

**SUMMARY REPORT
121 BEECH STREET (FORMERLY 264 BEECH STREET)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC**

**Revision: 0
Prepared for:**

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

and



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

JUNE 2021

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Prepared by:

CDM - AECOM
Multimedia Joint Venture

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

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

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List of Acronyms

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

1.0 INTRODUCTION

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

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

This report summarizes the results the environmental investigation activities associated with the storage of home heating oil and the potential release of petroleum constituents at the referenced property. Based on the results of the investigation, a No Further Action (NFA) determination has been made by the South Carolina Department of Health and Environmental Control (SCDHEC) for 121 Beech Street (Formerly 264 Beech Street). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

1.1 Background Information

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

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

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

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

1.2 UST Removal and Assessment Process

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

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

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

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

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

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 121 Beech Street (Formerly 264 Beech Street). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 264 Beech Street* (MCAS Beaufort, 2011). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Initial Groundwater Investigation Report – November and December 2015* (Resolution Consultants, 2016). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C.

2.1 UST Removal and Soil Sampling

On February 28, 2011, a single 280 gallon heating oil UST was removed from the front landscaped bed area adjacent to the front concrete porch at 121 Beech Street (Formerly 264 Beech Street). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The UST was removed, cleaned, and shipped offsite for recycling. There

was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depth to the base of the UST was 5'2" 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 121 Beech Street (Formerly 264 Beech Street) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated July 1, 2015, SCDHEC requested an IGWA for 121 Beech Street (Formerly 264 Beech Street) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

2.3 Groundwater Sampling

On November 5, 2015, a temporary monitoring well was installed at 121 Beech Street (Formerly 264 Beech Street), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST. The former UST 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 – November and December 2015* (Resolution Consultants, 2016).

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

2.4 Groundwater Analytical Results

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

The groundwater results collected from 121 Beech Street (Formerly 264 Beech Street) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated that the groundwater was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

3.0 PROPERTY STATUS

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 121 Beech Street (Formerly 264 Beech Street). This NFA determination was obtained in a letter dated June 8, 2016. SCDHEC's NFA letter is provided in Appendix D.

4.0 REFERENCES

Marine Corps Air Station Beaufort, 2011. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 264 Beech Street, Laurel Bay Military Housing Area*, June 2011.

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

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

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

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

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

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

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

Tables

Table 1
Laboratory Analytical Results - Soil
121 Beech Street (Formerly 264 Beech Street)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Results Sample Collected 02/28/11
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)		
Benzene	0.003	0.00184
Ethylbenzene	1.15	2.52
Naphthalene	0.036	16.1
Toluene	0.627	0.0013
Xylenes, Total	13.01	6.05
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)		
Benzo(a)anthracene	0.66	0.243
Benzo(b)fluoranthene	0.66	0.104
Benzo(k)fluoranthene	0.66	0.0993
Chrysene	0.66	0.226
Dibenz(a,h)anthracene	0.66	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 and 3.1 (SCDHEC, May 2015 and SCDHEC, February 2016) and the Underground Storage Tank Assessment Guidelines (SCDHEC, February 2006).

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Table 2
Laboratory Analytical Results - Groundwater
121 Beech Street (Formerly 264 Beech Street)
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 11/05/15
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 3.1 (SCDHEC, February 2016).

⁽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 1x10⁻⁶, a target hazard quotient of 1 (per target organ), and a default residential exposure scenario, assuming exposure for 24 hours/day, 350 days/year, for 26 years. Modeling was performed for a range of depths to groundwater for application as appropriate in different areas of the Laurel Bay Military Housing Area. The most conservative levels are presented for comparison. Refer to Appendix H of the Uniform Federal Policy Sampling Analysis and Sampling Plan for Vapor Media, Revision 4 (Resolution Consultants, April 2017) for additional information.

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - Not Applicable

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

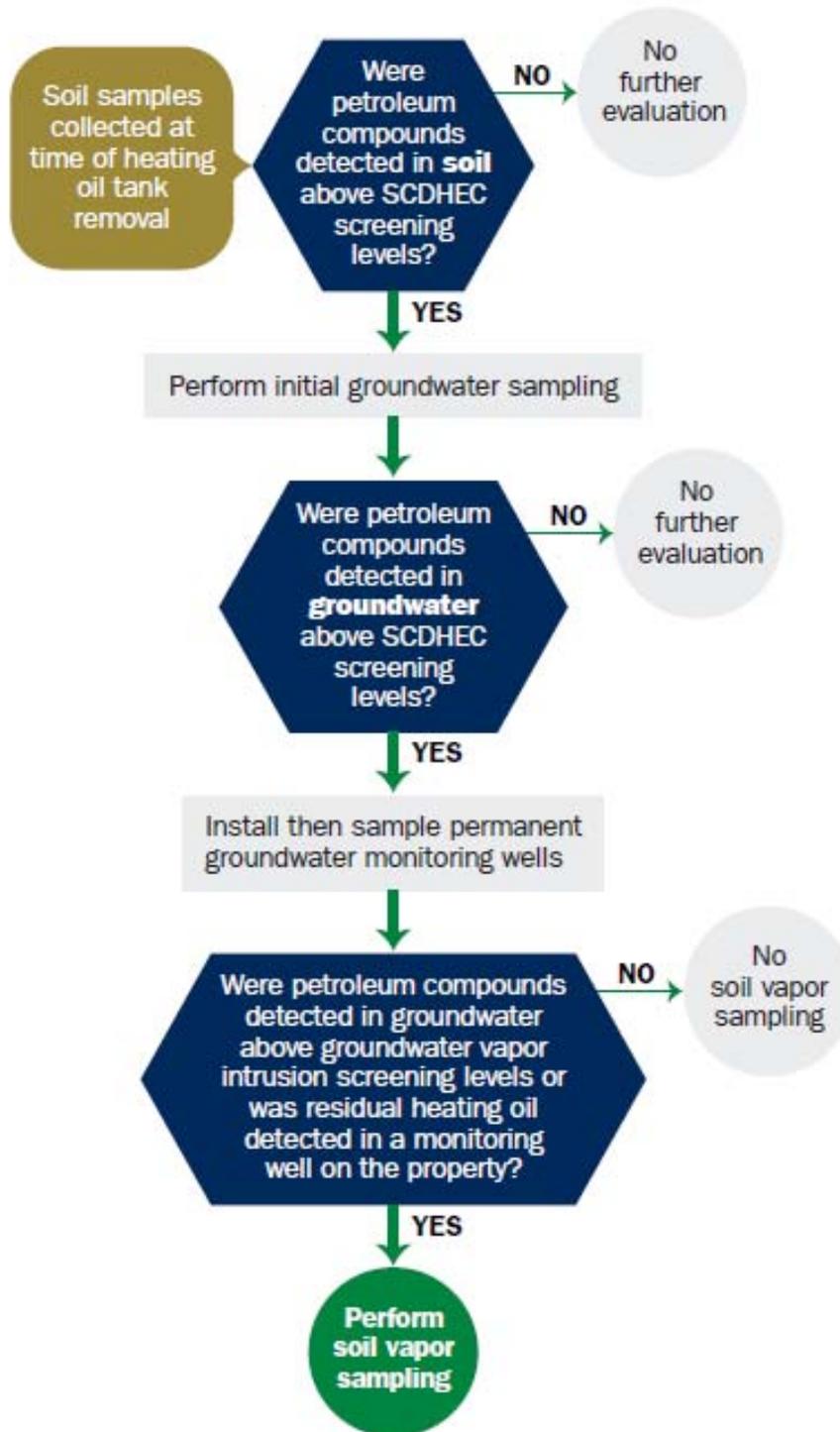
RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

Appendix A
Multi-Media Selection Process for LBMH



Appendix A - Multi-Media Selection Process for LBMH

Appendix B
UST Assessment Report

rec'd 6-23-11

Attachment 1

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

Date Received
State Use Only

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	
264 Beech Street, Laurel Bay Military Housing Area	
Street Address or State Road (as applicable)	
Beaufort,	Beaufort
City	County

Attachment 2

III. INSURANCE INFORMATION

Insurance Statement

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

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

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

My policy provider is: _____
The policy deductible is: _____
The policy limit is: _____

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

IV. REQUEST FOR SUPERB FUNDING

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

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

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

Name (Type or print.)

Signature

To be completed by Notary Public:

Sworn before me this _____ day of _____, 20____

(Name)

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

VI. UST INFORMATION

- A. Product...(ex. Gas, Kerosene).....
- B. Capacity...(ex. 1k, 2k).....
- C. Age.....
- D. Construction Material...(ex. Steel, FRP).....
- E. Month/Year of Last Use.....
- F. Depth (ft.) To Base of Tank.....
- G. Spill Prevention Equipment Y/N.....
- H. Overfill Prevention Equipment Y/N.....
- I. Method of Closure Removed/Filled.....
- J. Date Tanks Removed/Filled.....
- K. Visible Corrosion or Pitting Y/N.....
- L. Visible Holes Y/N.....

