					08/21/09 22:29	SW846 8270D	JLS	9082465

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSH1232-08 (1473 Cardinal - Soil) Sampled: 08/12/09 14:30									
General Chemistry Parameters									
% Dry Solids	82.2		%	0.500	1	08/21/09 09:35	SW846	BJM	9083242
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00209	1	08/21/09 19:58	SW846 8260B	SMS	9082342
Ethylbenzene	0.274		mg/kg dry	0.110	50	08/24/09 19:36	SW846 8260B	SMS	9083618
Naphthalene	0.177		mg/kg dry	0.00522	1	08/21/09 19:58	SW846 8260B	SMS	9082342
Toluene	0.0265		mg/kg dry	0.00209	1	08/21/09 19:58	SW846 8260B	SMS	9082342
Xylenes, total	1.46		mg/kg dry	0.276	50	08/24/09 19:36	SW846 8260B	SMS	9083618
Surr: 1,2-Dichloroethane-d4 (67-138%)	116 %					08/21/09 19:58	SW846 8260B	SMS	9082342
Surr: 1,2-Dichloroethane-d4 (67-138%)	121 %					08/24/09 19:36	SW846 8260B	SMS	9083618
Surr: Dibromofluoromethane (75-125%)	105 %					08/21/09 19:58	SW846 8260B	SMS	9082342
Surr: Dibromofluoromethane (75-125%)	99 %					08/24/09 19:36	SW846 8260B	SMS	9083618
Surr: Toluene-d8 (76-129%)	156 %	ZX				08/21/09 19:58	SW846 8260B	SMS	9082342
Surr: Toluene-d8 (76-129%)	102 %					08/24/09 19:36	SW846 8260B	SMS	9083618
Surr: 4-Bromofluorobenzene (67-147%)	430 %	ZX				08/21/09 19:58	SW846 8260B	SMS	9082342
Surr: 4-Bromofluorobenzene (67-147%)	113 %					08/24/09 19:36	SW846 8260B	SMS	9083618
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND		mg/kg dry	0.789	10	08/22/09 07:57	SW846 8270D	JLS	9082465
Acenaphthylene	ND		mg/kg dry	0.789	10	08/22/09 07:57	SW846 8270D	JLS	9082465
Anthracene	ND		mg/kg dry	0.789	10	08/22/09 07:57	SW846 8270D	JLS	9082465
Benzo (a) anthracene	ND		mg/kg dry	0.789	10	08/22/09 07:57	SW846 8270D	JLS	9082465
Benzo (a) pyrene	ND		mg/kg dry	0.789	10	08/22/09 07:57	SW846 8270D	JLS	9082465
Benzo (b) fluoranthene	ND		mg/kg dry	0.789	10	08/22/09 07:57	SW846 8270D	JLS	9082465
Benzo (g,h,i) perylene	ND		mg/kg dry	0.789	10	08/22/09 07:57	SW846 8270D	JLS	9082465
Benzo (k) fluoranthene	ND		mg/kg dry	0.789	10	08/22/09 07:57	SW846 8270D	JLS	9082465
Chrysene	0.813		mg/kg dry	0.789	10	08/22/09 07:57	SW846 8270D	JLS	9082465
Dibenz (a,h) anthracene	ND		mg/kg dry	0.789	10	08/22/09 07:57	SW846 8270D	JLS	9082465
Fluoranthene	ND		mg/kg dry	0.789	10	08/22/09 07:57	SW846 8270D	JLS	9082465
Fluorene	0.844		mg/kg dry	0.789	10	08/22/09 07:57	SW846 8270D	JLS	9082465
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.789	10	08/22/09 07:57	SW846 8270D	JLS	9082465
Naphthalene	0.939		mg/kg dry	0.789	10	08/22/09 07:57	SW846 8270D	JLS	9082465
Phenanthrene	1.23		mg/kg dry	0.789	10	08/22/09 07:57	SW846 8270D	JLS	9082465
Pyrene	1.27		mg/kg dry	0.789	10	08/22/09 07:57	SW846 8270D	JLS	9082465
1-Methylnaphthalene	3.18		mg/kg dry	0.789	10	08/22/09 07:57	SW846 8270D	JLS	9082465
2-Methylnaphthalene	3.40		mg/kg dry	0.789	10	08/22/09 07:57	SW846 8270D	JLS	9082465
Surr: Terphenyl-d14 (18-120%)	94 %					08/22/09 07:57	SW846 8270D	JLS	9082465
Surr: 2-Fluorobiphenyl (14-120%)	89 %					08/22/09 07:57	SW846 8270D	JLS	9082465
Surr: Nitrobenzene-d5 (17-120%)	94 %					08/22/09 07:57	SW846 8270D	JLS	9082465

