SUMMARY REPORT 94 BARRACUDA DRIVE (FORMERLY 905 BARRACUDA DRIVE) LAUREL BAY MILITARY HOUSING AREA MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SC

> Revision: 0 Prepared for:

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

and



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

**JUNE 2021** 

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**Prepared by:** 



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



Summary Report 94 Barracuda Drive (Formerly 905 Barracuda Drive) Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort June 2021

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#### List of Acronyms

bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
СТО	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 94 Barracuda Drive (Formerly 905 Barracuda Drive). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

#### **1.1 Background Information**

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



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 94 Barracuda Drive (Formerly 905 Barracuda Drive). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 905 Barracuda Drive* (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 – February and March 2017* (Resolution Consultants, 2017). 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 December 14, 2010, a single 280 gallon heating oil UST was removed from the front landscaped bed area adjacent to the driveway at 94 Barracuda Drive (Formerly 905 Barracuda Drive). 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 6'4" 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 94 Barracuda Drive (Formerly 905 Barracuda Drive) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated August 24, 2016, SCDHEC requested an IGWA for 94 Barracuda Drive (Formerly 905 Barracuda Drive) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

#### 2.3 Groundwater Sampling

On February 27, 2017, a temporary monitoring well was installed at 94 Barracuda Drive (Formerly 905 Barracuda Drive), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST. The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – February and March 2017* (Resolution Consultants, 2017).



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 and March 2017* (Resolution Consultants, 2017).

#### 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 94 Barracuda Drive (Formerly 905 Barracuda Drive) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated that the groundwater was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

#### 3.0 PROPERTY STATUS

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 94 Barracuda Drive (Formerly 905 Barracuda Drive). This NFA determination was obtained in a letter dated July 27, 2017. 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 – 905 Barracuda Drive, Laurel Bay Military Housing Area*, April 2011.
- Resolution Consultants, 2017. Initial Groundwater Investigation Report February and March 2017 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina, June 2017.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2013. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 2.0*, April 2013.



- 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 1Laboratory Analytical Results - Soil94 Barracuda Drive (Formerly 905 Barracuda Drive)Laurel Bay Military Housing AreaMarine Corps Air Station BeaufortBeaufort, South Carolina

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Results Sample Collected 12/14/10				
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)						
Benzene	0.003	ND				
Ethylbenzene	1.15	ND				
Naphthalene	0.036	ND				
Toluene	0.627	ND				
Xylenes, Total	13.01	ND				
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)						
Benzo(a)anthracene	0.66	ND				
Benzo(b)fluoranthene	0.66	0.716				
Benzo(k)fluoranthene	0.66	ND				
Chrysene	0.66	0.480				
Dibenz(a,h)anthracene	0.66	ND				

Notes:

<sup>(1)</sup> South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.0 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 2Laboratory Analytical Results - Groundwater94 Barracuda Drive (Formerly 905 Barracuda Drive)Laurel Bay Military Housing AreaMarine Corps Air Station BeaufortBeaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Site-Specific Groundwater VISLs (µg/L) <sup>(2)</sup>	Results Sample Collected 02/28/17	
Volatile Organic Compounds Analyzed	d 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 Ana	lyzed by EPA Method 8270I	) С (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:

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

<sup>(2)</sup> Site-specific groundwater VISLs were calculated using the EPA JE Model Spreadsheets (Version 3.1, February 2004) and conservative modeling inputs representative of a small single-story house with an 8 foot ceiling. Site-specific groundwater VISLs were developed based on a target risk level of 1x10<sup>-6</sup>, 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



Attachment 1

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

Date Received State Use Only RECEIVED APR 1 9 2011	Submit Completed Form To: UST Program SCDHEC 2600 Bull Street Columbia, South Carolina 29201 Telephone (803) 896-7957
SC DHEC - Burezu of Land & Waste Management I. OWNI	ERSHIP OF UST (S)
MCAS Beaufort, Commanding Officer A Owner Name (Corporation, Individual, Public Agency P.O. Box 55001 Mailing Address	
Beaufort,South CarolCityState	lina 29904-5001 Zip Code
843228-73Area CodeTelephone Num	

### 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					
905 Barracuda Street, Laurel Bay Military Housing Area					
Street Address or State Road (as applicable)					
Beaufort, Beaufort					
City County					

Γ

Attachment 2

#### **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

		Barracuda
A.	Product(ex. Gas, Kerosene)	Heating oil
B.	Capacity(ex. 1k, 2k)	280 gal
C.	Age	Late 1950s
D.	Construction Material(ex. Steel, FRP)	Steel
Ε·	Month/Year of Last Use	Mid 1980s
F.	Depth (ft.) To Base of Tank	6'4"
G.	Spill Prevention Equipment Y/N	No
H·	Overfill Prevention Equipment Y/N	No
I.	Method of Closure Removed/Filled	Removed
J <sub>.</sub>	Date Tanks Removed/Filled	12/14/10
K.	Visible Corrosion or Pitting Y/N	Yes
L.	Visible Holes Y/N	Yes

905

1

M. Method of disposal for any USTs removed from the ground (attach disposal manifests) UST 905Barracuda was removed from the ground, and disposed at a Subtitle "D" landfill. See Attachment "A".

N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)
The tank had been previously filled with sand by others.

O. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST <u>Corrosion</u>, pitting and holes were found throughout the tank.

#### VII. PIPING INFORMATION

		905
		Barracuda
		Steel
A.	Construction Material(ex. Steel, FRP)	& Copper
B.	Distance from UST to Dispenser	N/A
C.	Number of Dispensers	N/A
D.	Type of System Pressure or Suction	Suction
E.	Was Piping Removed from the Ground? Y/N	Yes
F.	Visible Corrosion or Pitting Y/N	Yes
G.	Visible Holes Y/N	No
0.		
H.	Age	Late 1950s
_		

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

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.

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

# IX. SITE CONDITIONS

### X. SAMPLE INFORMATION

# A. SCDHEC Lab Certification Number 84009001

В.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
905 B'cuda	Excav at fill end	Soil	Sandy	6'4"	12/14/10 1515 hrs	P. Shaw	
				, 2 <sup>100</sup> .001 - 111.01, 4 <sub>00</sub>			
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 <u>and</u> 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.