264Beech		
Heating oil		
280 gal		
Late 1950s		
Steel		
Mid 80s		
5'2"		
No		
No		
Removed		
2/28/2011		
Yes	Yes	
Yes	Yes	

M. Method of disposal for any USTs removed from the ground (attach disposal manifests)
UST 264Beech was removed from the ground, cleaned and recycled.

See Attachment "A".

N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)
Contaminated water was pumped from the tank and disposed by MCAS.

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.

264Beech		
Steel & Copper		
N/A		
N/A		
Suction		
Yes		
Yes		
No		
Late 1950s		

Steel vent piping was corroded and pitted. The copper supply and return piping was sound.

VIII. BRIEF SITE DESCRIPTION AND HISTORY

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

IX. SITE CONDITIONS

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

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009001

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
264 Beech	Excav at fill end	Soil	Sandy	5'2	2/28/11 1615 hrs	P. Shaw	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

* = Depth Below the Surrounding Land Surface

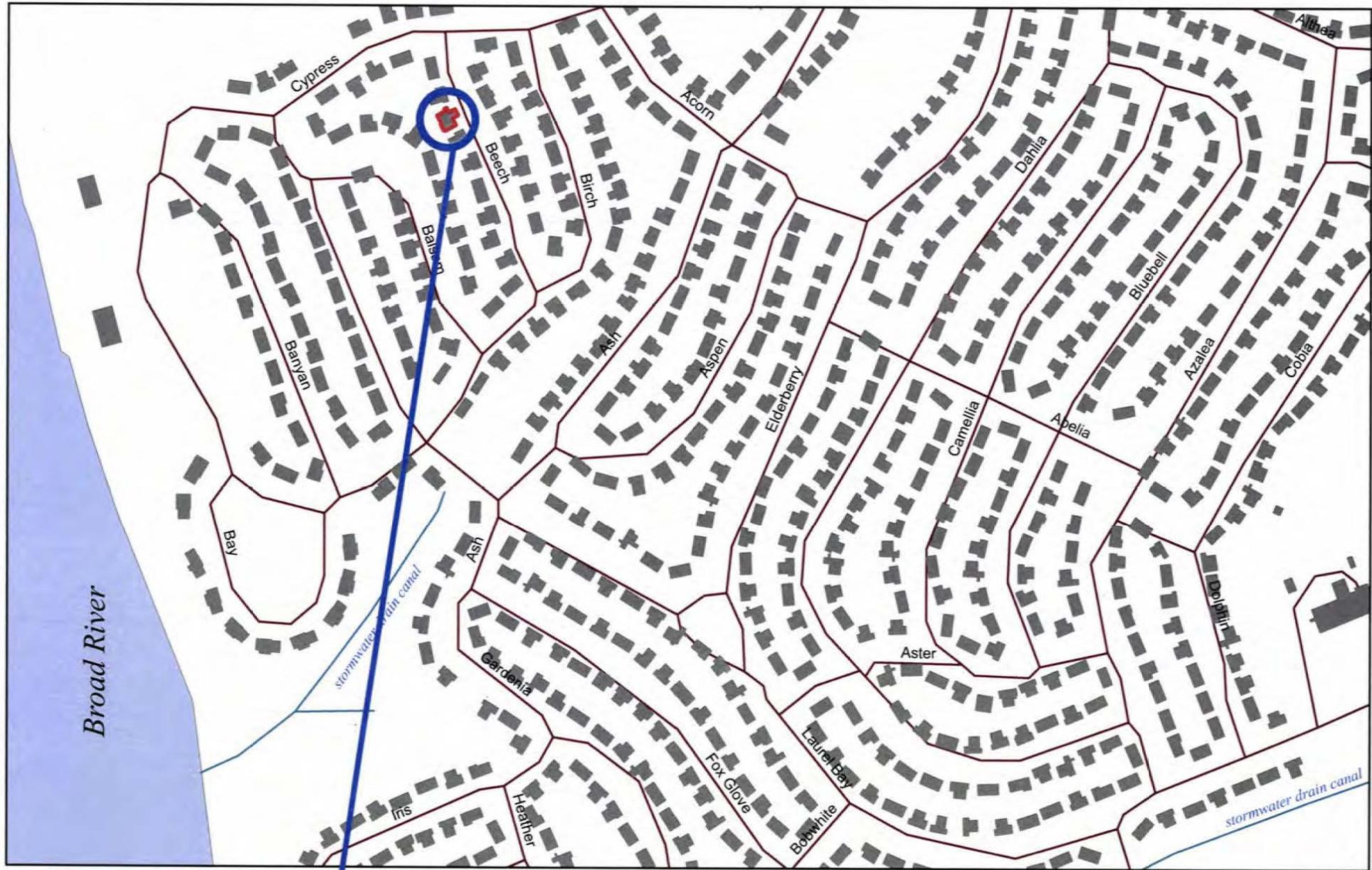
XII. RECEPTORS

	Yes	No
<p>A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system? *Approx 895' to stormwater drainage canals If yes, indicate type of receptor, distance, and direction on site map.</p>	*X	
<p>B. Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system? If yes, indicate type of well, distance, and direction on site map.</p>		X
<p>C. Are there any underground structures (e.g., basements) Located within 100 feet of the UST system? If yes, indicate type of structure, distance, and direction on site map.</p>		X
<p>D. Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination? *Sewer, water, electricity, cable & fiber optic If yes, indicate the type of utility, distance, and direction on the site map.</p>	*X	
<p>E. Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete? If yes, indicate the area of contaminated soil on the site map.</p>		X

XIII. SITE MAP

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

(Attach Site Map Here)



264 BEECH ST.

SBG-EEG, Inc.

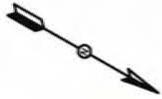
398 E. 5th North Street, Suite C
Summerville SC 29483-6954

Ph. (843) 875-1930

Drawn By: L. DiAsio

Dwg Date: APR 2011

**FIGURE 1: LOCATION MAP
264 BEECH ST.
LAUREL BAY, BEAUFORT SC**



STORMWATER DRAINAGE
CANALS \approx 895'



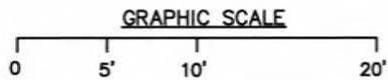
264 BEECH STREET
LAUREL BAY MILITARY HOUSING
MCAS BEAUFORT, SC

UST 264BEECH
280 GAL.



CONCRETE
PORCH & WALK

ASPHALT
DRIVEWAY



SBG-EEG

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

FIGURE 2 SITE MAP
264 BEECH ST., LAUREL BAY
MCAS BEAUFORT SC

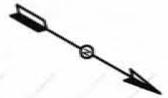
SCALE: GRAPHIC

DWG DATE APR 2011

STORMWATER DRAINAGE
CANALS \approx 895'

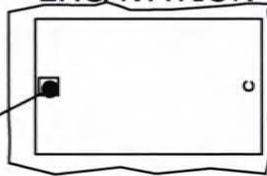


264 BEECH STREET



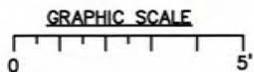
FILL END

EXCAVATION



UST 264BEECH

SOIL SAMPLE
264 BEECH-1



TANK WAS 26" BELOW GRADE

SBG-EEG

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

FIGURE 3 UST SAMPLE LOCATIONS
264 BEECH ST., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE APR 2011



Picture 1: Location of UST 264Beech.



Picture 2: UST 264Beech tank pit.

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	264Beech					
Benzene		0.00184 mg/kg					
Toluene		0.00130 mg/kg					
Ethylbenzene		2.52 mg/kg					
Xylenes		6.05 mg/kg					
Naphthalene		16.1 mg/kg					
Benzo (a) anthracene		0.243 mg/kg					
Benzo (b) fluoranthene		0.104 mg/kg					
Benzo (k) fluoranthene		0.0993 mg/kg					
Chrysene		0.226 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)

March 16, 2011 11:04:49AM

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

Work Order: NUC1043
Project Name: Laurel Bay Housing Project
Project Nbr: [none]
P/O Nbr: See COC
Date Received: 03/05/11

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
264 Beech	NUC1043-01	02/28/11 16:15
224 Cypress	NUC1043-02	03/01/11 16:00
118 Banyan	NUC1043-03	03/01/11 16:15

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

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

South Carolina Certification Number: 84009

The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.