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSH1232-09 (1470 Cardinal - Soil) Sampled: 08/13/09 10:30									
General Chemistry Parameters									
% Dry Solids	79.6		%	0.500	1	08/21/09 09:35	SW-846	BJM	9083242
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00219	1	08/21/09 20:28	SW846 8260B	SMS	9082342
Ethylbenzene	ND		mg/kg dry	0.00219	1	08/21/09 20:28	SW846 8260B	SMS	9082342
Naphthalene	0.0514		mg/kg dry	0.00548	1	08/21/09 20:28	SW846 8260B	SMS	9082342
Toluene	ND		mg/kg dry	0.00219	1	08/21/09 20:28	SW846 8260B	SMS	9082342
Xylenes, total	ND		mg/kg dry	0.00548	1	08/21/09 20:28	SW846 8260B	SMS	9082342
Surr: 1,2-Dichloroethane-d4 (67-138%)	113 %					08/21/09 20:28	SW846 8260B	SMS	9082342
Surr: Dibromofluoromethane (75-125%)	102 %					08/21/09 20:28	SW846 8260B	SMS	9082342
Surr: Toluene-d8 (76-129%)	108 %					08/21/09 20:28	SW846 8260B	SMS	9082342
Surr: 4-Bromofluorobenzene (67-147%)	129 %					08/21/09 20:28	SW846 8260B	SMS	9082342
Polyaromatic Hydrocarbons by EPA 8270D									
Acenaphthene	ND	RL1	mg/kg dry	0.838	10	08/22/09 08:21	SW846 8270D	JLS	9082465
Acenaphthylene	ND	RL1	mg/kg dry	0.838	10	08/22/09 08:21	SW846 8270D	JLS	9082465
Anthracene	ND	RL1	mg/kg dry	0.838	10	08/22/09 08:21	SW846 8270D	JLS	9082465
Benzo (a) anthracene	ND	RL1	mg/kg dry	0.838	10	08/22/09 08:21	SW846 8270D	JLS	9082465
Benzo (a) pyrene	ND	RL1	mg/kg dry	0.838	10	08/22/09 08:21	SW846 8270D	JLS	9082465
Benzo (b) fluoranthene	ND	RL1	mg/kg dry	0.838	10	08/22/09 08:21	SW846 8270D	JLS	9082465
Benzo (g,h,i) perylene	ND	RL1	mg/kg dry	0.838	10	08/22/09 08:21	SW846 8270D	JLS	9082465
Benzo (k) fluoranthene	ND	RL1	mg/kg dry	0.838	10	08/22/09 08:21	SW846 8270D	JLS	9082465
Chrysene	ND	RL1	mg/kg dry	0.838	10	08/22/09 08:21	SW846 8270D	JLS	9082465
Dibenz (a,h) anthracene	ND	RL1	mg/kg dry	0.838	10	08/22/09 08:21	SW846 8270D	JLS	9082465
Fluoranthene	ND	RL1	mg/kg dry	0.838	10	08/22/09 08:21	SW846 8270D	JLS	9082465
Fluorene	ND	RL1	mg/kg dry	0.838	10	08/22/09 08:21	SW846 8270D	JLS	9082465
Indeno (1,2,3-cd) pyrene	ND	RL1	mg/kg dry	0.838	10	08/22/09 08:21	SW846 8270D	JLS	9082465
Naphthalene	ND	RL1	mg/kg dry	0.838	10	08/22/09 08:21	SW846 8270D	JLS	9082465
Phenanthrene	ND	RL1	mg/kg dry	0.838	10	08/22/09 08:21	SW846 8270D	JLS	9082465
Pyrene	ND	RL1	mg/kg dry	0.838	10	08/22/09 08:21	SW846 8270D	JLS	9082465
1-Methylnaphthalene	ND	RL1	mg/kg dry	0.838	10	08/22/09 08:21	SW846 8270D	JLS	9082465
2-Methylnaphthalene	ND	RL1	mg/kg dry	0.838	10	08/22/09 08:21	SW846 8270D	JLS	9082465
Surr: Terphenyl-d14 (18-120%)	107 %					08/22/09 08:21	SW846 8270D	JLS	9082465
Surr: 2-Fluorobiphenyl (14-120%)	97 %					08/22/09 08:21	SW846 8270D	JLS	9082465
Surr: Nitrobenzene-d5 (17-120%)	112 %					08/22/09 08:21	SW846 8270D	JLS	9082465

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Polyaromatic Hydrocarbons by EPA 8270D							
SW846 8270D	9082465	NSH1232-01	30.47	1.00	08/19/09 15:30	TEM	EPA 3550C
SW846 8270D	9082465	NSH1232-01RE1	30.47	1.00	08/19/09 15:30	TEM	EPA 3550C
SW846 8270D	9082465	NSH1232-02	30.13	1.00	08/19/09 15:30	TEM	EPA 3550C
SW846 8270D	9082465	NSH1232-02RE1	30.13	1.00	08/19/09 15:30	TEM	EPA 3550C
SW846 8270D	9082465	NSH1232-03	30.86	1.00	08/19/09 15:30	TEM	EPA 3550C
SW846 8270D	9082465	NSH1232-03RE1	30.86	1.00	08/19/09 15:30	TEM	EPA 3550C
SW846 8270D	9082465	NSH1232-04	30.59	1.00	08/19/09 15:30	TEM	EPA 3550C
SW846 8270D	9082465	NSH1232-04RE1	30.59	1.00	08/19/09 15:30	TEM	EPA 3550C
SW846 8270D	9082465	NSH1232-05	30.85	1.00	08/19/09 15:30	TEM	EPA 3550C
SW846 8270D	9082465	NSH1232-06	30.42	1.00	08/19/09 15:30	TEM	EPA 3550C
SW846 8270D	9082465	NSH1232-06RE1	30.42	1.00	08/19/09 15:30	TEM	EPA 3550C
SW846 8270D	9082465	NSH1232-07	30.04	1.00	08/19/09 15:30	TEM	EPA 3550C
SW846 8270D	9082465	NSH1232-08	30.98	1.00	08/19/09 15:30	TEM	EPA 3550C
SW846 8270D	9082465	NSH1232-08RE1	30.98	1.00	08/19/09 15:30	TEM	EPA 3550C
SW846 8270D	9082465	NSH1232-09	30.15	1.00	08/19/09 15:30	TEM	EPA 3550C
SW846 8270D	9082465	NSH1232-09RE1	30.15	1.00	08/19/09 15:30	TEM	EPA 3550C
Selected Volatile Organic Compounds by EPA Method 8260B							
SW846 8260B	9082342	NSH1232-01	5.80	5.00	08/10/09 13:15	CHH	EPA 5035
SW846 8260B	9082342	NSH1232-02	5.73	5.00	08/10/09 10:30	CHH	EPA 5035
SW846 8260B	9083618	NSH1232-02RE1	5.85	5.00	08/10/09 10:30	CHH	EPA 5035
SW846 8260B	9082342	NSH1232-03	5.81	5.00	08/10/09 15:30	CHH	EPA 5035
SW846 8260B	9083618	NSH1232-03RE1	5.42	5.00	08/10/09 15:30	CHH	EPA 5035
SW846 8260B	9083618	NSH1232-03RE2	5.42	5.00	08/10/09 15:30	CHH	EPA 5035
SW846 8260B	9082342	NSH1232-04	5.62	5.00	08/11/09 09:15	CHH	EPA 5035
SW846 8260B	9083618	NSH1232-04RE1	5.45	5.00	08/11/09 09:15	CHH	EPA 5035
SW846 8260B	9082342	NSH1232-05	5.92	5.00	08/11/09 12:00	CHH	EPA 5035
SW846 8260B	9083618	NSH1232-05RE1	5.69	5.00	08/11/09 12:00	CHH	EPA 5035
SW846 8260B	9082342	NSH1232-06	5.49	5.00	08/11/09 15:15	CHH	EPA 5035
SW846 8260B	9083623	NSH1232-06RE1	5.47	5.00	08/11/09 15:15	CHH	EPA 5035
SW846 8260B	9082342	NSH1232-07	5.79	5.00	08/12/09 10:30	CHH	EPA 5035
SW846 8260B	9083623	NSH1232-07RE1	5.44	5.00	08/12/09 10:30	CHH	EPA 5035
SW846 8260B	9082342	NSH1232-08	5.83	5.00	08/12/09 14:30	CHH	EPA 5035
SW846 8260B	9083618	NSH1232-08RE1	5.51	5.00	08/12/09 14:30	CHH	EPA 5035
SW846 8260B	9082342	NSH1232-09	5.73	5.00	08/13/09 10:30	CHH	EPA 5035
SW846 8260B	9082342	NSH1232-09RE1	5.60	5.00	08/13/09 10:30	CHH	EPA 5035