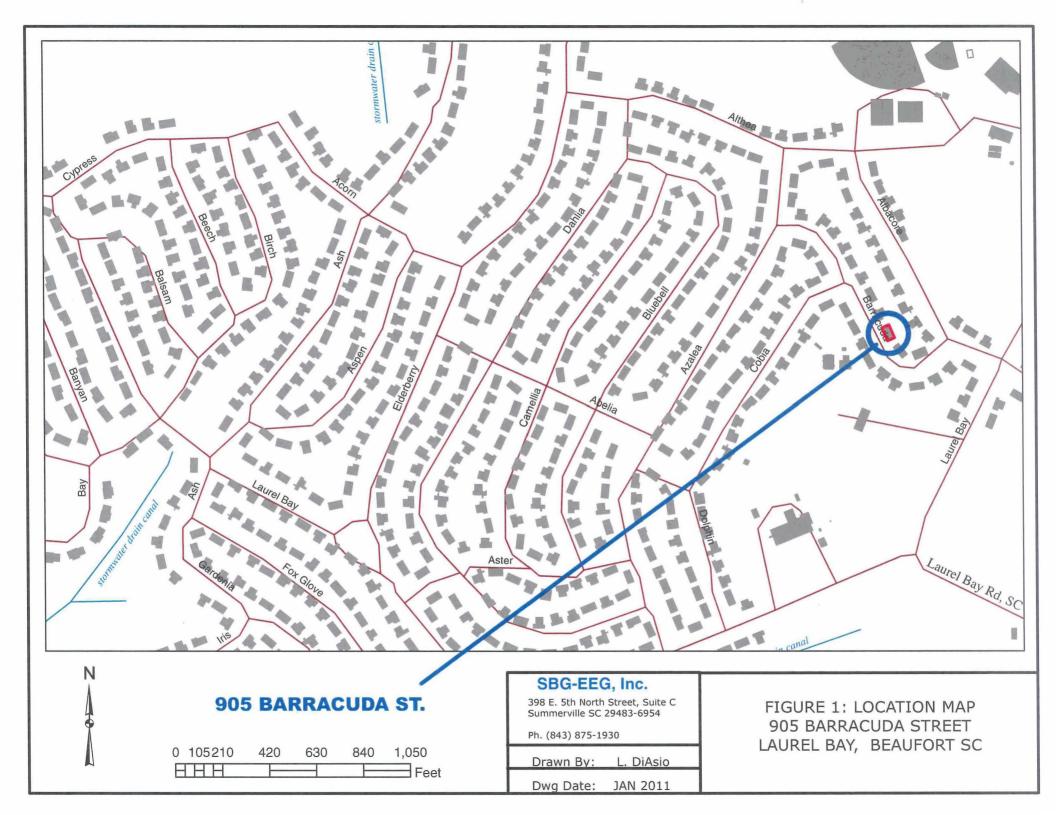
## **XII. RECEPTORS**

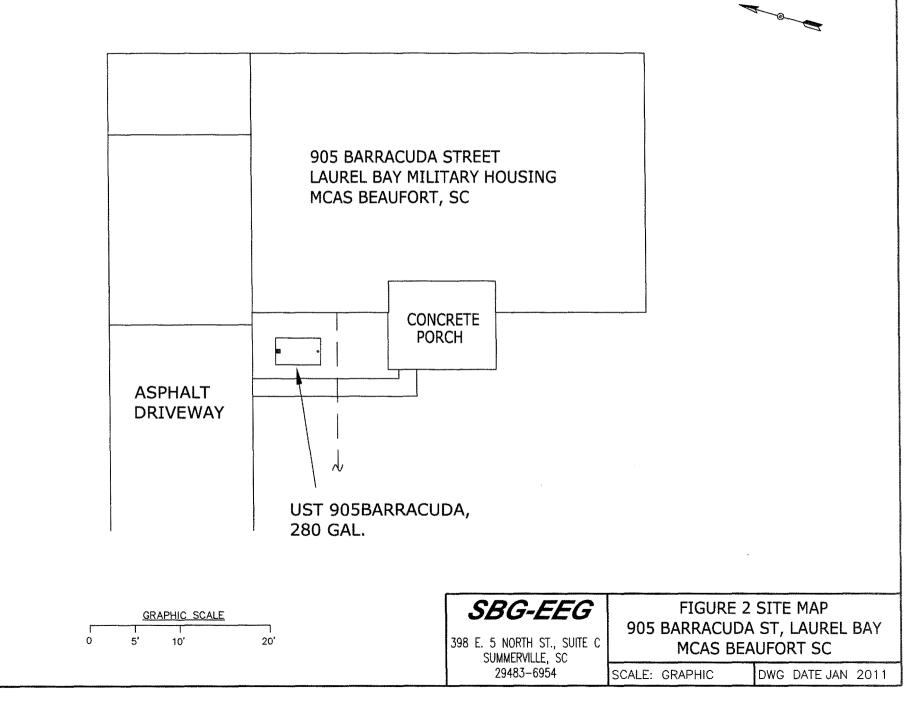
r		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?		Х
	If yes, indicate type of receptor, distance, and direction on site map.		
В.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		Х
	If yes, indicate type of well, distance, and direction on site map.		
C.	Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?		х
	If yes, indicate type of structure, distance, and direction on site map.		
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 and water	*X	
	If yes, indicate the type of utility, distance, and direction on the site map.		
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?		Х
	If yes, indicate the area of contaminated soil on the site map.		