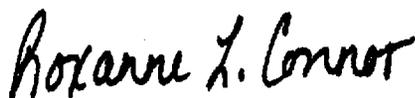
These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Roxanne Connor

Program Manager - Conventional Accounts

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

Work Order: NUC1043
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 03/05/11 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NUC1043-01 (264 Beech - Soil) Sampled: 02/28/11 16:15										
General Chemistry Parameters										
% Dry Solids	76.2		%	0.500	0.500	1	03/15/11 11:53	SW-846	AMS	11C3120
Volatile Organic Compounds by EPA Method 8260B										
Benzene	0.00184	J	mg/kg dry	0.00123	0.00224	1	03/09/11 13:09	SW846 8260B	KKK	11C1524
Ethylbenzene	2.52		mg/kg dry	0.0549	0.112	50	03/10/11 17:38	SW846 8260B	KKK	11C2640
Naphthalene	16.1		mg/kg dry	0.952	2.80	500	03/11/11 12:57	SW846 8260B	KKK	11C1245
Toluene	0.00130	J	mg/kg dry	0.000997	0.00224	1	03/09/11 13:09	SW846 8260B	KKK	11C1524
Xylenes, total	6.05		mg/kg dry	0.106	0.280	50	03/10/11 17:38	SW846 8260B	KKK	11C2640
Surr: 1,2-Dichloroethane-d4 (67-138%)	102 %					1	03/09/11 13:09	SW846 8260B	KKK	11C1524
Surr: 1,2-Dichloroethane-d4 (67-138%)	102 %					50	03/10/11 17:38	SW846 8260B	KKK	11C2640
Surr: 1,2-Dichloroethane-d4 (67-138%)	103 %					500	03/11/11 12:57	SW846 8260B	KKK	11C1245
Surr: Dibromofluoromethane (75-125%)	103 %					1	03/09/11 13:09	SW846 8260B	KKK	11C1524
Surr: Dibromofluoromethane (75-125%)	95 %					50	03/10/11 17:38	SW846 8260B	KKK	11C2640
Surr: Dibromofluoromethane (75-125%)	101 %					500	03/11/11 12:57	SW846 8260B	KKK	11C1245
Surr: Toluene-d8 (76-129%)	136 %	ZX				1	03/09/11 13:09	SW846 8260B	KKK	11C1524
Surr: Toluene-d8 (76-129%)	110 %					50	03/10/11 17:38	SW846 8260B	KKK	11C2640
Surr: Toluene-d8 (76-129%)	107 %					500	03/11/11 12:57	SW846 8260B	KKK	11C1245
Surr: 4-Bromofluorobenzene (67-147%)	153 %	ZX				1	03/09/11 13:09	SW846 8260B	KKK	11C1524
Surr: 4-Bromofluorobenzene (67-147%)	110 %					50	03/10/11 17:38	SW846 8260B	KKK	11C2640
Surr: 4-Bromofluorobenzene (67-147%)	107 %					500	03/11/11 12:57	SW846 8260B	KKK	11C1245
Polyaromatic Hydrocarbons by EPA 8270D										
Acenaphthene	1.58	M8	mg/kg dry	0.0180	0.0860	1	03/07/11 21:18	SW846 8270D	KJP	11C1488
Acenaphthylene	ND		mg/kg dry	0.0257	0.0860	1	03/07/11 21:18	SW846 8270D	KJP	11C1488
Anthracene	0.556		mg/kg dry	0.0116	0.0860	1	03/07/11 21:18	SW846 8270D	KJP	11C1488
Benzo (a) anthracene	0.243		mg/kg dry	0.0141	0.0860	1	03/07/11 21:18	SW846 8270D	KJP	11C1488
Benzo (a) pyrene	0.0869		mg/kg dry	0.0103	0.0860	1	03/07/11 21:18	SW846 8270D	KJP	11C1488
Benzo (b) fluoranthene	0.104		mg/kg dry	0.0488	0.0860	1	03/07/11 21:18	SW846 8270D	KJP	11C1488
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0116	0.0860	1	03/07/11 21:18	SW846 8270D	KJP	11C1488
Benzo (k) fluoranthene	0.0993		mg/kg dry	0.0475	0.0860	1	03/07/11 21:18	SW846 8270D	KJP	11C1488
Chrysene	0.226		mg/kg dry	0.0398	0.0860	1	03/07/11 21:18	SW846 8270D	KJP	11C1488
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0193	0.0860	1	03/07/11 21:18	SW846 8270D	KJP	11C1488
Fluoranthene	1.06		mg/kg dry	0.0141	0.0860	1	03/07/11 21:18	SW846 8270D	KJP	11C1488
Fluorene	2.33	M8	mg/kg dry	0.0257	0.0860	1	03/07/11 21:18	SW846 8270D	KJP	11C1488
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0398	0.0860	1	03/07/11 21:18	SW846 8270D	KJP	11C1488
Naphthalene	6.49	M8	mg/kg dry	0.0899	0.430	5	03/08/11 14:47	SW846 8270D	KJP	11C1488
Phenanthrene	8.06	M8	mg/kg dry	0.0642	0.430	5	03/08/11 14:47	SW846 8270D	KJP	11C1488
Pyrene	0.802		mg/kg dry	0.0295	0.0860	1	03/07/11 21:18	SW846 8270D	KJP	11C1488
1-Methylnaphthalene	13.4	M8	mg/kg dry	0.0770	0.430	5	03/08/11 14:47	SW846 8270D	KJP	11C1488
2-Methylnaphthalene	22.0	M8	mg/kg dry	0.135	0.430	5	03/08/11 14:47	SW846 8270D	KJP	11C1488
Surr: Terphenyl-d14 (18-120%)	66 %					1	03/07/11 21:18	SW846 8270D	KJP	11C1488

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

Work Order: NUC1043
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 03/05/11 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NUC1043-01 (264 Beech - Soil) - cont. Sampled: 02/28/11 16:15										
Polyaromatic Hydrocarbons by EPA 8270D - cont.										
Surr: 2-Fluorobiphenyl (14-120%)	59 %					1	03/07/11 21:18	SW846 8270D	KJP	11C1488
Surr: Nitrobenzene-d5 (17-120%)	74 %					1	03/07/11 21:18	SW846 8270D	KJP	11C1488
Sample ID: NUC1043-02 (224 Cypress - Soil) Sampled: 03/01/11 16:00										
General Chemistry Parameters										
% Dry Solids	80.0		%	0.500	0.500	1	03/15/11 11:53	SW-846	AMS	11C3120
Volatile Organic Compounds by EPA Method 8260B										
Benzene	ND		mg/kg dry	0.00115	0.00209	1	03/09/11 13:40	SW846 8260B	KKK	11C1524
Ethylbenzene	0.0527		mg/kg dry	0.00102	0.00209	1	03/09/11 13:40	SW846 8260B	KKK	11C1524
Naphthalene	0.254	E	mg/kg dry	0.00178	0.00523	1	03/09/11 13:40	SW846 8260B	KKK	11C1524
Toluene	ND		mg/kg dry	0.000930	0.00209	1	03/09/11 13:40	SW846 8260B	KKK	11C1524
Xylenes, total	0.116		mg/kg dry	0.00199	0.00523	1	03/09/11 13:40	SW846 8260B	KKK	11C1524
Surr: 1,2-Dichloroethane-d4 (67-138%)	106 %					1	03/09/11 13:40	SW846 8260B	KKK	11C1524
Surr: Dibromofluoromethane (75-125%)	97 %					1	03/09/11 13:40	SW846 8260B	KKK	11C1524
Surr: Toluene-d8 (76-129%)	114 %					1	03/09/11 13:40	SW846 8260B	KKK	11C1524
Surr: 4-Bromofluorobenzene (67-147%)	133 %					1	03/09/11 13:40	SW846 8260B	KKK	11C1524
Polyaromatic Hydrocarbons by EPA 8270D										
Acenaphthene	0.426		mg/kg dry	0.0171	0.0816	1	03/07/11 21:40	SW846 8270D	KJP	11C1488
Acenaphthylene	ND		mg/kg dry	0.0244	0.0816	1	03/07/11 21:40	SW846 8270D	KJP	11C1488
Anthracene	0.149		mg/kg dry	0.0110	0.0816	1	03/07/11 21:40	SW846 8270D	KJP	11C1488
Benzo (a) anthracene	ND		mg/kg dry	0.0134	0.0816	1	03/07/11 21:40	SW846 8270D	KJP	11C1488
Benzo (a) pyrene	ND		mg/kg dry	0.00975	0.0816	1	03/07/11 21:40	SW846 8270D	KJP	11C1488
Benzo (b) fluoranthene	ND		mg/kg dry	0.0463	0.0816	1	03/07/11 21:40	SW846 8270D	KJP	11C1488
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0110	0.0816	1	03/07/11 21:40	SW846 8270D	KJP	11C1488
Benzo (k) fluoranthene	ND		mg/kg dry	0.0451	0.0816	1	03/07/11 21:40	SW846 8270D	KJP	11C1488
Chrysene	ND		mg/kg dry	0.0378	0.0816	1	03/07/11 21:40	SW846 8270D	KJP	11C1488
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0183	0.0816	1	03/07/11 21:40	SW846 8270D	KJP	11C1488
Fluoranthene	0.0756	J	mg/kg dry	0.0134	0.0816	1	03/07/11 21:40	SW846 8270D	KJP	11C1488
Fluorene	0.749		mg/kg dry	0.0244	0.0816	1	03/07/11 21:40	SW846 8270D	KJP	11C1488
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0378	0.0816	1	03/07/11 21:40	SW846 8270D	KJP	11C1488
Naphthalene	0.561		mg/kg dry	0.0171	0.0816	1	03/07/11 21:40	SW846 8270D	KJP	11C1488
Phenanthrene	1.55		mg/kg dry	0.0122	0.0816	1	03/07/11 21:40	SW846 8270D	KJP	11C1488
Pyrene	0.103		mg/kg dry	0.0280	0.0816	1	03/07/11 21:40	SW846 8270D	KJP	11C1488
1-Methylnaphthalene	3.15		mg/kg dry	0.0146	0.0816	1	03/07/11 21:40	SW846 8270D	KJP	11C1488
2-Methylnaphthalene	5.46		mg/kg dry	0.0512	0.163	2	03/08/11 15:08	SW846 8270D	KJP	11C1488
Surr: Terphenyl-d14 (18-120%)	68 %					1	03/07/11 21:40	SW846 8270D	KJP	11C1488
Surr: 2-Fluorobiphenyl (14-120%)	67 %					1	03/07/11 21:40	SW846 8270D	KJP	11C1488
Surr: Nitrobenzene-d5 (17-120%)	73 %					1	03/07/11 21:40	SW846 8270D	KJP	11C1488