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

PROJECT QUALITY CONTROL DATA

Blank

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

9082342-BLK1

Benzene	<0.000670		mg/kg wet	9082342	9082342-BLK1	08/21/09 14:46
Ethylbenzene	<0.000670		mg/kg wet	9082342	9082342-BLK1	08/21/09 14:46
Naphthalene	<0.00170		mg/kg wet	9082342	9082342-BLK1	08/21/09 14:46
Toluene	<0.000400		mg/kg wet	9082342	9082342-BLK1	08/21/09 14:46
Xylenes, total	<0.00130		mg/kg wet	9082342	9082342-BLK1	08/21/09 14:46
Surrogate: 1,2-Dichloroethane-d4	124%			9082342	9082342-BLK1	08/21/09 14:46
Surrogate: Dibromofluoromethane	110%			9082342	9082342-BLK1	08/21/09 14:46
Surrogate: Toluene-d8	100%			9082342	9082342-BLK1	08/21/09 14:46
Surrogate: 4-Bromofluorobenzene	103%			9082342	9082342-BLK1	08/21/09 14:46

9083618-BLK1

Benzene	<0.000670		mg/kg wet	9083618	9083618-BLK1	08/24/09 13:21
Ethylbenzene	<0.000670		mg/kg wet	9083618	9083618-BLK1	08/24/09 13:21
Naphthalene	<0.00170		mg/kg wet	9083618	9083618-BLK1	08/24/09 13:21
Toluene	<0.000400		mg/kg wet	9083618	9083618-BLK1	08/24/09 13:21
Xylenes, total	<0.00130		mg/kg wet	9083618	9083618-BLK1	08/24/09 13:21
Surrogate: 1,2-Dichloroethane-d4	125%			9083618	9083618-BLK1	08/24/09 13:21
Surrogate: Dibromofluoromethane	102%			9083618	9083618-BLK1	08/24/09 13:21
Surrogate: Toluene-d8	104%			9083618	9083618-BLK1	08/24/09 13:21
Surrogate: 4-Bromofluorobenzene	109%			9083618	9083618-BLK1	08/24/09 13:21

9083623-BLK1

Benzene	<0.000670		mg/kg wet	9083623	9083623-BLK1	08/24/09 13:34
Ethylbenzene	<0.000670		mg/kg wet	9083623	9083623-BLK1	08/24/09 13:34
Naphthalene	<0.00170		mg/kg wet	9083623	9083623-BLK1	08/24/09 13:34
Toluene	<0.000400		mg/kg wet	9083623	9083623-BLK1	08/24/09 13:34
Xylenes, total	<0.00130		mg/kg wet	9083623	9083623-BLK1	08/24/09 13:34
Surrogate: 1,2-Dichloroethane-d4	101%			9083623	9083623-BLK1	08/24/09 13:34
Surrogate: Dibromofluoromethane	95%			9083623	9083623-BLK1	08/24/09 13:34
Surrogate: Toluene-d8	96%			9083623	9083623-BLK1	08/24/09 13:34
Surrogate: 4-Bromofluorobenzene	99%			9083623	9083623-BLK1	08/24/09 13:34

Polyaromatic Hydrocarbons by EPA 8270D

9082465-BLK1

Acenaphthene	<0.0320		mg/kg wet	9082465	9082465-BLK1	08/21/09 17:01
Acenaphthylene	<0.0310		mg/kg wet	9082465	9082465-BLK1	08/21/09 17:01
Anthracene	<0.0330		mg/kg wet	9082465	9082465-BLK1	08/21/09 17:01
Benzo (a) anthracene	<0.0380		mg/kg wet	9082465	9082465-BLK1	08/21/09 17:01
Benzo (a) pyrene	<0.0300		mg/kg wet	9082465	9082465-BLK1	08/21/09 17:01
Benzo (b) fluoranthene	<0.0300		mg/kg wet	9082465	9082465-BLK1	08/21/09 17:01
Benzo (g,h,i) perylene	<0.0300		mg/kg wet	9082465	9082465-BLK1	08/21/09 17:01

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D						
9082465-BLK1						
Benzo (k) fluoranthene	<0.0300		mg/kg wet	9082465	9082465-BLK1	08/21/09 17:01
Chrysene	<0.0400		mg/kg wet	9082465	9082465-BLK1	08/21/09 17:01
Dibenz (a,h) anthracene	<0.0310		mg/kg wet	9082465	9082465-BLK1	08/21/09 17:01
Fluoranthene	<0.0340		mg/kg wet	9082465	9082465-BLK1	08/21/09 17:01
Fluorene	<0.0360		mg/kg wet	9082465	9082465-BLK1	08/21/09 17:01
Indeno (1,2,3-cd) pyrene	<0.0310		mg/kg wet	9082465	9082465-BLK1	08/21/09 17:01
Naphthalene	<0.0410		mg/kg wet	9082465	9082465-BLK1	08/21/09 17:01
Phenanthrene	<0.0340		mg/kg wet	9082465	9082465-BLK1	08/21/09 17:01
Pyrene	<0.0410		mg/kg wet	9082465	9082465-BLK1	08/21/09 17:01
Surrogate: Terphenyl-d14	82%			9082465	9082465-BLK1	08/21/09 17:01
Surrogate: 2-Fluorobiphenyl	72%			9082465	9082465-BLK1	08/21/09 17:01
Surrogate: Nitrobenzene-d5	69%			9082465	9082465-BLK1	08/21/09 17:01

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

PROJECT QUALITY CONTROL DATA

Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters										
9083242-DUP1										
% Dry Solids	82.9	82.9		%	0	20	9083242	NSH1220-01		08/21/09 09:35