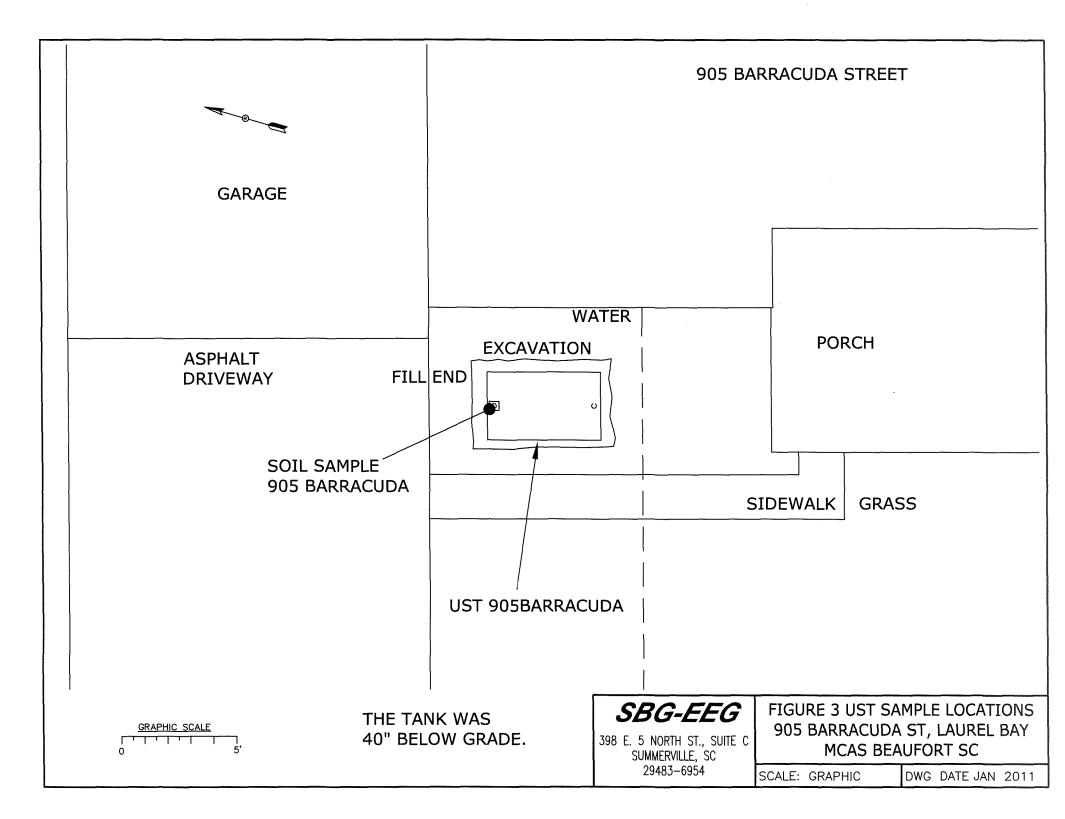
#### **XIII. SITE MAP**

You must supply a <u>scaled</u> 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)









Picture 1: Location of UST 905Barracuda.



Picture 2: Excavation 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	905Barracuda			
Benzene	ND			
Toluene	ND			
Ethylbenzene	ND			
Xylenes	ND			
Naphthalene	ND			
Benzo (a) anthracene	ND			
Benzo (b) fluoranthene	0.716 mg/kg			
Benzo (k) fluoranthene	ND			
Chrysene	0.480 mg/kg			
Dibenz (a, h) anthracene	ND			
TPH (EPA 3550)				
			 	 ······

CoC					
Benzene		5			
Toluene					
Ethylbenzene					
Xylenes					
Naphthalene					
Benzo (a) anthracene					
Benzo (b) fluoranthene					
Benzo (k) fluoranthene					
Chrysene					
Dibenz (a, h) anthracene					
ТРН (ЕРА 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				
МТВЕ	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)



THE LEADER IN ENVIRONMENTAL TESTING

December 30, 2010 11:48:33AM

Client: Attn:	EEG - Small Business Group, Inc. (2449) 10179 Highway 78 Ladson, SC 29456 Tom McElwee	Work Order: Project Name: Project Nbr: P/O Nbr: Date Received:	NTL2521 Laurel Bay Housing Project [none] 1005 12/18/10		
	SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME		
914 B	Barracuda	NTL2521-01	12/13/10 16:15		
903 B	Barracuda	NTL2521-02	12/14/10 10:30		
905 B	Barracuda	NTL2521-03	12/14/10 15:15		

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.

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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 L. Connor

Roxanne Connor Program Manager - Conventional Accounts **TestAmerica** 

THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NTL2521
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	Received:	12/18/10 08:30

#### ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NTL2521-01 (914 B	arracuda - Soi	il) Sampl	ed: 12/13/	10 16:15						
General Chemistry Parameters										
% Dry Solids	89.3		%	0.500	0.500	1	12/21/10 08:56	SW-846	HLB	10L4259
Volatile Organic Compounds by EP.	A Method 8260I	В								
Benzene	ND		mg/kg dry	0.00143	0.00260	1	12/20/10 13:35	SW846 8260B	KKK	10L4170
Ethylbenzene	ND		mg/kg dry	0.00128	0.00260	1	12/20/10 13:35	SW846 8260B	ККК	10L4170
Naphthalene	ND		mg/kg dry	0.00221	0.00651	1	12/20/10 13:35	SW846 8260B	KKK	10L4170
Toluene	ND		mg/kg dry	0.00116	0.00260	1	12/20/10 13:35	SW846 8260B	ККК	10L4170
Xylenes, total	ND		mg/kg dry	0.00247	0.00651	1	12/20/10 13:35	SW846 8260B	KKK	10L4170
Surr: 1,2-Dichloroethane-d4 (67-138%)	92 %					1	12/20/10 13:35	SW846 8260B	KKK	10L4170
Surr: Dibromofluoromethane (75-125%)	96 %					1	12/20/10 13:35	SW846 8260B	KKK	10L4170
Surr: Toluene-d8 (76-129%)	96 %					1	12/20/10 13:35	SW846 8260B	KKK	10L4170
Surr: 4-Bromofluorobenzene (67-147%)	93 %					1	12/20/10 13:35	SW846 8260B	KKK	10L4170
Polyaromatic Hydrocarbons by EPA	8270D									
Acenaphthene	ND		mg/kg dry	0.0154	0.0739	1	12/21/10 15:27	SW846 8270D	KJP	10L4153
Acenaphthylene	ND		mg/kg dry	0.0221	0.0739	1	12/21/10 15:27	SW846 8270D	KJP	10L4153
Anthracene	ND		mg/kg dry	0.00993	0.0739	1	12/21/10 15:27	SW846 8270D	KJP	10L4153
Benzo (a) anthracene	ND		mg/kg dry	0.0121	0.0739	1	12/21/10 15:27	SW846 8270D	KJP	10L4153
Benzo (a) pyrene	ND		mg/kg dry	0.00883	0.0739	1	12/21/10 15:27	SW846 8270D	KJP	10L4153
Benzo (b) fluoranthene	0.0721	J	mg/kg dry	0.0419	0.0739	1	12/21/10 15:27	SW846 8270D	KJP	10L4153
Benzo (g,h,i) perylene	ND		mg/kg dry	0.00993	0.0739	1	12/21/10 15:27	SW846 8270D	KJP	10L4153
Benzo (k) fluoranthenc	ND		mg/kg dry	0.0408	0.0739	1	12/21/10 15:27	SW846 8270D	KJP	10L4153
Chrysene	0.0460	J	mg/kg dry	0.0342	0.0739	1	12/21/10 15:27	SW846 8270D	KJP	10L4153
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0166	0.0739	1	12/21/10 15:27	SW846 8270D	KJP	10L4153
Fluoranthene	ND		mg/kg dry	0.0121	0.0739	1	12/21/10 15:27	SW846 8270D	KJP	10L4153
Fluorene	ND		mg/kg dry	0.0221	0.0739	I	12/21/10 15:27	SW846 8270D	KJP	10L4153
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0342	0.0739	1	12/21/10 15:27	SW846 8270D	KJP	10L4153
Naphthalene	ND		mg/kg dry	0.0154	0.0739	1	12/21/10 15:27	SW846 8270D	KJP	10L4153
Phenanthrene	ND		mg/kg dry	0.0110	0.0739	1	12/21/10 15:27	SW846 8270D	KJP	10L4153
Pyrenc	ND		mg/kg dry	0.0254	0.0739	1	12/21/10 15:27	SW846 8270D	KJP	10L4153
l-Methylnaphthalene	ND		mg/kg dry	0.0132	0.0739	1	12/21/10 15:27	SW846 8270D	KJP	10L4153
2-Methylnaphthalene	ND		mg/kg dry	0.0232	0.0739	1	12/21/10 15:27	SW846 8270D	KJP	10L4153
Surr: Terphenyl-d14 (18-120%)	66 %					1	12/21/10 15:27	SW846 8270D	KJP	10L4153
Surr: 2-Fluorobiphenyl (14-120%)	53 %					1	12/21/10 15:27	SW846 8270D	KJP	10L4153
Surr: Nitrobenzene-d5 (17-120%)	57 %					1	12/21/10 15:27	SW846 8270D	KJP	10L4153