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

Work Order: NUC1043
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 03/05/11 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NUC1043-03 (118 Banyan - Soil) Sampled: 03/01/11 16:15										
General Chemistry Parameters										
% Dry Solids	76.4		%	0.500	0.500	1	03/15/11 11:53	SW-846	AMS	11C3120
Volatile Organic Compounds by EPA Method 8260B										
Benzene	0.00554		mg/kg dry	0.00114	0.00207	1	03/09/11 14:10	SW846 8260B	KKK	11C1524
Ethylbenzene	0.180		mg/kg dry	0.0534	0.109	50	03/10/11 17:08	SW846 8260B	KKK	11C2640
Naphthalene	1.38		mg/kg dry	0.0926	0.272	50	03/10/11 17:08	SW846 8260B	KKK	11C2640
Toluene	ND		mg/kg dry	0.000919	0.00207	1	03/09/11 14:10	SW846 8260B	KKK	11C1524
Xylenes, total	0.287		mg/kg dry	0.00196	0.00516	1	03/09/11 14:10	SW846 8260B	KKK	11C1524
Surr: 1,2-Dichloroethane-d4 (67-138%)	104 %					1	03 09 11 14:10	SW846 8260B	KKK	11C1524
Surr: 1,2-Dichloroethane-d4 (67-138%)	101 %					50	03-10-11 17:08	SW846 8260B	KKK	11C2640
Surr: Dibromofluoromethane (75-125%)	99 %					1	03/09/11 14:10	SW846 8260B	KKK	11C1524
Surr: Dibromofluoromethane (75-125%)	98 %					50	03 10 11 17:08	SW846 8260B	KKK	11C2640
Surr: Toluene-d8 (76-129%)	186 %	ZX				1	03-09-11 14:10	SW846 8260B	KKK	11C1524
Surr: Toluene-d8 (76-129%)	106 %					50	03/10/11 17:08	SW846 8260B	KKK	11C2640
Surr: 4-Bromofluorobenzene (67-147%)	211 %	ZX				1	03 09 11 14:10	SW846 8260B	KKK	11C1524
Surr: 4-Bromofluorobenzene (67-147%)	111 %					50	03-10-11 17:08	SW846 8260B	KKK	11C2640
Polyaromatic Hydrocarbons by EPA 8270D										
Acenaphthene	0.198		mg/kg dry	0.0179	0.0858	1	03/07/11 22:02	SW846 8270D	KJP	11C1488
Acenaphthylene	ND		mg/kg dry	0.0256	0.0858	1	03/07/11 22:02	SW846 8270D	KJP	11C1488
Anthracene	0.0580	J	mg/kg dry	0.0115	0.0858	1	03/07/11 22:02	SW846 8270D	KJP	11C1488
Benzo (a) anthracene	ND		mg/kg dry	0.0141	0.0858	1	03/07/11 22:02	SW846 8270D	KJP	11C1488
Benzo (a) pyrene	ND		mg/kg dry	0.0102	0.0858	1	03/07/11 22:02	SW846 8270D	KJP	11C1488
Benzo (b) fluoranthene	ND		mg/kg dry	0.0487	0.0858	1	03/07/11 22:02	SW846 8270D	KJP	11C1488
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0115	0.0858	1	03/07/11 22:02	SW846 8270D	KJP	11C1488
Benzo (k) fluoranthene	ND		mg/kg dry	0.0474	0.0858	1	03/07/11 22:02	SW846 8270D	KJP	11C1488
Chrysene	ND		mg/kg dry	0.0397	0.0858	1	03/07/11 22:02	SW846 8270D	KJP	11C1488
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0192	0.0858	1	03/07/11 22:02	SW846 8270D	KJP	11C1488
Fluoranthene	ND		mg/kg dry	0.0141	0.0858	1	03/07/11 22:02	SW846 8270D	KJP	11C1488
Fluorene	0.360		mg/kg dry	0.0256	0.0858	1	03/07/11 22:02	SW846 8270D	KJP	11C1488
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0397	0.0858	1	03/07/11 22:02	SW846 8270D	KJP	11C1488
Naphthalene	0.412		mg/kg dry	0.0179	0.0858	1	03/07/11 22:02	SW846 8270D	KJP	11C1488
Phenanthrene	0.707		mg/kg dry	0.0128	0.0858	1	03/07/11 22:02	SW846 8270D	KJP	11C1488
Pyrene	ND		mg/kg dry	0.0295	0.0858	1	03/07/11 22:02	SW846 8270D	KJP	11C1488
1-Methylnaphthalene	1.54		mg/kg dry	0.0154	0.0858	1	03/07/11 22:02	SW846 8270D	KJP	11C1488
2-Methylnaphthalene	2.47		mg/kg dry	0.0269	0.0858	1	03/07/11 22:02	SW846 8270D	KJP	11C1488
Surr: Terphenyl-d14 (18-120%)	61 %					1	03 07 11 22:02	SW846 8270D	KJP	11C1488
Surr: 2-Fluorobiphenyl (14-120%)	62 %					1	03/07/11 22:02	SW846 8270D	KJP	11C1488
Surr: Nitrobenzene-d5 (17-120%)	65 %					1	03 07 11 22:02	SW846 8270D	KJP	11C1488

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

Work Order: NUC1043
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 03/05/11 08:30

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extract Vol	Date	Analyst	Extraction Method
Polyaromatic Hydrocarbons by EPA 8270D							
SW846 8270D	11C1488	NUC1043-01	30.67	1.00	03/07/11 12:00	SAS	EPA 3550C
SW846 8270D	11C1488	NUC1043-01RE1	30.67	1.00	03/07/11 12:00	SAS	EPA 3550C
SW846 8270D	11C1488	NUC1043-02	30.78	1.00	03/07/11 12:00	SAS	EPA 3550C
SW846 8270D	11C1488	NUC1043-02RE1	30.78	1.00	03/07/11 12:00	SAS	EPA 3550C
SW846 8270D	11C1488	NUC1043-03	30.68	1.00	03/07/11 12:00	SAS	EPA 3550C
Volatile Organic Compounds by EPA Method 8260B							
SW846 8260B	11C1524	NUC1043-01	5.86	5.00	02/28/11 16:15	TSP	EPA 5035
SW846 8260B	11C2640	NUC1043-01RE1	5.86	5.00	02/28/11 16:15	TSP	EPA 5035
SW846 8260B	11C1245	NUC1043-01RE2	5.86	5.00	02/28/11 16:15	TSP	EPA 5035
SW846 8260B	11C1524	NUC1043-02	5.98	5.00	03/01/11 16:00	TSP	EPA 5035
SW846 8260B	11C1524	NUC1043-03	6.34	5.00	03/01/11 16:15	TSP	EPA 5035
SW846 8260B	11C2640	NUC1043-03RE1	6.01	5.00	03/01/11 16:15	TSP	EPA 5035