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Selected Volatile Organic Compounds by EPA Method 8260B								
9082342-BS1								
Benzene	50.0	45.3		ug/kg	91%	78 - 126	9082342	08/21/09 12:48
Ethylbenzene	50.0	45.1		ug/kg	90%	79 - 130	9082342	08/21/09 12:48
Naphthalene	50.0	44.3		ug/kg	89%	72 - 150	9082342	08/21/09 12:48
Toluene	50.0	45.0		ug/kg	90%	76 - 126	9082342	08/21/09 12:48
Xylenes, total	150	140		ug/kg	93%	80 - 130	9082342	08/21/09 12:48
Surrogate: 1,2-Dichloroethane-d4	50.0	60.9			122%	67 - 138	9082342	08/21/09 12:48
Surrogate: Dibromofluoromethane	50.0	54.6			109%	75 - 125	9082342	08/21/09 12:48
Surrogate: Toluene-d8	50.0	50.5			101%	76 - 129	9082342	08/21/09 12:48
Surrogate: 4-Bromofluorobenzene	50.0	47.8			96%	67 - 147	9082342	08/21/09 12:48
9083618-BS1								
Benzene	50.0	49.2		ug/kg	98%	78 - 126	9083618	08/24/09 11:23
Ethylbenzene	50.0	47.9		ug/kg	96%	79 - 130	9083618	08/24/09 11:23
Naphthalene	50.0	49.8		ug/kg	100%	72 - 150	9083618	08/24/09 11:23
Toluene	50.0	48.0		ug/kg	96%	76 - 126	9083618	08/24/09 11:23
Xylenes, total	150	147		ug/kg	98%	80 - 130	9083618	08/24/09 11:23
Surrogate: 1,2-Dichloroethane-d4	50.0	56.5			113%	67 - 138	9083618	08/24/09 11:23
Surrogate: Dibromofluoromethane	50.0	53.1			106%	75 - 125	9083618	08/24/09 11:23
Surrogate: Toluene-d8	50.0	50.1			100%	76 - 129	9083618	08/24/09 11:23
Surrogate: 4-Bromofluorobenzene	50.0	48.8			98%	67 - 147	9083618	08/24/09 11:23
9083623-BS1								
Benzene	50.0	56.1		ug/kg	112%	78 - 126	9083623	08/24/09 11:32
Ethylbenzene	50.0	60.3		ug/kg	121%	79 - 130	9083623	08/24/09 11:32
Naphthalene	50.0	59.7		ug/kg	119%	72 - 150	9083623	08/24/09 11:32
Toluene	50.0	57.4		ug/kg	115%	76 - 126	9083623	08/24/09 11:32
Xylenes, total	150	181		ug/kg	121%	80 - 130	9083623	08/24/09 11:32
Surrogate: 1,2-Dichloroethane-d4	50.0	50.9			102%	67 - 138	9083623	08/24/09 11:32
Surrogate: Dibromofluoromethane	50.0	50.0			100%	75 - 125	9083623	08/24/09 11:32
Surrogate: Toluene-d8	50.0	50.0			100%	76 - 129	9083623	08/24/09 11:32
Surrogate: 4-Bromofluorobenzene	50.0	50.0			100%	67 - 147	9083623	08/24/09 11:32
Polyaromatic Hydrocarbons by EPA 8270D								
9082465-BS1								
Acenaphthene	1.67	1.16		mg/kg wet	70%	49 - 120	9082465	08/21/09 17:31
Acenaphthylene	1.67	1.16		mg/kg wet	69%	52 - 120	9082465	08/21/09 17:31
Anthracene	1.67	1.31		mg/kg wet	79%	58 - 120	9082465	08/21/09 17:31
Benzo (a) anthracene	1.67	1.25		mg/kg wet	75%	57 - 120	9082465	08/21/09 17:31
Benzo (a) pyrene	1.67	1.33		mg/kg wet	80%	55 - 120	9082465	08/21/09 17:31
Benzo (b) fluoranthene	1.67	1.27		mg/kg wet	76%	51 - 123	9082465	08/21/09 17:31
Benzo (g,h,i) perylene	1.67	1.20		mg/kg wet	72%	49 - 121	9082465	08/21/09 17:31

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D								
9082465-BS1								
Benzo (k) fluoranthene	1.67	1.25		mg/kg wet	75%	42 - 129	9082465	08/21/09 17:31
Chrysene	1.67	1.22		mg/kg wet	73%	55 - 120	9082465	08/21/09 17:31
Dibenz (a,h) anthracene	1.67	1.27		mg/kg wet	76%	50 - 123	9082465	08/21/09 17:31
Fluoranthene	1.67	1.28		mg/kg wet	77%	58 - 120	9082465	08/21/09 17:31
Fluorene	1.67	1.35		mg/kg wet	81%	54 - 120	9082465	08/21/09 17:31
Indeno (1,2,3-cd) pyrene	1.67	1.26		mg/kg wet	76%	50 - 122	9082465	08/21/09 17:31
Naphthalene	1.67	1.11		mg/kg wet	67%	28 - 120	9082465	08/21/09 17:31
Phenanthrene	1.67	1.16		mg/kg wet	70%	56 - 120	9082465	08/21/09 17:31
Pyrene	1.67	1.21		mg/kg wet	73%	56 - 120	9082465	08/21/09 17:31
Surrogate: Terphenyl-d14	1.67	1.33			80%	18 - 120	9082465	08/21/09 17:31
Surrogate: 2-Fluorobiphenyl	1.67	1.27			76%	14 - 120	9082465	08/21/09 17:31
Surrogate: Nitrobenzene-d5	1.67	1.25			75%	17 - 120	9082465	08/21/09 17:31

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

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
Selected Volatile Organic Compounds by EPA Method 8260B												
9082342-BSD1												
Benzene		44.2		ug/kg	50.0	88%	78 - 126	2	50	9082342		08/21/09 13:18
Ethylbenzene		46.7		ug/kg	50.0	93%	79 - 130	3	50	9082342		08/21/09 13:18
Naphthalene		46.6		ug/kg	50.0	93%	72 - 150	5	50	9082342		08/21/09 13:18
Toluene		45.8		ug/kg	50.0	92%	76 - 126	2	50	9082342		08/21/09 13:18
Xylenes, total		144		ug/kg	150	96%	80 - 130	3	50	9082342		08/21/09 13:18
Surrogate: 1,2-Dichloroethane-d4		60.0		ug/kg	50.0	120%	67 - 138			9082342		08/21/09 13:18
Surrogate: Dibromofluoromethane		45.4		ug/kg	50.0	91%	75 - 125			9082342		08/21/09 13:18
Surrogate: Toluene-d8		49.8		ug/kg	50.0	100%	76 - 129			9082342		08/21/09 13:18
Surrogate: 4-Bromofluorobenzene		46.6		ug/kg	50.0	93%	67 - 147			9082342		08/21/09 13:18
9083618-BSD1												
Benzene		48.9		ug/kg	50.0	98%	78 - 126	0.6	50	9083618		08/24/09 11:53
Ethylbenzene		50.9		ug/kg	50.0	102%	79 - 130	6	50	9083618		08/24/09 11:53
Naphthalene		47.5		ug/kg	50.0	95%	72 - 150	5	50	9083618		08/24/09 11:53
Toluene		53.0		ug/kg	50.0	106%	76 - 126	10	50	9083618		08/24/09 11:53
Xylenes, total		159		ug/kg	150	106%	80 - 130	8	50	9083618		08/24/09 11:53
Surrogate: 1,2-Dichloroethane-d4		61.7		ug/kg	50.0	123%	67 - 138			9083618		08/24/09 11:53
Surrogate: Dibromofluoromethane		54.3		ug/kg	50.0	109%	75 - 125			9083618		08/24/09 11:53
Surrogate: Toluene-d8		54.3		ug/kg	50.0	109%	76 - 129			9083618		08/24/09 11:53
Surrogate: 4-Bromofluorobenzene		50.6		ug/kg	50.0	101%	67 - 147			9083618		08/24/09 11:53
9083623-BSD1												
Benzene		53.1		ug/kg	50.0	106%	78 - 126	6	50	9083623		08/24/09 12:04
Ethylbenzene		56.1		ug/kg	50.0	112%	79 - 130	7	50	9083623		08/24/09 12:04
Naphthalene		56.8		ug/kg	50.0	114%	72 - 150	5	50	9083623		08/24/09 12:04
Toluene		54.0		ug/kg	50.0	108%	76 - 126	6	50	9083623		08/24/09 12:04
Xylenes, total		168		ug/kg	150	112%	80 - 130	7	50	9083623		08/24/09 12:04
Surrogate: 1,2-Dichloroethane-d4		51.0		ug/kg	50.0	102%	67 - 138			9083623		08/24/09 12:04
Surrogate: Dibromofluoromethane		50.4		ug/kg	50.0	101%	75 - 125			9083623		08/24/09 12:04
Surrogate: Toluene-d8		49.9		ug/kg	50.0	100%	76 - 129			9083623		08/24/09 12:04
Surrogate: 4-Bromofluorobenzene		49.8		ug/kg	50.0	100%	67 - 147			9083623		08/24/09 12:04