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THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

ClientEEG - Small Business Group, Inc. (2449)Work Order:NTL252110179 Highway 78Project Name:Laurel Bay Housing ProjectLadson, SC 29456Project Number:[none]AttmTom McElweeReceived:12/18/10 08:30

#### ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NTL2521-02 (903 Ba	arracuda - Soil	) Sampl	ed: 12/14/2	10 10:30						
General Chemistry Parameters										
% Dry Solids	95.6		%	0.500	0.500	1	12/21/10 08:56	SW-846	HLB	10L4259
Volatile Organic Compounds by EPA	A Method 8260B									
Benzene	ND		mg/kg dry	0.00126	0.00229	1	12/20/10 14:05	SW846 8260B	ККК	10L4170
Ethylbenzene	ND		mg/kg dry	0.00112	0.00229	1	12/20/10 14:05	SW846 8260B	ККК	10L4170
Naphthalene	ND		mg/kg dry	0.00195	0.00573	1	12/20/10 14:05	SW846 8260B	KKK	10L4170
Toluene	ND		mg/kg dry	0.00102	0.00229	1	12/20/10 14:05	SW846 8260B	ККК	10L4170
Xylenes, total	ND		mg/kg dry	0.00218	0.00573	1	12/20/10 14:05	SW846 8260B	KKK	10L4170
Surr: 1,2-Dichloroethane-d4 (67-138%)	98 %					1	12/20/10 14:05	SW846 8260B	KKK	10L4170
Surr: Dibromofluoromethane (75-125%)	102 %					1	12/20/10 14:05	SW846 8260B	KKK	10L4170
Surr: Toluene-d8 (76-129%)	93 %					I	12/20/10 14:05	SW846 8260B	KKK	10L4170
Surr: 4-Bromofluorobenzene (67-147%)	107 %					1	12/20/10 14:05	SW846 8260B	KKK	10L4170
Polyaromatic Hydrocarbons by EPA	8270D									
Acenaphthene	ND		mg/kg dry	0.0145	0.0694	1	12/21/10 15:48	SW846 8270D	KJP	10L4153
Acenaphthylene	ND		mg/kg dry	0.0207	0.0694	1	12/21/10 15:48	SW846 8270D	KJP	10L4153
Anthracene	ND		mg/kg dry	0.00933	0.0694	1	12/21/10 15:48	SW846 8270D	KJP	10L4153
Benzo (a) anthracene	ND		mg/kg dry	0.0114	0.0694	1	12/21/10 15:48	SW846 8270D	KJP	10L4153
Benzo (a) pyrene	ND		mg/kg dry	0.00829	0.0694	1	12/21/10 15:48	SW846 8270D	KJP	10L4153
Benzo (b) fluoranthene	ND		mg/kg dry	0.0394	0.0694	1	12/21/10 15:48	SW846 8270D	КЈР	10L4153
Benzo (g,h,i) perylene	ND		mg/kg dry	0.00933	0.0694	1	12/21/10 15:48	SW846 8270D	KJP	10L4153
Benzo (k) fluoranthene	ND		mg/kg dry	0.0384	0.0694	1	12/21/10 15:48	SW846 8270D	KJP	10L4153
Chrysene	ND		mg/kg dry	0.0321	0.0694	1	12/21/10 15:48	SW846 8270D	KJP	10L4153
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0155	0.0694	1	12/21/10 15:48	SW846 8270D	КЈР	10L4153
Fluoranthene	ND		mg/kg dry	0.0114	0.0694	1	12/21/10 15:48	SW846 8270D	KJP	10L4153
Fluorene	ND		mg/kg dry	0.0207	0.0694	1	12/21/10 15:48	SW846 8270D	KJP	10L4153
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0321	0.0694	1	12/21/10 15:48	SW846 8270D	KJP	10L4153
Naphthalene	ND		mg/kg dry	0.0145	0.0694	1	12/21/10 15:48	SW846 8270D	KJP	10L4153
Phenanthrene	ND		mg/kg dry	0.0104	0.0694	1	12/21/10 15:48	SW846 8270D	KJP	10L4153
Pyrene	ND		mg/kg dry	0.0238	0.0694	1	12/21/10 15:48	SW846 8270D	KJP	10L4153
1-Methylnaphthalene	ND		mg/kg dry	0.0124	0.0694	1	12/21/10 15:48	SW846 8270D	KJP	10L4153
2-Methylnaphthalene	ND		mg/kg dry	0.0218	0.0694	1	12/21/10 15:48	SW846 8270D	KJP	10L4153
Surr: Terphenyl-d14 (18-120%)	58 %					1	12/21/10 15:48	SW846 8270D	KJP	10L4153
Surr: 2-Fluorobiphenyl (14-120%)	52 %					1	12/21/10 15:48	SW846 8270D	KJP	10L4153
Surr: Nitrobenzene-d5 (17-120%)	57 %					1	12/21/10 15:48	SW846 8270D	KJP	10L4153

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THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NTL2521
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	Received:	12/18/10 08:30

#### ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NTL2521-03 (905 Ba	arracuda - Soil	l) Sampl	ed: 12/14/	10 15:15						
General Chemistry Parameters										
% Dry Solids	94.1		%	0.500	0.500	1	12/21/10 08:56	SW-846	HLB	10L4259
Volatile Organic Compounds by EPA	A Method 8260E	3								
Benzene	ND		mg/kg dry	0.00129	0.00235	1	12/20/10 14:35	SW846 8260B	ККК	10L4170
Ethylbenzene	ND		mg/kg dry	0.00115	0.00235	1	12/20/10 14:35	SW846 8260B	ККК	10L4170
Naphthalene	ND		mg/kg dry	0.00200	0.00588	1	12/20/10 14:35	SW846 8260B	ККК	10L4170
Toluene	ND		mg/kg dry	0.00105	0.00235	1	12/20/10 14:35	SW846 8260B	ККК	10L4170
Xylenes, total	ND		mg/kg dry	0.00223	0.00588	1	12/20/10 14:35	SW846 8260B	KKK	10L4170
Surr: 1,2-Dichloroethane-d4 (67-138%)	98 %					1	12/20/10 14:35	SW846 8260B	KKK	10L4170
Surr: Dibromofluoromethane (75-125%)	103 %					1	12/20/10 14:35	SW846 8260B	KKK	10L4170
Surr: Toluene-d8 (76-129%)	92 %					1	12/20/10 14:35	SW846 8260B	KKK	10L4170
Surr: 4-Bromofluorobenzene (67-147%)	89 %					1	12/20/10 14:35	SW846 8260B	KKK	10L4170
Polyaromatic Hydrocarbons by EPA	8270D									
Acenaphthene	ND		mg/kg dry	0.117	0.558	1	12/21/10 16:07	SW846 8270D	KJP	10L4153
Acenaphthylene	ND		mg/kg dry	0.167	0.558	1	12/21/10 16:07	SW846 8270D	KJP	10L4153
Anthracene	ND		mg/kg dry	0.0749	0.558	1	12/21/10 16:07	SW846 8270D	KJP	10L4153
Benzo (a) anthracene	ND		mg/kg dry	0.0916	0.558	1	12/21/10 16:07	SW846 8270D	KJP	10L4153
Benzo (a) pyrene	ND		mg/kg dry	0.0666	0.558	1	12/21/10 16:07	SW846 8270D	KJP	10L4153
Benzo (b) fluoranthene	0.716		mg/kg dry	0.316	0.558	1	12/21/10 16:07	SW846 8270D	KJP	10L4153
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0749	0.558	I	12/21/10 16:07	SW846 8270D	KJP	10L4153
Benzo (k) fluoranthene	ND		mg/kg dry	0.308	0.558	1	12/21/10 16:07	SW846 8270D	КЈР	10L4153
Chrysene	0.480	J	mg/kg dry	0.258	0.558	I	12/21/10 16:07	SW846 8270D	KJP	10L4153
Dibenz (a,h) anthracene	ND		mg/kg dry	0.125	0.558	1	12/21/10 16:07	SW846 8270D	KJP	10L4153
Fluoranthene	ND		mg/kg dry	0.0916	0.558	1	12/21/10 16:07	SW846 8270D	КЈР	10L4153
Fluorene	ND		mg/kg dry	0.167	0.558	1	12/21/10 16:07	SW846 8270D	KJP	10L4153
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.258	0.558	1	12/21/10 16:07	SW846 8270D	КЈР	10L4153
Naphthalene	ND		mg/kg dry	0.117	0.558	1	12/21/10 16:07	SW846 8270D	KJP	10L4153
Phenanthrene	ND		mg/kg dry	0.0833	0.558	1	12/21/10 16:07	SW846 8270D	KJP	10L4153
Pyrene	1.07		mg/kg dry	0.192	0.558	1	12/21/10 16:07	SW846 8270D	KJP	10L4153
I-Methylnaphthalene	ND		mg/kg dry	0.0999	0.558	1	12/21/10 16:07	SW846 8270D	KJP	10L4153
2-Methylnaphthalene	0.414	J	mg/kg dry	0.175	0.558	1	12/21/10 16:07	SW846 8270D	KJP	10L4153
Surr: Terphenyl-d14 (18-120%)	63 %					I	12/21/10 16:07	SW846 8270D	KJP	10L4153
Surr: 2-Fluorobiphenyl (14-120%)	51 %					1	12/21/10 16:07	SW846 8270D	KJP	10L4153
Surr: Nitrobenzene-d5 (17-120%)	58 %					1	12/21/10 16:07	SW846 8270D	KJP	10L4153



THE LEADER IN ENVIRONMENTAL TESTING

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NTL2521
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	Received:	12/18/10 08:30

#### SAMPLE EXTRACTION DATA

			Wt/Vol				Extraction
Parameter	Batch	Lab Number	Extracted	Extract Vol	Date	Analyst	Method
Polyaromatic Hydrocarbons by I	EPA 8270D						
SW846 8270D	10L4153	NTL2521-01	30.43	1.00	12/20/10 12:28	SAS	EPA 3550C
SW846 8270D	10L4153	NTL2521-02	30.27	1.00	12/20/10 12:28	SAS	EPA 3550C
SW846 8270D	10L4153	NTL2521-03	3.83	1.00	12/20/10 12:28	SAS	EPA 3550C
Volatile Organic Compounds by	EPA Method 8260B						
SW846 8260B	10L4170	NTL2521-01	4.30	5.00	12/13/10 16:15	JRL	EPA 5035
SW846 8260B	10L4170	NTL2521-02	4.56	5.00	12/14/10 10:30	JRL	EPA 5035
SW846 8260B	10L4170	NTL2521-03	4.52	5.00	12/14/10 15:15	JRL	EPA 5035

THE LEADER IN ENVIRONMENTAL TESTING

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Client EEG - Small Business Group, Inc. (2449)