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

Work Order: NUC1043
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 03/05/11 08:30

PROJECT QUALITY CONTROL DATA
Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B						
11C1245-BLK1						
Benzene	<0.00110		mg/kg wet	11C1245	11C1245-BLK1	03/11/11 11:57
Ethylbenzene	<0.000980		mg/kg wet	11C1245	11C1245-BLK1	03/11/11 11:57
Naphthalene	<0.00170		mg/kg wet	11C1245	11C1245-BLK1	03/11/11 11:57
Toluene	<0.000890		mg/kg wet	11C1245	11C1245-BLK1	03/11/11 11:57
Xylenes, total	<0.00190		mg/kg wet	11C1245	11C1245-BLK1	03/11/11 11:57
Surrogate: 1,2-Dichloroethane-d4	108%			11C1245	11C1245-BLK1	03/11/11 11:57
Surrogate: Dibromofluoromethane	102%			11C1245	11C1245-BLK1	03/11/11 11:57
Surrogate: Toluene-d8	106%			11C1245	11C1245-BLK1	03/11/11 11:57
Surrogate: 4-Bromofluorobenzene	108%			11C1245	11C1245-BLK1	03/11/11 11:57
11C1245-BLK2						
Benzene	<0.0550		mg/kg wet	11C1245	11C1245-BLK2	03/11/11 12:27
Ethylbenzene	<0.0490		mg/kg wet	11C1245	11C1245-BLK2	03/11/11 12:27
Naphthalene	<0.0850		mg/kg wet	11C1245	11C1245-BLK2	03/11/11 12:27
Toluene	<0.0445		mg/kg wet	11C1245	11C1245-BLK2	03/11/11 12:27
Xylenes, total	<0.0950		mg/kg wet	11C1245	11C1245-BLK2	03/11/11 12:27
Surrogate: 1,2-Dichloroethane-d4	104%			11C1245	11C1245-BLK2	03/11/11 12:27
Surrogate: Dibromofluoromethane	103%			11C1245	11C1245-BLK2	03/11/11 12:27
Surrogate: Toluene-d8	106%			11C1245	11C1245-BLK2	03/11/11 12:27
Surrogate: 4-Bromofluorobenzene	107%			11C1245	11C1245-BLK2	03/11/11 12:27
11C1524-BLK1						
Benzene	<0.00110		mg/kg wet	11C1524	11C1524-BLK1	03/09/11 12:08
Ethylbenzene	<0.000980		mg/kg wet	11C1524	11C1524-BLK1	03/09/11 12:08
Naphthalene	<0.00170		mg/kg wet	11C1524	11C1524-BLK1	03/09/11 12:08
Toluene	<0.000890		mg/kg wet	11C1524	11C1524-BLK1	03/09/11 12:08
Xylenes, total	<0.00190		mg/kg wet	11C1524	11C1524-BLK1	03/09/11 12:08
Surrogate: 1,2-Dichloroethane-d4	107%			11C1524	11C1524-BLK1	03/09/11 12:08
Surrogate: Dibromofluoromethane	103%			11C1524	11C1524-BLK1	03/09/11 12:08
Surrogate: Toluene-d8	107%			11C1524	11C1524-BLK1	03/09/11 12:08
Surrogate: 4-Bromofluorobenzene	107%			11C1524	11C1524-BLK1	03/09/11 12:08
11C1524-BLK2						
Benzene	<0.0550		mg/kg wet	11C1524	11C1524-BLK2	03/09/11 12:39
Ethylbenzene	<0.0490		mg/kg wet	11C1524	11C1524-BLK2	03/09/11 12:39
Naphthalene	<0.0850		mg/kg wet	11C1524	11C1524-BLK2	03/09/11 12:39
Toluene	<0.0445		mg/kg wet	11C1524	11C1524-BLK2	03/09/11 12:39
Xylenes, total	<0.0950		mg/kg wet	11C1524	11C1524-BLK2	03/09/11 12:39
Surrogate: 1,2-Dichloroethane-d4	100%			11C1524	11C1524-BLK2	03/09/11 12:39
Surrogate: Dibromofluoromethane	102%			11C1524	11C1524-BLK2	03/09/11 12:39
Surrogate: Toluene-d8	107%			11C1524	11C1524-BLK2	03/09/11 12:39
Surrogate: 4-Bromofluorobenzene	107%			11C1524	11C1524-BLK2	03/09/11 12:39

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

Work Order: NUC1043
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 03/05/11 08:30

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B						
11C2640-BLK1						
Benzene	<0.00110		mg/kg wet	11C2640	11C2640-BLK1	03/10/11 16:08
Ethylbenzene	<0.000980		mg/kg wet	11C2640	11C2640-BLK1	03/10/11 16:08
Naphthalene	<0.00170		mg/kg wet	11C2640	11C2640-BLK1	03/10/11 16:08
Toluene	<0.000890		mg/kg wet	11C2640	11C2640-BLK1	03/10/11 16:08
Xylenes, total	<0.00190		mg/kg wet	11C2640	11C2640-BLK1	03/10/11 16:08
Surrogate: 1,2-Dichloroethane-d4	105%			11C2640	11C2640-BLK1	03/10/11 16:08
Surrogate: Dibromofluoromethane	102%			11C2640	11C2640-BLK1	03/10/11 16:08
Surrogate: Toluene-d8	106%			11C2640	11C2640-BLK1	03/10/11 16:08
Surrogate: 4-Bromofluorobenzene	108%			11C2640	11C2640-BLK1	03/10/11 16:08
11C2640-BLK2						
Benzene	<0.0550		mg/kg wet	11C2640	11C2640-BLK2	03/10/11 16:38
Ethylbenzene	<0.0490		mg/kg wet	11C2640	11C2640-BLK2	03/10/11 16:38
Naphthalene	<0.0850		mg/kg wet	11C2640	11C2640-BLK2	03/10/11 16:38
Toluene	<0.0445		mg/kg wet	11C2640	11C2640-BLK2	03/10/11 16:38
Xylenes, total	<0.0950		mg/kg wet	11C2640	11C2640-BLK2	03/10/11 16:38
Surrogate: 1,2-Dichloroethane-d4	102%			11C2640	11C2640-BLK2	03/10/11 16:38
Surrogate: Dibromofluoromethane	102%			11C2640	11C2640-BLK2	03/10/11 16:38
Surrogate: Toluene-d8	107%			11C2640	11C2640-BLK2	03/10/11 16:38
Surrogate: 4-Bromofluorobenzene	117%			11C2640	11C2640-BLK2	03/10/11 16:38
Polyaromatic Hydrocarbons by EPA 8270D						
11C1488-BLK1						
Acenaphthene	<0.0140		mg/kg wet	11C1488	11C1488-BLK1	03/07/11 19:50
Acenaphthylene	<0.0200		mg/kg wet	11C1488	11C1488-BLK1	03/07/11 19:50
Anthracene	<0.00900		mg/kg wet	11C1488	11C1488-BLK1	03/07/11 19:50
Benzo (a) anthracene	<0.0110		mg/kg wet	11C1488	11C1488-BLK1	03/07/11 19:50
Benzo (a) pyrene	<0.00800		mg/kg wet	11C1488	11C1488-BLK1	03/07/11 19:50
Benzo (b) fluoranthene	<0.0380		mg/kg wet	11C1488	11C1488-BLK1	03/07/11 19:50
Benzo (g,h,i) perylene	<0.00900		mg/kg wet	11C1488	11C1488-BLK1	03/07/11 19:50
Benzo (k) fluoranthene	<0.0370		mg/kg wet	11C1488	11C1488-BLK1	03/07/11 19:50
Chrysene	<0.0310		mg/kg wet	11C1488	11C1488-BLK1	03/07/11 19:50
Dibenz (a,h) anthracene	<0.0150		mg/kg wet	11C1488	11C1488-BLK1	03/07/11 19:50
Fluoranthene	<0.0110		mg/kg wet	11C1488	11C1488-BLK1	03/07/11 19:50
Fluorene	<0.0200		mg/kg wet	11C1488	11C1488-BLK1	03/07/11 19:50
Indeno (1,2,3-cd) pyrene	<0.0310		mg/kg wet	11C1488	11C1488-BLK1	03/07/11 19:50
Naphthalene	<0.0140		mg/kg wet	11C1488	11C1488-BLK1	03/07/11 19:50
Phenanthrene	<0.0100		mg/kg wet	11C1488	11C1488-BLK1	03/07/11 19:50
Pyrene	<0.0230		mg/kg wet	11C1488	11C1488-BLK1	03/07/11 19:50
1-Methylnaphthalene	<0.0120		mg/kg wet	11C1488	11C1488-BLK1	03/07/11 19:50
2-Methylnaphthalene	<0.0210		mg/kg wet	11C1488	11C1488-BLK1	03/07/11 19:50