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Selected Volatile Organic Compounds by EPA Method 8260B										
9082342-MS1										
Benzene	ND	2.11		mg/kg dry	2.80	75%	42 - 141	9082342	NSH1232-09RE 1	08/21/09 21:27
Ethylbenzene	ND	2.22		mg/kg dry	2.80	79%	21 - 165	9082342	NSH1232-09RE 1	08/21/09 21:27
Naphthalene	1.00	2.64		mg/kg dry	2.80	58%	10 - 160	9082342	NSH1232-09RE 1	08/21/09 21:27
Toluene	ND	2.14		mg/kg dry	2.80	76%	45 - 145	9082342	NSH1232-09RE 1	08/21/09 21:27
Xylenes, total	ND	7.01		mg/kg dry	8.41	83%	31 - 159	9082342	NSH1232-09RE 1	08/21/09 21:27
Surrogate: 1,2-Dichloroethane-d4		58.0		ug/kg	50.0	116%	67 - 138	9082342	NSH1232-09RE 1	08/21/09 21:27
Surrogate: Dibromofluoromethane		50.7		ug/kg	50.0	101%	75 - 125	9082342	NSH1232-09RE 1	08/21/09 21:27
Surrogate: Toluene-d8		51.4		ug/kg	50.0	103%	76 - 129	9082342	NSH1232-09RE 1	08/21/09 21:27
Surrogate: 4-Bromofluorobenzene		51.4		ug/kg	50.0	103%	67 - 147	9082342	NSH1232-09RE 1	08/21/09 21:27
9083618-MS1										
Benzene	ND	2.19		mg/kg wet	2.22	99%	42 - 141	9083618	NSH1963-01RE 1	08/24/09 21:04
Ethylbenzene	ND	2.23		mg/kg wet	2.22	100%	21 - 165	9083618	NSH1963-01RE 1	08/24/09 21:04
Naphthalene	ND	1.92		mg/kg wet	2.22	86%	10 - 160	9083618	NSH1963-01RE 1	08/24/09 21:04
Toluene	ND	2.18		mg/kg wet	2.22	98%	45 - 145	9083618	NSH1963-01RE 1	08/24/09 21:04
Xylenes, total	ND	6.96		mg/kg wet	6.67	104%	31 - 159	9083618	NSH1963-01RE 1	08/24/09 21:04
Surrogate: 1,2-Dichloroethane-d4		61.8		ug/kg	50.0	124%	67 - 138	9083618	NSH1963-01RE 1	08/24/09 21:04
Surrogate: Dibromofluoromethane		52.3		ug/kg	50.0	105%	75 - 125	9083618	NSH1963-01RE 1	08/24/09 21:04
Surrogate: Toluene-d8		51.6		ug/kg	50.0	103%	76 - 129	9083618	NSH1963-01RE 1	08/24/09 21:04
Surrogate: 4-Bromofluorobenzene		52.2		ug/kg	50.0	104%	67 - 147	9083618	NSH1963-01RE 1	08/24/09 21:04
9083623-MS1										
Benzene	ND	2.67		mg/kg wet	2.50	107%	42 - 141	9083623	NSH1342-04RE 1	08/24/09 21:02
Ethylbenzene	ND	2.76		mg/kg wet	2.50	110%	21 - 165	9083623	NSH1342-04RE 1	08/24/09 21:02
Naphthalene	ND	2.31		mg/kg wet	2.50	93%	10 - 160	9083623	NSH1342-04RE 1	08/24/09 21:02
Toluene	ND	2.57		mg/kg wet	2.50	103%	45 - 145	9083623	NSH1342-04RE 1	08/24/09 21:02

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

PROJECT QUALITY CONTROL DATA Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Selected Volatile Organic Compounds by EPA Method 8260B										
9083623-MS1										
Xylenes, total	ND	8.40		mg/kg wet	7.50	112%	31 - 159	9083623	NSH1342-04RE 1	08/24/09 21:02
Surrogate: 1,2-Dichloroethane-d4		45.5		ug/kg	50.0	91%	67 - 138	9083623	NSH1342-04RE 1	08/24/09 21:02
Surrogate: Dibromofluoromethane		47.6		ug/kg	50.0	95%	75 - 125	9083623	NSH1342-04RE 1	08/24/09 21:02
Surrogate: Toluene-d8		47.2		ug/kg	50.0	94%	76 - 129	9083623	NSH1342-04RE 1	08/24/09 21:02
Surrogate: 4-Bromofluorobenzene		47.9		ug/kg	50.0	96%	67 - 147	9083623	NSH1342-04RE 1	08/24/09 21:02
Polyaromatic Hydrocarbons by EPA 8270D										
9082465-MS1										
Acenaphthene	ND	1.21		mg/kg dry	1.96	62%	42 - 120	9082465	NSH1309-08	08/21/09 18:01
Acenaphthylene	ND	1.20		mg/kg dry	1.96	62%	32 - 120	9082465	NSH1309-08	08/21/09 18:01
Anthracene	ND	1.37		mg/kg dry	1.96	70%	10 - 200	9082465	NSH1309-08	08/21/09 18:01
Benzo (a) anthracene	ND	1.31		mg/kg dry	1.96	67%	41 - 120	9082465	NSH1309-08	08/21/09 18:01
Benzo (a) pyrene	ND	1.40		mg/kg dry	1.96	72%	33 - 121	9082465	NSH1309-08	08/21/09 18:01
Benzo (b) fluoranthene	ND	1.34		mg/kg dry	1.96	69%	26 - 137	9082465	NSH1309-08	08/21/09 18:01
Benzo (g,h,i) perylene	ND	1.27		mg/kg dry	1.96	65%	21 - 124	9082465	NSH1309-08	08/21/09 18:01
Benzo (k) fluoranthene	ND	1.33		mg/kg dry	1.96	68%	14 - 140	9082465	NSH1309-08	08/21/09 18:01
Chrysene	ND	1.31		mg/kg dry	1.96	67%	28 - 123	9082465	NSH1309-08	08/21/09 18:01
Dibenz (a,h) anthracene	ND	1.34		mg/kg dry	1.96	69%	25 - 127	9082465	NSH1309-08	08/21/09 18:01
Fluoranthene	ND	1.38		mg/kg dry	1.96	70%	38 - 120	9082465	NSH1309-08	08/21/09 18:01
Fluorene	ND	1.45		mg/kg dry	1.96	74%	41 - 120	9082465	NSH1309-08	08/21/09 18:01
Indeno (1,2,3-cd) pyrene	ND	1.33		mg/kg dry	1.96	68%	25 - 123	9082465	NSH1309-08	08/21/09 18:01
Naphthalene	ND	1.09		mg/kg dry	1.96	56%	25 - 120	9082465	NSH1309-08	08/21/09 18:01
Phenanthrene	ND	1.26		mg/kg dry	1.96	65%	37 - 120	9082465	NSH1309-08	08/21/09 18:01
Pyrene	ND	1.30		mg/kg dry	1.96	67%	29 - 125	9082465	NSH1309-08	08/21/09 18:01
Surrogate: Terphenyl-d14		1.40		mg/kg dry	1.96	72%	18 - 120	9082465	NSH1309-08	08/21/09 18:01
Surrogate: 2-Fluorobiphenyl		1.25		mg/kg dry	1.96	64%	14 - 120	9082465	NSH1309-08	08/21/09 18:01
Surrogate: Nitrobenzene-d5		1.27		mg/kg dry	1.96	65%	17 - 120	9082465	NSH1309-08	08/21/09 18:01