10179 Highway 78

Ladson, SC 29456

Attn Tom McElwee

Work Order:NTL2521Project Name:Laurel Bay Housing ProjectProject Number:[nonc]Received:12/18/10 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					
10L4170-BLK1						
Benzene	< 0.00110		mg/kg wet	10L4170	10L4170-BLK1	12/20/10 12:34
Ethylbenzene	<0.000980		mg/kg wet	10L4170	10L4170-BLK1	12/20/10 12:34
Naphthalene	< 0.00170		mg/kg wet	10L4170	10L4170-BLK1	12/20/10 12:34
Toluene	< 0.000890		mg/kg wet	10L4170	10L4170-BLK1	12/20/10 12:34
Xylenes, total	< 0.00190		mg/kg wet	10L4170	10L4170-BLK1	12/20/10 12:34
Surrogate: 1,2-Dichloroethane-d4	94%			10L4170	10L4170-BLK1	12/20/10 12:34
Surrogate: Dibromofluoromethane	102%			10L4170	10L4170-BLK1	12/20/10 12:34
Surrogate: Toluene-d8	93%			10L4170	10L4170-BLK1	12/20/10 12:34
Surrogate: 4-Bromofluorobenzene	109%			10L4170	10L4170-BLK1	12/20/10 12:34
Polyaromatic Hydrocarbons by I	EPA 8270D					
10L4153-BLK1						
Acenaphthene	< 0.0140		mg/kg wet	10L4153	10L4153-BLK1	12/21/10 12:09
Acenaphthylene	< 0.0200		mg/kg wet	10L4153	10L4153-BLK1	12/21/10 12:09
Anthracene	<0.00900		mg/kg wet	10L4153	10L4153-BLK1	12/21/10 12:09
Benzo (a) anthracene	< 0.0110		mg/kg wet	10L4153	10L4153-BLK1	12/21/10 12:09
Benzo (a) pyrene	< 0.00800		mg/kg wet	10L4153	10L4153-BLK1	12/21/10 12:09
Benzo (b) fluoranthene	< 0.0380		mg/kg wet	10L4153	10L4153-BLK1	12/21/10 12:09
Benzo (g,h,i) perylene	< 0.00900		mg/kg wet	10L4153	10L4153-BLK1	12/21/10 12:09
Benzo (k) fluoranthene	< 0.0370		mg/kg wet	10L4153	10L4153-BLK1	12/21/10 12:09
Chrysene	< 0.0310		mg/kg wet	10L4153	10L4153-BLK1	12/21/10 12:09
Dibenz (a,h) anthracene	< 0.0150		mg/kg wet	10L4153	10L4153-BLK1	12/21/10 12:09
Fluoranthene	< 0.0110		mg/kg wet	10L4153	10L4153-BLK1	12/21/10 12:09
Fluorene	< 0.0200		mg/kg wet	10L4153	10L4153-BLK1	12/21/10 12:09
Indeno (1,2,3-cd) pyrene	< 0.0310		mg/kg wet	10L4153	10L4153-BLK1	12/21/10 12:09
Naphthalene	< 0.0140		mg/kg wet	10L4153	10L4153-BLK1	12/21/10 12:09
Phenanthrene	< 0.0100		mg/kg wet	10L4153	10L4153-BLK1	12/21/10 12:09
Pyrene	< 0.0230		mg/kg wet	10L4153	10L4153-BLK1	12/21/10 12:09
1-Methylnaphthalene	< 0.0120		mg/kg wet	10L4153	10L4153-BLK1	12/21/10 12:09
2-Methylnaphthalene	< 0.0210		mg/kg wet	10L4153	10L4153-BLK1	12/21/10 12:09
Surrogate: Terphenyl-d14	71%			10L4153	10L4153-BLK1	12/21/10 12:09
Surrogate: 2-Fluorobiphenyl	61%			10L4153	10L4153-BLK1	12/21/10 12:09
Surrogate: Nitrobenzene-d5	70%			10L4153	10L4153-BLK1	12/21/10 12:09

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2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

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

Attn Tom McElwee

Work Order:NTL2521Project Name:Laurel Bay Housing ProjectProject Number:[none]Received:12/18/10 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 10L4259-DUP1 % Dry Solids	97.8	97.2		%	0.6	20	10L4259	NTL2278-01		12/21/10 08:56

THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Client EEG - Small Business Group, Inc. (2449)

10179 Highway 78

Ladson, SC 29456

Attn Tom McElwee

Work Order:NTL2521Project Name:Laurel Bay Housing ProjectProject Number:[none]Received:12/18/10 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 E	PA Method 8260B							
10L4170-BS1								
Benzene	50.0	53.8		ug/kg	108%	78 - 126	10L4170	12/20/10 10:36
Ethylbenzene	50.0	54.4		ug/kg	109%	79 - 130	10L4170	12/20/10 10:36
Naphthalene	50.0	57.0		ug/kg	114%	72 - 150	10L4170	12/20/10 10:36
Toluene	50.0	48.9		ug/kg	98%	76 - 126	10L4170	12/20/10 10:36
Xylenes, total	150	165		ug/kg	110%	80 - 130	10L4170	12/20/10 10:36
Surrogate: 1,2-Dichloroethane-d4	50.0	45.7			91%	67 - 138	10L4170	12/20/10 10:36
Surrogate: Dibromofluoromethane	50.0	48.4			97%	75 - 125	10L4170	12/20/10 10:36
Surrogate: Toluene-d8	50.0	46.4			93%	76 - 129	10L4170	12/20/10 10:36
Surrogate: 4-Bromofluorobenzene	50.0	54.1			108%	67 - 147	10L4170	12/20/10 10:36
Polyaromatic Hydrocarbons by EP	A 8270D							
10L4153-BS1								
Acenaphthene	1.67	1.13		mg/kg wet	68%	49 - 120	10L4153	12/21/10 12:29
Acenaphthylene	1.67	1.25		mg/kg wet	75%	52 - 120	10L4153	12/21/10 12:29
Anthracene	1.67	1.28		mg/kg wet	77%	58 - 120	10L4153	12/21/10 12:29
Benzo (a) anthracene	1.67	1.35		mg/kg wet	81%	57 - 120	10L4153	12/21/10 12:29
Benzo (a) pyrene	1.67	1.41		mg/kg wet	85%	55 - 120	10L4153	12/21/10 12:29
Benzo (b) fluoranthene	1.67	1.24		mg/kg wet	75%	51 - 123	10L4153	12/21/10 12:29
Benzo (g,h,i) perylene	1.67	1.33		mg/kg wet	80%	49 - 121	10L4153	12/21/10 12:29
Benzo (k) fluoranthene	1.67	1.34		mg/kg wet	80%	42 - 129	10L4153	12/21/10 12:29
Chrysene	1.67	1.32		mg/kg wet	79%	55 - 120	10L4153	12/21/10 12:29
Dibenz (a,h) anthracene	1.67	1.32		mg/kg wet	79%	50 - 123	10L4153	12/21/10 12:29
Fluoranthene	1.67	1.21		mg/kg wet	73%	58 - 120	10L4153	12/21/10 12:29
Fluorene	1.67	1.20		mg/kg wet	72%	54 - 120	10L4153	12/21/10 12:29
Indeno (1,2,3-cd) pyrene	1.67	1.33		mg/kg wet	80%	50 - 122	10L4153	12/21/10 12:29
Naphthalene	1.67	1.13		mg/kg wet	68%	28 - 120	10L4153	12/21/10 12:29
Phenanthrene	1.67	1.26		mg/kg wet	75%	56 - 120	10L4153	12/21/10 12:29
Pyrene	1.67	1.33		mg/kg wet	80%	56 - 120	10L4153	12/21/10 12:29
1-Methylnaphthalene	1.67	0.986		mg/kg wet	59%	36 - 120	10L4153	12/21/10 12:29
2-Methylnaphthalene	1.67	1.12		mg/kg wet	67%	36 - 120	10L4153	12/21/10 12:29
Surrogate: Terphenyl-d14	1.67	1.10			66%	18 - 120	10L4153	12/21/10 12:29
Surrogate: 2-Fluorobiphenyl	1.67	0.997			60%	14 - 120	10L4153	12/21/10 12:29
Surrogate: Nitrobenzene-d5	1.67	1.11			67%	17 - 120	10L4153	12/21/10 12:29

THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Client EEG - Small Business Group, Inc. (2449)

10179 Highway 78

Ladson, SC 29456

Attn Tom McElwee

Work Order:NTL2521Project Name:Laurel Bay Housing ProjectProject Number:[none]Received:12/18/10 08:30