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

Work Order: NUC1043
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 03/05/11 08:30

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D						
11C1488-BLK1						
<i>Surrogate: Terphenyl-d14</i>	68%			11C1488	11C1488-BLK1	03/07/11 19:50
<i>Surrogate: 2-Fluorobiphenyl</i>	69%			11C1488	11C1488-BLK1	03/07/11 19:50
<i>Surrogate: Nitrobenzene-d5</i>	70%			11C1488	11C1488-BLK1	03/07/11 19:50

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

Work Order: NUC1043
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 03/05/11 08:30

PROJECT QUALITY CONTROL DATA

Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters										
11C3120-DUP1										
% Dry Solids	76.2	76.1		%	0.06	20	11C3120	NUC1043-01		03/15/11 11:53

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

Work Order: NUC1043
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 03/05/11 08:30

PROJECT QUALITY CONTROL DATA
LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B								
11C1245-BS1								
Benzene	50.0	53.8		ug/kg	108%	78 - 126	11C1245	03/11/11 10:25
Ethylbenzene	50.0	56.1		ug/kg	112%	79 - 130	11C1245	03/11/11 10:25
Naphthalene	50.0	50.5		ug/kg	101%	72 - 150	11C1245	03/11/11 10:25
Toluene	50.0	55.9		ug/kg	112%	76 - 126	11C1245	03/11/11 10:25
Xylenes, total	150	164		ug/kg	109%	80 - 130	11C1245	03/11/11 10:25
Surrogate: 1,2-Dichloroethane-d4	50.0	51.8			104%	67 - 138	11C1245	03/11/11 10:25
Surrogate: Dibromofluoromethane	50.0	51.0			102%	75 - 125	11C1245	03/11/11 10:25
Surrogate: Toluene-d8	50.0	52.5			105%	76 - 129	11C1245	03/11/11 10:25
Surrogate: 4-Bromofluorobenzene	50.0	54.5			109%	67 - 147	11C1245	03/11/11 10:25
11C1524-BS1								
Benzene	50.0	53.5		ug/kg	107%	78 - 126	11C1524	03/09/11 10:35
Ethylbenzene	50.0	57.9		ug/kg	116%	79 - 130	11C1524	03/09/11 10:35
Naphthalene	50.0	50.4		ug/kg	101%	72 - 150	11C1524	03/09/11 10:35
Toluene	50.0	57.3		ug/kg	115%	76 - 126	11C1524	03/09/11 10:35
Xylenes, total	150	170		ug/kg	113%	80 - 130	11C1524	03/09/11 10:35
Surrogate: 1,2-Dichloroethane-d4	50.0	52.7			105%	67 - 138	11C1524	03/09/11 10:35
Surrogate: Dibromofluoromethane	50.0	52.4			105%	75 - 125	11C1524	03/09/11 10:35
Surrogate: Toluene-d8	50.0	52.9			106%	76 - 129	11C1524	03/09/11 10:35
Surrogate: 4-Bromofluorobenzene	50.0	52.5			105%	67 - 147	11C1524	03/09/11 10:35
11C2640-BS1								
Benzene	50.0	55.4		ug/kg	111%	78 - 126	11C2640	03/10/11 15:05
Ethylbenzene	50.0	59.3		ug/kg	119%	79 - 130	11C2640	03/10/11 15:05
Naphthalene	50.0	52.6		ug/kg	105%	72 - 150	11C2640	03/10/11 15:05
Toluene	50.0	58.7		ug/kg	117%	76 - 126	11C2640	03/10/11 15:05
Xylenes, total	150	173		ug/kg	115%	80 - 130	11C2640	03/10/11 15:05
Surrogate: 1,2-Dichloroethane-d4	50.0	51.5			103%	67 - 138	11C2640	03/10/11 15:05
Surrogate: Dibromofluoromethane	50.0	51.2			102%	75 - 125	11C2640	03/10/11 15:05
Surrogate: Toluene-d8	50.0	53.3			107%	76 - 129	11C2640	03/10/11 15:05
Surrogate: 4-Bromofluorobenzene	50.0	54.5			109%	67 - 147	11C2640	03/10/11 15:05
Polyaromatic Hydrocarbons by EPA 8270D								
11C1488-BS1								
Acenaphthene	1.67	1.13		mg/kg wet	68%	49 - 120	11C1488	03/07/11 20:12
Acenaphthylene	1.67	1.11		mg/kg wet	67%	52 - 120	11C1488	03/07/11 20:12
Anthracene	1.67	1.23		mg/kg wet	74%	58 - 120	11C1488	03/07/11 20:12
Benzo (a) anthracene	1.67	1.19		mg/kg wet	71%	57 - 120	11C1488	03/07/11 20:12
Benzo (a) pyrene	1.67	1.18		mg/kg wet	71%	55 - 120	11C1488	03/07/11 20:12
Benzo (b) fluoranthene	1.67	1.19		mg/kg wet	72%	51 - 123	11C1488	03/07/11 20:12
Benzo (g,h,i) perylene	1.67	1.11		mg/kg wet	67%	49 - 121	11C1488	03/07/11 20:12
Benzo (k) fluoranthene	1.67	1.18		mg/kg wet	71%	42 - 129	11C1488	03/07/11 20:12

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

Work Order: NUC1043
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 03/05/11 08:30

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								
11C1488-BS1								
Chrysene	1.67	1.18		mg/kg wet	71%	55 - 120	11C1488	03/07/11 20:12
Dibenz (a,h) anthracene	1.67	1.13		mg/kg wet	68%	50 - 123	11C1488	03/07/11 20:12
Fluoranthene	1.67	1.22		mg/kg wet	73%	58 - 120	11C1488	03/07/11 20:12
Fluorene	1.67	1.19		mg/kg wet	72%	54 - 120	11C1488	03/07/11 20:12
Indeno (1,2,3-cd) pyrene	1.67	1.11		mg/kg wet	67%	50 - 122	11C1488	03/07/11 20:12
Naphthalene	1.67	1.02		mg/kg wet	61%	28 - 120	11C1488	03/07/11 20:12
Phenanthrene	1.67	1.22		mg/kg wet	73%	56 - 120	11C1488	03/07/11 20:12
Pyrene	1.67	1.21		mg/kg wet	73%	56 - 120	11C1488	03/07/11 20:12
1-Methylnaphthalene	1.67	0.923		mg/kg wet	55%	36 - 120	11C1488	03/07/11 20:12
2-Methylnaphthalene	1.67	1.01		mg/kg wet	61%	36 - 120	11C1488	03/07/11 20:12
Surrogate: Terphenyl-d14	1.67	1.06			63%	18 - 120	11C1488	03/07/11 20:12
Surrogate: 2-Fluorobiphenyl	1.67	1.00			60%	14 - 120	11C1488	03/07/11 20:12
Surrogate: Nitrobenzene-d5	1.67	0.932			56%	17 - 120	11C1488	03/07/11 20:12

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

Work Order: NUC1043
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 03/05/11 08:30