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

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
Selected Volatile Organic Compounds by EPA Method 8260B												
9082342-MSD1												
Benzene	ND	2.47		mg/kg dry	2.80	88%	42 - 141	16	50	9082342	NSH1232-09R E1	08/21/09 21:56
Ethylbenzene	ND	2.53		mg/kg dry	2.80	90%	21 - 165	13	50	9082342	NSH1232-09R E1	08/21/09 21:56
Naphthalene	1.00	3.09		mg/kg dry	2.80	75%	10 - 160	16	50	9082342	NSH1232-09R E1	08/21/09 21:56
Toluene	ND	2.45		mg/kg dry	2.80	87%	45 - 145	13	50	9082342	NSH1232-09R E1	08/21/09 21:56
Xylenes, total	ND	7.94		mg/kg dry	8.41	94%	31 - 159	12	50	9082342	NSH1232-09R E1	08/21/09 21:56
Surrogate: 1,2-Dichloroethane-d4		60.1		ug/kg	50.0	120%	67 - 138			9082342	NSH1232-09R E1	08/21/09 21:56
Surrogate: Dibromofluoromethane		51.7		ug/kg	50.0	103%	75 - 125			9082342	NSH1232-09R E1	08/21/09 21:56
Surrogate: Toluene-d8		50.3		ug/kg	50.0	101%	76 - 129			9082342	NSH1232-09R E1	08/21/09 21:56
Surrogate: 4-Bromofluorobenzene		53.0		ug/kg	50.0	106%	67 - 147			9082342	NSH1232-09R E1	08/21/09 21:56
9083618-MSD1												
Benzene	ND	1.99		mg/kg wet	2.22	90%	42 - 141	10	50	9083618	NSH1963-01R E1	08/24/09 21:33
Ethylbenzene	ND	2.13		mg/kg wet	2.22	96%	21 - 165	4	50	9083618	NSH1963-01R E1	08/24/09 21:33
Naphthalene	ND	1.95		mg/kg wet	2.22	87%	10 - 160	1	50	9083618	NSH1963-01R E1	08/24/09 21:33
Toluene	ND	2.11		mg/kg wet	2.22	95%	45 - 145	3	50	9083618	NSH1963-01R E1	08/24/09 21:33
Xylenes, total	ND	6.51		mg/kg wet	6.67	98%	31 - 159	7	50	9083618	NSH1963-01R E1	08/24/09 21:33
Surrogate: 1,2-Dichloroethane-d4		57.7		ug/kg	50.0	115%	67 - 138			9083618	NSH1963-01R E1	08/24/09 21:33
Surrogate: Dibromofluoromethane		48.7		ug/kg	50.0	97%	75 - 125			9083618	NSH1963-01R E1	08/24/09 21:33
Surrogate: Toluene-d8		51.8		ug/kg	50.0	104%	76 - 129			9083618	NSH1963-01R E1	08/24/09 21:33
Surrogate: 4-Bromofluorobenzene		52.7		ug/kg	50.0	105%	67 - 147			9083618	NSH1963-01R E1	08/24/09 21:33
9083623-MSD1												
Benzene	ND	2.17		mg/kg wet	2.50	87%	42 - 141	20	50	9083623	NSH1342-04R E1	08/24/09 21:32
Ethylbenzene	ND	2.24		mg/kg wet	2.50	89%	21 - 165	21	50	9083623	NSH1342-04R E1	08/24/09 21:32
Naphthalene	ND	2.04		mg/kg wet	2.50	82%	10 - 160	13	50	9083623	NSH1342-04R E1	08/24/09 21:32
Toluene	ND	2.14		mg/kg wet	2.50	86%	45 - 145	18	50	9083623	NSH1342-04R E1	08/24/09 21:32
Xylenes, total	ND	6.88		mg/kg wet	7.50	92%	31 - 159	20	50	9083623	NSH1342-04R E1	08/24/09 21:32