### PROJECT QUALITY CONTROL DATA LCS Dup

			Spike		Target				Sample	Analyzed
Analyte	Orig. Val. Duplicate	Q Units		% Rec.	Range	RPD Limit		Batch	Duplicated	Date/Time
Volatile Organic Compounds by E	PA Method 8260B									
10L4170-BSD1										
Benzene	51.1	ug/kg	50.0	102%	78 - 126	5	50	10L4170		12/20/10 11:05
Ethylbenzene	51.9	ug/kg	50.0	104%	79 - 130	5	50	10L4170		12/20/10 11:05
Naphthalene	50.2	ug/kg	50.0	100%	72 - 150	13	50	10L4170		12/20/10 11:05
Toluene	46.9	ug/kg	50.0	94%	76 - 126	4	50	10L4170		12/20/10 11:05
Xylenes, total	157	ug/kg	150	105%	80 - 130	5	50	10L4170		12/20/10 11:05
Surrogate: 1,2-Dichloroethane-d4	45.5	ug/kg	50.0	91%	67 - 138			10L4170		12/20/10 11:05
Surrogate: Dibromofluoromethane	49.1	ug/kg	50.0	98%	75 - 125			10L4170		12/20/10 11:05
Surrogate: Toluene-d8	47.1	ug/kg	50.0	94%	76 - 129			10L4170		12/20/10 11:05
Surrogate: 4-Bromofluorobenzene	49.4	ug/kg	50.0	99%	67 - 147			10L4170		12/20/10 11:05

THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Client EEG - Small Business Group, Inc. (2449)

10179 Highway 78

Ladson, SC 29456

Attn Tom McElwee

Work Order:	NTL2521
Project Name:	Laurel Bay Housing Project
Project Number:	[none]
Received:	12/18/10 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 I	EPA Method 8260	B									
10L4170-MS1											
Benzene	ND	0.0418		mg/kg dry	0.0398	105%	42 - 141	10L4170	NTL2316-02	12/20/10 16:38	
Ethylbenzene	ND	0.0441		mg/kg dry	0.0398	111%	21 - 165	10L4170	NTL2316-02	12/20/10 16:38	
Naphthalene	ND	0.0429		mg/kg dry	0.0398	108%	10 - 160	10L4170	NTL2316-02	12/20/10 16:38	
Toluene	ND	0.0318		mg/kg dry	0.0398	80%	45 - 145	10L4170	NTL2316-02	12/20/10 16:38	
Xylenes, total	ND	0.135		mg/kg dry	0.119	113%	31 - 159	10L4170	NTL2316-02	12/20/10 16:38	
Surrogate: 1,2-Dichloroethane-d4		47.5		ug/kg	50.0	95%	67 - 138	10L4170	NTL2316-02	12/20/10 16:38	
Surrogate: Dibromofluoromethane		51.6		ug/kg	50.0	103%	75 - 125	10L4170	NTL2316-02	12/20/10 16:38	
Surrogate: Toluene-d8		38.1		ug/kg	50.0	76%	76 - 129	10L4170	NTL2316-02	12/20/10 16:38	
Surrogate: 4-Bromofluorobenzene		57.1		ug/kg	50.0	114%	67 - 147	10L4170	NTL2316-02	12/20/10 16:38	
Polyaromatic Hydrocarbons by EPA 8270D											
10L4153-MS1											
Acenaphthene	ND	0.910		mg/kg wet	1.65	55%	42 - 120	10L4153	NTL2299-01	12/21/10 12:48	
Acenaphthylene	ND	1.00		mg/kg wet	1.65	61%	32 - 120	10L4153	NTL2299-01	12/21/10 12:48	
Anthracene	ND	1.08		mg/kg wet	1.65	65%	10 - 200	10L4153	NTL2299-01	12/21/10 12:48	
Benzo (a) anthracene	ND	1.14		mg/kg wet	1.65	69%	41 - 120	10L4153	NTL2299-01	12/21/10 12:48	
Benzo (a) pyrene	ND	1.15		mg/kg wet	1.65	70%	33 - 121	10L4153	NTL2299-01	12/21/10 12:48	
Benzo (b) fluoranthene	ND	1.23		mg/kg wet	1.65	74%	26 - 137	10L4153	NTL2299-01	12/21/10 12:48	
Benzo (g,h,i) perylene	ND	1.10		mg/kg wet	1.65	67%	21 - 124	10L4153	NTL2299-01	12/21/10 12:48	
Benzo (k) fluoranthene	ND	0.962		mg/kg wet	1.65	58%	14 - 140	10L4153	NTL2299-01	12/21/10 12:48	
Chrysene	ND	1.12		mg/kg wet	1.65	68%	28 - 123	10L4153	NTL2299-01	12/21/10 12:48	
Dibenz (a,h) anthracene	ND	1.11		mg/kg wet	1.65	67%	25 - 127	10L4153	NTL2299-01	12/21/10 12:48	
Fluoranthene	ND	1.04		mg/kg wet	1.65	63%	38 - 120	10L4153	NTL2299-01	12/21/10 12:48	
Fluorene	ND	1.01		mg/kg wet	1.65	62%	41 - 120	10L4153	NTL2299-01	12/21/10 12:48	
Indeno (1,2,3-cd) pyrene	ND	1.12		mg/kg wet	1.65	68%	25 - 123	10L4153	NTL2299-01	12/21/10 12:48	
Naphthalene	ND	0.937		mg/kg wet	1.65	57%	25 - 120	10L4153	NTL2299-01	12/21/10 12:48	
Phenanthrene	ND	1.06		mg/kg wet	1.65	65%	37 - 120	10L4153	NTL2299-01	12/21/10 12:48	
Pyrene	ND	1.12		mg/kg wet	1.65	68%	29 - 125	10L4153	NTL2299-01	12/21/10 12:48	
1-Methylnaphthalene	ND	0.792		mg/kg wet	1.65	48%	19 - 120	10L4153	NTL2299-01	12/21/10 12:48	
2-Methylnaphthalene	ND	0.908		mg/kg wet	1.65	55%	11 - 120	10L4153	NTL2299-01	12/21/10 12:48	
Surrogate: Terphenyl-d14		0.919		mg/kg wet	1.65	56%	18 - 120	10L4153	NTL2299-01	12/21/10 12:48	
Surrogate: 2-Fluorobiphenyl		0.829		mg/kg wet	1.65	50%	14 - 120	10L4153	NTL2299-01	12/21/10 12:48	
Surrogate: Nitrobenzene-d5		0.893		mg/kg wet	1.65	54%	17 - 120	10L4153	NTL2299-01	12/21/10 12:48	

THE LEADER IN ENVIRONMENTAL TESTING

Client EEG - Small Business Group, Inc. (2449)