PROJECT QUALITY CONTROL DATA
Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B										
11C1245-MS1										
Benzene	0.0864	2.15		mg/kg wet	1.67	124%	42 - 141	11C1245	NUC0857-12R E1	03/11/11 19:03
Ethylbenzene	0.216	2.40		mg/kg wet	1.67	131%	21 - 165	11C1245	NUC0857-12R E1	03/11/11 19:03
Naphthalene	ND	1.89		mg/kg wet	1.67	114%	10 - 160	11C1245	NUC0857-12R E1	03/11/11 19:03
Toluene	ND	2.15		mg/kg wet	1.67	129%	45 - 145	11C1245	NUC0857-12R E1	03/11/11 19:03
Xylenes, total	ND	6.38		mg/kg wet	5.01	127%	31 - 159	11C1245	NUC0857-12R E1	03/11/11 19:03
Surrogate: 1,2-Dichloroethane-d4		49.5		ug/kg	50.0	99%	67 - 138	11C1245	NUC0857-12R E1	03/11/11 19:03
Surrogate: Dibromofluoromethane		50.5		ug/kg	50.0	101%	75 - 125	11C1245	NUC0857-12R E1	03/11/11 19:03
Surrogate: Toluene-d8		56.0		ug/kg	50.0	112%	76 - 129	11C1245	NUC0857-12R E1	03/11/11 19:03
Surrogate: 4-Bromofluorobenzene		53.3		ug/kg	50.0	107%	67 - 147	11C1245	NUC0857-12R E1	03/11/11 19:03
11C1524-MS1										
Benzene	ND	0.0544		mg/kg wet	0.0476	114%	42 - 141	11C1524	NUC1294-03	03/11/11 20:03
Ethylbenzene	ND	0.0563		mg/kg wet	0.0476	118%	21 - 165	11C1524	NUC1294-03	03/11/11 20:03
Naphthalene	ND	0.0515		mg/kg wet	0.0476	108%	10 - 160	11C1524	NUC1294-03	03/11/11 20:03
Toluene	ND	0.0568		mg/kg wet	0.0476	119%	45 - 145	11C1524	NUC1294-03	03/11/11 20:03
Xylenes, total	ND	0.164		mg/kg wet	0.143	115%	31 - 159	11C1524	NUC1294-03	03/11/11 20:03
Surrogate: 1,2-Dichloroethane-d4		50.0		ug/kg	50.0	100%	67 - 138	11C1524	NUC1294-03	03/11/11 20:03
Surrogate: Dibromofluoromethane		50.2		ug/kg	50.0	100%	75 - 125	11C1524	NUC1294-03	03/11/11 20:03
Surrogate: Toluene-d8		52.8		ug/kg	50.0	106%	76 - 129	11C1524	NUC1294-03	03/11/11 20:03
Surrogate: 4-Bromofluorobenzene		54.8		ug/kg	50.0	110%	67 - 147	11C1524	NUC1294-03	03/11/11 20:03
11C2640-MS1										
Benzene	ND	2.90		mg/kg dry	2.72	106%	42 - 141	11C2640	NUC1043-03R E1	03/11/11 01:10
Ethylbenzene	0.180	3.15		mg/kg dry	2.72	109%	21 - 165	11C2640	NUC1043-03R E1	03/11/11 01:10
Naphthalene	1.38	3.92		mg/kg dry	2.72	93%	10 - 160	11C2640	NUC1043-03R E1	03/11/11 01:10
Toluene	ND	2.99		mg/kg dry	2.72	110%	45 - 145	11C2640	NUC1043-03R E1	03/11/11 01:10
Xylenes, total	ND	8.83		mg/kg dry	8.17	108%	31 - 159	11C2640	NUC1043-03R E1	03/11/11 01:10
Surrogate: 1,2-Dichloroethane-d4		50.3		ug/kg	50.0	101%	67 - 138	11C2640	NUC1043-03R E1	03/11/11 01:10
Surrogate: Dibromofluoromethane		49.6		ug/kg	50.0	99%	75 - 125	11C2640	NUC1043-03R E1	03/11/11 01:10

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

Work Order: NUC1043
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 03/05/11 08:30

PROJECT QUALITY CONTROL DATA
Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B										
11C2640-MS1										
<i>Surrogate: Toluene-d8</i>		52.7		ug/kg	50.0	105%	76 - 129	11C2640	NUC1043-03R E1	03/11/11 01:10
<i>Surrogate: 4-Bromofluorobenzene</i>		52.3		ug/kg	50.0	105%	67 - 147	11C2640	NUC1043-03R E1	03/11/11 01:10
Polyaromatic Hydrocarbons by EPA 8270D										
11C1488-MS1										
Acenaphthene	1.58	2.26	M8	mg/kg dry	2.15	32%	42 - 120	11C1488	NUC1043-01	03/07/11 20:34
Acenaphthylene	ND	1.43		mg/kg dry	2.15	67%	32 - 120	11C1488	NUC1043-01	03/07/11 20:34
Anthracene	0.556	1.86		mg/kg dry	2.15	61%	10 - 200	11C1488	NUC1043-01	03/07/11 20:34
Benzo (a) anthracene	0.243	1.63		mg/kg dry	2.15	64%	41 - 120	11C1488	NUC1043-01	03/07/11 20:34
Benzo (a) pyrene	0.0869	1.55		mg/kg dry	2.15	68%	33 - 121	11C1488	NUC1043-01	03/07/11 20:34
Benzo (b) fluoranthene	0.104	1.63		mg/kg dry	2.15	71%	26 - 137	11C1488	NUC1043-01	03/07/11 20:34
Benzo (g,h,i) perylene	ND	1.48		mg/kg dry	2.15	69%	21 - 124	11C1488	NUC1043-01	03/07/11 20:34
Benzo (k) fluoranthene	0.0993	1.48		mg/kg dry	2.15	64%	14 - 140	11C1488	NUC1043-01	03/07/11 20:34
Chrysene	0.226	1.65		mg/kg dry	2.15	66%	28 - 123	11C1488	NUC1043-01	03/07/11 20:34
Dibenz (a,h) anthracene	ND	1.49		mg/kg dry	2.15	70%	25 - 127	11C1488	NUC1043-01	03/07/11 20:34
Fluoranthene	1.06	1.99		mg/kg dry	2.15	43%	38 - 120	11C1488	NUC1043-01	03/07/11 20:34
Fluorene	2.33	2.65	M8	mg/kg dry	2.15	15%	41 - 120	11C1488	NUC1043-01	03/07/11 20:34
Indeno (1,2,3-cd) pyrene	ND	1.47		mg/kg dry	2.15	69%	25 - 123	11C1488	NUC1043-01	03/07/11 20:34
Naphthalene	4.78	3.42	M8	mg/kg dry	2.15	-64%	25 - 120	11C1488	NUC1043-01	03/07/11 20:34
Phenanthrene	5.19	3.91	M8	mg/kg dry	2.15	-60%	37 - 120	11C1488	NUC1043-01	03/07/11 20:34
Pyrene	0.802	1.76		mg/kg dry	2.15	45%	29 - 125	11C1488	NUC1043-01	03/07/11 20:34
1-Methylnaphthalene	8.70	5.41	M8	mg/kg dry	2.15	-153%	19 - 120	11C1488	NUC1043-01	03/07/11 20:34
2-Methylnaphthalene	12.6	7.67	M8	mg/kg dry	2.15	-231%	11 - 120	11C1488	NUC1043-01	03/07/11 20:34
<i>Surrogate: Terphenyl-d14</i>		1.26		mg/kg dry	2.15	59%	18 - 120	11C1488	NUC1043-01	03/07/11 20:34
<i>Surrogate: 2-Fluorobiphenyl</i>		1.25		mg/kg dry	2.15	58%	14 - 120	11C1488	NUC1043-01	03/07/11 20:34
<i>Surrogate: Nitrobenzene-d5</i>		1.25		mg/kg dry	2.15	58%	17 - 120	11C1488	NUC1043-01	03/07/11 20:34

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

Work Order: NUC1043
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 03/05/11 08:30