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

PROJECT QUALITY CONTROL DATA

Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Selected Volatile Organic Compounds by EPA Method 8260B												
9083623-MSD1												
Surrogate: 1,2-Dichloroethane-d4		46.6		ug/kg	50.0	93%	67 - 138			9083623	NSH1342-04R E1	08/24/09 21:32
Surrogate: Dibromofluoromethane		47.9		ug/kg	50.0	96%	75 - 125			9083623	NSH1342-04R E1	08/24/09 21:32
Surrogate: Toluene-d8		47.6		ug/kg	50.0	95%	76 - 129			9083623	NSH1342-04R E1	08/24/09 21:32
Surrogate: 4-Bromofluorobenzene		48.6		ug/kg	50.0	97%	67 - 147			9083623	NSH1342-04R E1	08/24/09 21:32
Polyaromatic Hydrocarbons by EPA 8270D												
9082465-MSD1												
Acenaphthene	ND	1.37		mg/kg dry	1.95	71%	42 - 120	12	40	9082465	NSH1309-08	08/21/09 18:30
Acenaphthylene	ND	1.38		mg/kg dry	1.95	71%	32 - 120	14	30	9082465	NSH1309-08	08/21/09 18:30
Anthracene	ND	1.62		mg/kg dry	1.95	83%	10 - 200	17	50	9082465	NSH1309-08	08/21/09 18:30
Benzo (a) anthracene	ND	1.53		mg/kg dry	1.95	79%	41 - 120	15	30	9082465	NSH1309-08	08/21/09 18:30
Benzo (a) pyrene	ND	1.63		mg/kg dry	1.95	84%	33 - 121	15	33	9082465	NSH1309-08	08/21/09 18:30
Benzo (b) fluoranthene	ND	1.56		mg/kg dry	1.95	80%	26 - 137	15	42	9082465	NSH1309-08	08/21/09 18:30
Benzo (g,h,i) perylene	ND	1.38		mg/kg dry	1.95	71%	21 - 124	9	32	9082465	NSH1309-08	08/21/09 18:30
Benzo (k) fluoranthene	ND	1.54		mg/kg dry	1.95	79%	14 - 140	14	39	9082465	NSH1309-08	08/21/09 18:30
Chrysene	ND	1.49		mg/kg dry	1.95	77%	28 - 123	13	34	9082465	NSH1309-08	08/21/09 18:30
Dibenz (a,h) anthracene	ND	1.49		mg/kg dry	1.95	77%	25 - 127	10	31	9082465	NSH1309-08	08/21/09 18:30
Fluoranthene	ND	1.58		mg/kg dry	1.95	81%	38 - 120	14	35	9082465	NSH1309-08	08/21/09 18:30
Fluorene	ND	1.64		mg/kg dry	1.95	84%	41 - 120	13	37	9082465	NSH1309-08	08/21/09 18:30
Indeno (1,2,3-cd) pyrene	ND	1.49		mg/kg dry	1.95	77%	25 - 123	11	32	9082465	NSH1309-08	08/21/09 18:30
Naphthalene	ND	1.26		mg/kg dry	1.95	65%	25 - 120	14	42	9082465	NSH1309-08	08/21/09 18:30
Phenanthrene	ND	1.43		mg/kg dry	1.95	74%	37 - 120	12	32	9082465	NSH1309-08	08/21/09 18:30
Pyrene	ND	1.50		mg/kg dry	1.95	77%	29 - 125	14	40	9082465	NSH1309-08	08/21/09 18:30
Surrogate: Terphenyl-d14		1.54		mg/kg dry	1.95	79%	18 - 120			9082465	NSH1309-08	08/21/09 18:30
Surrogate: 2-Fluorobiphenyl		1.27		mg/kg dry	1.95	65%	14 - 120			9082465	NSH1309-08	08/21/09 18:30
Surrogate: Nitrobenzene-d5		1.31		mg/kg dry	1.95	67%	17 - 120			9082465	NSH1309-08	08/21/09 18:30

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

Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

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

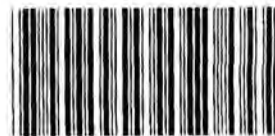
Work Order: NSH1232
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 08/14/09 08:10

DATA QUALIFIERS AND DEFINITIONS

RL1 Reporting limit raised due to sample matrix effects.
ZX Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.
ND Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES

COOLER RECE



Cooler Received/Opened On 08/14/09 @ 08:10

NSH1232

1. Tracking # 44341 (last 4 digits, F#)

Courier: FED-EX IR Gun ID 97310166

2. Temperature of rep. sample or temp blank when opened: 39 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler?

If yes, how many and where:

2 - FRONT & BACK

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

6. Were custody papers inside cooler?

I certify that I opened the cooler and answered questions 1-6 (initial) AW

7. Were custody seals on containers:

YES NO and intact

YES...NO...NA

Were these signed and dated correctly?

YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process:

Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)?

YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)?

YES...NO...NA

12. Did all container labels and tags agree with custody papers?

YES...NO...NA

13a. Were VOA vials received?

YES...NO...NA

b. Was there any observable headspace present in any VOA vial?

YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #

I certify that I unloaded the cooler and answered questions 7-14 (initial) AW

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

b. Did the bottle labels indicate that the correct preservatives were used

YES...NO...NA

16. Was residual chlorine present?

YES...NO...NA

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

17. Were custody papers properly filled out (ink, signed, etc)?

YES...NO...NA

18. Did you sign the custody papers in the appropriate place?

YES...NO...NA

19. Were correct containers used for the analysis requested?

YES...NO...NA

20. Was sufficient amount of sample sent in each container?

YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) AW

I certify that I attached a label with the unique LIMS number to each container (initial) AW

21. Were there Non-Conformance issues at login? YES NO Was a PIPE generated? YES NO #

NSH1232
08/28/09 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

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

Client Name/Account #: EEG # 2449

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29456

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

Telephone Number: 843.412.2097

Sampler Name: (Print)

Sampler Signature:

Compliance Monitoring? Yes ☐ No ☐

Enforcement Action? Yes ☐ No ☐

Site State: SC

PO#:

TA Quote #:

Project ID: Laurel Bay Housing Project

Project #:

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative						Matrix					Analyze For:										RUSH TAT (Pre-Schedule)			
							Ice	HNO ₃ (Red Label)	HCl (Blue Label)	NaOH (Orange Label)	H ₂ SO ₄ Plastic (Yellow Label)	H ₂ SO ₄ Glass (Yellow Label)	None (Black Label)	Other (Specify)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	BTEX + Napth - 82608	PAH - 8270D									
1461 CARDINAL	8/10/09	1315	5	X				2					2						X		3	2									01
1456 CARDINAL	8/10/09	1030	5	X				2					2	1					X		3	2									02
1465 CARDINAL	8/10/09	1530	5	X				2					2	1					X		3	2									03
1469 CARDINAL	8/11/09	0915	5	X				2					2	1					X		3	2									04
1471 CARDINAL	8/11/09	1200	5	X				2					2	1					X		3	2									05
1466 CARDINAL	8/11/09	1515	5	X				2					2	1					X		3	2									06
1475 CARDINAL	8/12/09	1030	5	X				2					2	1					X		3	2									07
1473 CARDINAL	8/12/09	1430	5	X				2					2	1					X		3	2									08
1470 CARDINAL	8/13/09	1030	5	X				2					2	1					X		3	2									09

Special Instructions:

Relinquished by		Date		Time		Received by		Date		Time	
[Signature]		8/13/09		1700		Fedex					
Relinquished by		Date		Time		Received by TestAmerica		Date		Time	

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 1 of 1									
3. Generator's Name and Mailing Address MCAS, Beaufort Laurel Bay Housing Beaufort SC 29904				A. Manifest Number WMNA 10885469											
4. Generator's Phone 843 228-8460				B. State Generator's ID											
5. Transporter 1 Company Name EEG, Inc.		6. US EPA ID Number		C. State Transporter's ID		D. Transporter's Phone 843 879-0411									
7. Transporter 2 Company Name		8. US EPA ID Number		E. State Transporter's ID		F. Transporter's Phone									
9. Designated Facility Name and Site Address HICKORY HILL LANDFILL ROUTE 1, BOX 121 RIDGELAND SC 29936		10. US EPA ID Number		G. State Facility's ID		H. Facility's Phone 843 887-4843									
11. Description of Waste Materials				12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol		I. Misc. Comments					
a. Heating Oil Tank filled with Sand WM Profile # 102655SC				0 0 1		6.28		TN							
b. WM Profile #															
c. WM Profile #															
WM Profile #															
J. Additional Descriptions for Materials Listed Above Landfill _____ Solidification _____ Bio Remediation _____				K. Disposal Location Cell _____ Level _____ Grid _____											
15. Special Handling Instructions and Additional Information 60A UST's from 1461 Cardinal ✓ Purchase Order # _____				2) 1456 Cardinal ✓ 3) 1465 Cardinal ✓ 4) 1469 Cardinal ✓ 5) 1466 Cardinal ✓ 6) 1475 Cardinal ✓				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 W. G. Baker, Jr.				Signature "On behalf of" <i>[Signature]</i>				Month Day Year 08 26 09							
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name James Baldwin												Signature <i>[Signature]</i>		Month Day Year 10 20 10	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name												Signature		Month Day Year	
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.															
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest. Printed/Typed Name John Collins												Signature <i>[Signature]</i>		Month Day Year 10 27 09	

Appendix C
Laboratory Analytical Report - Groundwater

Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants	Laboratory ID: QB06006-007
Description: BEALB1456TW01WG20150205	Matrix: Aqueous
Date Sampled: 02/05/2015 0900	
Date Received: 02/06/2015	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/12/2015 1247	EH1		67618

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	0.40	U	1.0	0.40	0.13	ug/L	1
Ethylbenzene	100-41-4	8260B	0.50	U	1.0	0.50	0.33	ug/L	1
Naphthalene	91-20-3	8260B	0.20	U	1.0	0.20	0.40	ug/L	1
Toluene	108-88-3	8260B	0.50	U	1.0	0.50	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	0.40	U	1.0	0.40	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-120
Bromofluorobenzene		99	75-120
Toluene-d8		99	85-120
Dibromofluoromethane		97	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

Level 1 Report v2.1

Semivolatile Organic Compounds by GC/MS (SIM)

Client: AECOM - Resolution Consultants	Laboratory ID: QB06006-007
Description: BEALB1456TW01WG20150205	Matrix: Aqueous
Date Sampled: 02/05/2015 0900	
Date Received: 02/06/2015	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	3520C	8270D (SIM)	50	02/19/2015 1225	RBH	02/10/2015 1512	67395

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzo(a)anthracene	56-55-3	8270D (SIM)	2.0	U	10	2.0	0.95	ug/L	2
Benzo(b)fluoranthene	205-99-2	8270D (SIM)	2.0	U	10	2.0	0.95	ug/L	2
Benzo(k)fluoranthene	207-08-9	8270D (SIM)	2.0	U	10	2.0	1.2	ug/L	2
Chrysene	218-01-9	8270D (SIM)	2.0	U	10	2.0	1.1	ug/L	2
Dibenzo(a,h)anthracene	53-70-3	8270D (SIM)	4.0	U	10	4.0	2.0	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
2-Methylnaphthalene-d10		57	15-139
Fluoranthene-d10		43	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

Level 1 Report v2.1

Appendix D
Laboratory Analytical Report - Vapor

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: AECOM

Client Sample ID: BEALB1456SG01GS20141007

Client Project ID: JM30- Laurel Bay Military Housing Area, MCAS Beauf / 60272162.FI.WS

ALS Project ID: P1404131

ALS Sample ID: P1404131-001

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: SC02009

Date Collected: 10/7/14

Date Received: 10/9/14

Date Analyzed: 10/11/14

Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.21 Final Pressure (psig): 4.77

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m ³	LOQ µg/m ³	LOD µg/m ³	MDL µg/m ³	Data Qualifier
71-43-2	Benzene	0.69	0.78	0.69	0.25	U
108-88-3	Toluene	0.82	0.78	0.66	0.27	
100-41-4	Ethylbenzene	0.67	0.78	0.67	0.25	U
179601-23-1	m,p-Xylenes	0.59	1.6	1.3	0.47	J
95-47-6	o-Xylene	0.64	0.78	0.64	0.23	U
91-20-3	Naphthalene	0.64	0.78	0.64	0.28	U

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

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

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

Appendix E

Regulatory Correspondence

April 1, 2014

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

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

Dear Mr. Drawdy,

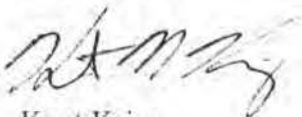
The South Carolina Department of Health and Environmental Control (the Department) received the above referenced Underground Storage Tank Assessment Reports for the addresses listed above. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina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

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

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

If you have any questions, please contact me at kriegkm@gmail.com or 803-898-0255.

Sincerely,



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

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

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

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

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



May 5, 2015

W. Marshall Taylor Jr., Acting Director

Promoting and protecting the health of the public and the environment

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

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

Dear Mr. Drawdy,

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

Per the Department's request, groundwater samples were collected from the attached referenced addresses. The Department reviewed the groundwater data and previous investigations and it agrees with the conclusions and recommendations included in the document. To further assess the impact to groundwater, permanent wells should be installed at the 3 stated addresses. For the remaining 23 addresses, there is no indication of contamination on the property and therefore no further investigation is required at this time. *Note the correction to the attachment, properly referencing 1431 Dove and 1435 Dove Tank 1 and Tank 2 in the Permanent Monitoring Well Investigation recommendation section.*

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

If you have any questions, please contact me at kriegkm@dhec.sc.gov or 803-898-0255.

Sincerely,

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

Attachment: Specific Property Recommendations

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



W. Marshall Taylor Jr., Acting Director

Promoting and protecting the health of the public and the environment

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

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

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



W. Marshall Taylor Jr., Acting Director

Promoting and protecting the health of the public and the environment

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

March 10, 2015

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

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

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received the above referenced soil gas sampling results for multiple former heating oil tank sites on February 2, 2015. During tank removal, contaminated soil had been observed at the former tank sites selected for this study. The purpose of this study was to evaluate whether the constituents observed in soil have potential for exposure and risk to residents through impacted vapor intrusion pathways. Sampling was performed at fourteen (14) former heating oil tank sites with a range of VOCs present in the soil at the time of tank removal. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

The Department has reviewed the soil gas sampling results. The Department has generated no comments on this report. Please note that the Department's decision is based on information provided by the Marine Corps Air Station (MCAS) to date. Any information found to be contradictory to this decision may require additional action. Furthermore, the Department retains the right to request further investigation if deemed necessary. If you have any questions, please contact me at petruslb@dhec.sc.gov or 803-898-0294.

Sincerely,

Laurel Petrus
Department of Defense Corrective Action Section

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