PROJECT QUALITY CONTROL DATA
Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
11C1245-MSD1												
Benzene	0.0864	1.99		mg/kg wet	1.67	114%	42 - 141	8	50	11C1245	NUC0857-12R	03/11/11 19:33
											E1	
Ethylbenzene	0.216	2.20		mg/kg wet	1.67	119%	21 - 165	8	50	11C1245	NUC0857-12R	03/11/11 19:33
											E1	
Naphthalene	ND	1.84		mg/kg wet	1.67	110%	10 - 160	3	50	11C1245	NUC0857-12R	03/11/11 19:33
											E1	
Toluene	ND	1.96		mg/kg wet	1.67	117%	45 - 145	9	50	11C1245	NUC0857-12R	03/11/11 19:33
											E1	
Xylenes, total	ND	5.83		mg/kg wet	5.01	117%	31 - 159	9	50	11C1245	NUC0857-12R	03/11/11 19:33
											E1	
Surrogate: 1,2-Dichloroethane-d4		50.1		ug/kg	50.0	100%	67 - 138			11C1245	NUC0857-12R	03/11/11 19:33
											E1	
Surrogate: Dibromofluoromethane		50.2		ug/kg	50.0	100%	75 - 125			11C1245	NUC0857-12R	03/11/11 19:33
											E1	
Surrogate: Toluene-d8		55.7		ug/kg	50.0	111%	76 - 129			11C1245	NUC0857-12R	03/11/11 19:33
											E1	
Surrogate: 4-Bromofluorobenzene		54.1		ug/kg	50.0	108%	67 - 147			11C1245	NUC0857-12R	03/11/11 19:33
											E1	
11C1524-MSD1												
Benzene	ND	0.0556		mg/kg wet	0.0481	116%	42 - 141	2	50	11C1524	NUC1294-03	03/11/11 20:33
Ethylbenzene	ND	0.0564		mg/kg wet	0.0481	117%	21 - 165	0.2	50	11C1524	NUC1294-03	03/11/11 20:33
Naphthalene	ND	0.0502		mg/kg wet	0.0481	104%	10 - 160	3	50	11C1524	NUC1294-03	03/11/11 20:33
Toluene	ND	0.0565		mg/kg wet	0.0481	118%	45 - 145	0.5	50	11C1524	NUC1294-03	03/11/11 20:33
Xylenes, total	ND	0.164		mg/kg wet	0.144	113%	31 - 159	0.2	50	11C1524	NUC1294-03	03/11/11 20:33
Surrogate: 1,2-Dichloroethane-d4		51.2		ug/kg	50.0	102%	67 - 138			11C1524	NUC1294-03	03/11/11 20:33
Surrogate: Dibromofluoromethane		51.4		ug/kg	50.0	103%	75 - 125			11C1524	NUC1294-03	03/11/11 20:33
Surrogate: Toluene-d8		52.6		ug/kg	50.0	105%	76 - 129			11C1524	NUC1294-03	03/11/11 20:33
Surrogate: 4-Bromofluorobenzene		54.8		ug/kg	50.0	110%	67 - 147			11C1524	NUC1294-03	03/11/11 20:33
11C2640-MSD1												
Benzene	ND	2.87		mg/kg dry	2.72	105%	42 - 141	0.9	50	11C2640	NUC1043-03R	03/11/11 01:40
											E1	
Ethylbenzene	0.180	3.03		mg/kg dry	2.72	105%	21 - 165	4	50	11C2640	NUC1043-03R	03/11/11 01:40
											E1	
Naphthalene	1.38	4.25		mg/kg dry	2.72	105%	10 - 160	8	50	11C2640	NUC1043-03R	03/11/11 01:40
											E1	
Toluene	ND	2.88		mg/kg dry	2.72	106%	45 - 145	4	50	11C2640	NUC1043-03R	03/11/11 01:40
											E1	
Xylenes, total	ND	8.53		mg/kg dry	8.17	104%	31 - 159	3	50	11C2640	NUC1043-03R	03/11/11 01:40
											E1	
Surrogate: 1,2-Dichloroethane-d4		50.9		ug/kg	50.0	102%	67 - 138			11C2640	NUC1043-03R	03/11/11 01:40
											E1	
Surrogate: Dibromofluoromethane		50.2		ug/kg	50.0	100%	75 - 125			11C2640	NUC1043-03R	03/11/11 01:40
											E1	
Surrogate: Toluene-d8		52.8		ug/kg	50.0	106%	76 - 129			11C2640	NUC1043-03R	03/11/11 01:40
											E1	
Surrogate: 4-Bromofluorobenzene		54.1		ug/kg	50.0	108%	67 - 147			11C2640	NUC1043-03R	03/11/11 01:40
											E1	

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

Work Order: NUC1043
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 03/05/11 08:30

PROJECT QUALITY CONTROL DATA
Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
Polyaromatic Hydrocarbons by EPA 8270D												
11C1488-MSD1												
Acenaphthene	1.58	2.59		mg/kg dry	2.18	46%	42 - 120	13	40	11C1488	NUC1043-01	03/07/11 20:56
Acenaphthylene	ND	1.48		mg/kg dry	2.18	68%	32 - 120	3	30	11C1488	NUC1043-01	03/07/11 20:56
Anthracene	0.556	2.18		mg/kg dry	2.18	74%	10 - 200	15	50	11C1488	NUC1043-01	03/07/11 20:56
Benzo (a) anthracene	0.243	1.77		mg/kg dry	2.18	70%	41 - 120	8	30	11C1488	NUC1043-01	03/07/11 20:56
Benzo (a) pyrene	0.0869	1.68		mg/kg dry	2.18	73%	33 - 121	9	33	11C1488	NUC1043-01	03/07/11 20:56
Benzo (b) fluoranthene	0.104	1.73		mg/kg dry	2.18	74%	26 - 137	6	42	11C1488	NUC1043-01	03/07/11 20:56
Benzo (g,h,i) perylene	ND	1.57		mg/kg dry	2.18	72%	21 - 124	6	32	11C1488	NUC1043-01	03/07/11 20:56
Benzo (k) fluoranthene	0.0993	1.70		mg/kg dry	2.18	73%	14 - 140	14	39	11C1488	NUC1043-01	03/07/11 20:56
Chrysene	0.226	1.80		mg/kg dry	2.18	72%	28 - 123	9	34	11C1488	NUC1043-01	03/07/11 20:56
Dibenz (a,h) anthracene	ND	1.60		mg/kg dry	2.18	73%	25 - 127	7	31	11C1488	NUC1043-01	03/07/11 20:56
Fluoranthene	1.06	2.26		mg/kg dry	2.18	55%	38 - 120	13	35	11C1488	NUC1043-01	03/07/11 20:56
Fluorene	2.33	2.99	M8	mg/kg dry	2.18	31%	41 - 120	12	37	11C1488	NUC1043-01	03/07/11 20:56
Indeno (1,2,3-cd) pyrene	ND	1.59		mg/kg dry	2.18	73%	25 - 123	7	32	11C1488	NUC1043-01	03/07/11 20:56
Naphthalene	4.78	4.16	M8	mg/kg dry	2.18	-29%	25 - 120	20	42	11C1488	NUC1043-01	03/07/11 20:56
Phenanthrene	5.19	5.08	M8	mg/kg dry	2.18	-5%	37 - 120	26	32	11C1488	NUC1043-01	03/07/11 20:56
Pyrene	0.802	2.00		mg/kg dry	2.18	55%	29 - 125	13	40	11C1488	NUC1043-01	03/07/11 20:56
1-Methylnaphthalene	8.70	6.67	M8	mg/kg dry	2.18	-93%	19 - 120	21	45	11C1488	NUC1043-01	03/07/11 20:56
2-Methylnaphthalene	12.6	9.19	M8	mg/kg dry	2.18	-158%	11 - 120	18	50	11C1488	NUC1043-01	03/07/11 20:56
Surrogate: Terphenyl-d14		1.34		mg/kg dry	2.18	62%	18 - 120			11C1488	NUC1043-01	03/07/11 20:56
Surrogate: 2-Fluorobiphenyl		1.29		mg/kg dry	2.18	59%	14 - 120			11C1488	NUC1043-01	03/07/11 20:56
Surrogate: Nitrobenzene-d5		1.38		mg/kg dry	2.18	63%	17 - 120			11C1488	NUC1043-01	03/07/11 20:56

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

Work Order: NUC1043
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 03/05/11 08:30

CERTIFICATION SUMMARY

TestAmerica Nashville

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

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

Work Order: NUC1043
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 03/05/11 08:30

DATA QUALIFIERS AND DEFINITIONS

E Concentration exceeds the calibration range and therefore result is semi-quantitative.
J Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).
Concentrations within this range are estimated.
M8 The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
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

ATTACHMENT A

Appendix C
Laboratory Analytical Report - Groundwater

Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants	Laboratory ID: QK05015-011
Description: BEALB264TW01WG20151105	Matrix: Aqueous
Date Sampled: 11/05/2015 1625	
Date Received: 11/06/2015	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/11/2015 1442	ALL		89321

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	0.45	U	5.0	0.45	0.21	ug/L	1
Ethylbenzene	100-41-4	8260B	0.51	U	5.0	0.51	0.21	ug/L	1
Naphthalene	91-20-3	8260B	0.96	U	5.0	0.96	0.14	ug/L	1
Toluene	108-88-3	8260B	0.48	U	5.0	0.48	0.24	ug/L	1
Xylenes (total)	1330-20-7	8260B	0.57	U	5.0	0.57	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		96	75-120
1,2-Dichloroethane-d4		96	70-120
Toluene-d8		97	85-120
Dibromofluoromethane		101	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

Semivolatile Organic Compounds by GC/MS (SIM)

Client: **AECOM - Resolution Consultants**

Laboratory ID: **QK05015-011**

Description: **BEALB264TW01WG20151105**

Matrix: **Aqueous**

Date Sampled: **11/05/2015 1625**

Date Received: **11/06/2015**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D (SIM)	1	11/17/2015 2001	RBH	11/10/2015 1444	89221

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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Methylnaphthalene-d10		71	15-139
Fluoranthene-d10		64	23-154

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

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

Appendix D
Regulatory Correspondence



Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

July 1, 2015

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

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

Dear Mr. Drawdy,

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

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

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

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

Sincerely,

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

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



Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

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

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

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

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

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



Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

Division of Waste Management
Bureau of Land and Waste Management

June 8, 2016

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

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

Dear Mr. Drawdy,

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

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

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

If you have any questions, please contact me at petruslb@dhec.sc.gov or 803-898-0294.

Sincerely,

Laurel Petrus
RCRA Federal Facilities Section

Attachment: Specific Property Recommendations

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

No Further Action recommendation (80 addresses)

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

Attachment to: Petrus to Drawdy

Subject: Draft Final Initial Groundwater Investigation Report-November and December 2015

Specific Property Recommendations

Dated June 8, 2016, Page 2