10179 Highway 78

Ladson, SC 29456

Attn Tom McElwee

Work Order:	NTL2521
Project Name:	Laurel Bay Housing Project
Project Number:	[none]
Received:	12/18/10 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 8	3260B										
10L4170-MSD1												
Benzene	ND	0.0396		mg/kg dry	0.0388	102%	42 - 141	5	50	10L4170	NTL2316-02	12/20/10 17:08
Ethylbenzene	ND	0.0402		mg/kg dry	0.0388	104%	21 - 165	9	50	10L4170	NTL2316-02	12/20/10 17:08
Naphthalene	ND	0.0402		mg/kg dry	0.0388	104%	10 - 160	6	50	10L4170	NTL2316-02	12/20/10 17:08
Toluene	ND	0.0362		mg/kg dry	0.0388	93%	45 - 145	13	50	10L4170	NTL2316-02	12/20/10 17:08
Xylenes, total	ND	0.124		mg/kg dry	0.116	106%	31 - 159	9	50	10L4170	NTL2316-02	12/20/10 17:08
Surrogate: 1,2-Dichloroethane-d4		48.3		ug/kg	50.0	97%	67 - 138			10L4170	NTL2316-02	12/20/10 17:08
Surrogate: Dibromofluoromethane		51.1		ug/kg	50.0	102%	75 - 125			10L4170	NTL2316-02	12/20/10 17:08
Surrogate: Toluene-d8		46.0		ug/kg	50.0	92%	76 - 129			10L4170	NTL2316-02	12/20/10 17:08
Surrogate: 4-Bromofluorobenzene		51.3		ug/kg	50.0	103%	67 - 147			10L4170	NTL2316-02	12/20/10 17:08
Polyaromatic Hydrocarbons by 1	EPA 8270D											
10L4153-MSD1												
Acenaphthene	ND	1.01		mg/kg wet	1.66	61%	42 - 120	11	40	10L4153	NTL2299-01	12/21/10 13:08
Acenaphthylene	ND	1.12		mg/kg wet	1.66	68%	32 - 120	12	30	10L4153	NTL2299-01	12/21/10 13:08
Anthracene	ND	1.14		mg/kg wet	1.66	69%	10 - 200	6	50	10L4153	NTL2299-01	12/21/10 13:08
Benzo (a) anthracene	ND	1.22		mg/kg wet	1.66	74%	41 - 120	7	30	10L4153	NTL2299-01	12/21/10 13:08
Benzo (a) pyrene	ND	1.29		mg/kg wet	1.66	78%	33 - 121	11	33	10L4153	NTL2299-01	12/21/10 13:08
Benzo (b) fluoranthene	ND	1.12		mg/kg wet	1.66	67%	26 - 137	9	42	10L4153	NTL2299-01	12/21/10 13:08
Benzo (g,h,i) perylene	ND	1.20		mg/kg wet	1.66	73%	21 - 124	8	32	10L4153	NTL2299-01	12/21/10 13:08
Benzo (k) fluoranthene	ND	1.21		mg/kg wet	1.66	73%	14 - 140	22	39	10L4153	NTL2299-01	12/21/10 13:08
Chrysene	ND	1.19		mg/kg wet	1.66	72%	28 - 123	5	34	10L4153	NTL2299-01	12/21/10 13:08
Dibenz (a,h) anthracene	ND	1.18		mg/kg wet	1.66	71%	25 - 127	7	31	10L4153	NTL2299-01	12/21/10 13:08
Fluoranthene	ND	1.11		mg/kg wet	1.66	67%	38 - 120	7	35	10L4153	NTL2299-01	12/21/10 13:08
Fluorene	ND	1.08		mg/kg wet	1.66	65%	41 - 120	7	37	10L4153	NTL2299-01	12/21/10 13:08
Indeno (1,2,3-cd) pyrene	ND	1.19		mg/kg wet	1.66	72%	25 - 123	6	32	10L4153	NTL2299-01	12/21/10 13:08
Naphthalene	ND	1.01		mg/kg wet	1.66	61%	25 - 120	8	42	10L4153	NTL2299-01	12/21/10 13:08
Phenanthrene	ND	1.15		mg/kg wet	1.66	69%	37 - 120	8	32	10L4153	NTL2299-01	12/21/10 13:08
Pyrene	ND	1.17		mg/kg wet	1.66	71%	29 - 125	4	40	10L4153	NTL2299-01	12/21/10 13:08
1-Methylnaphthalene	ND	0.889		mg/kg wet	1.66	54%	19 - 120	11	45	10L4153	NTL2299-01	12/21/10 13:08
2-Methylnaphthalene	ND	1.01		mg/kg wet	1.66	61%	11 - 120	11	50	10L4153	NTL2299-01	12/21/10 13:08
Surrogate: Terphenyl-d14		0.966		mg/kg wet	1.66	58%	18 - 120			10L4153	NTL2299-01	12/21/10 13:08
Surrogate: 2-Fluorobiphenyl		0.913		mg/kg wet	1.66	55%	14 - 120			10L4153	NTL2299-01	12/21/10 13:08
Surrogate: Nitrobenzene-d5		1.01		mg/kg wet	1.66	61%	17 - 120			10L4153	NTL2299-01	12/21/10 13:08



THE LEADER IN ENVIRONMENTAL TESTING

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**TestAmerica** Nashville

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NTL2521
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	Received:	12/18/10 08:30

# CERTIFICATION SUMMARY

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



THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NTL2521
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	Received:	12/18/10 08:30

#### DATA QUALIFIERS AND DEFINITIONS

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.

ND Not detected at the reporting limit (or method detection limit if shown)

#### METHOD MODIFICATION NOTES

	LTESTING	Nashville 2960 Fost Nashville,	er Crei	ighton	,				Free	800	-726-1 -765-1 -726-1	980							To assis method regulato	s, is this	s work ooses?	being	conduc	ted for		Yee	Ν.
Client Name/Account #:											<u> </u>				<del></del>							•		nitoring? Action?	<i>!</i>	_	
City/State/Zip:	10179 Highway														-		Sito	State:	SC.		1	Emorce	ment A	ACTION ?		res_	 INC
Project Manager:				aine of				~									Due	PO#:		100	5	-					 
Telephone Number:				9.10.11		Fax	No.:	8	म3)	8	379	) -	04	0	T		TA Qu	•									 
Sampler Name: (Print)	PRA	H.S	ha	u)				-	<u></u>										Laurel								 
Sampler Signature:	pla	10 0-																; ject #:									
		$\overline{T}$				Г		Pre	serva	tive	~	1	_	Matri	ix		_				An	alyze F	or:				
174 BAREACUDA 903 BAREACUDA 905 BAREACUDA	Date Sampled	1415 1030 1515	5 6 V No. of Containers Shipped	X X Grab	Composite	Field Flittered	HNO3 (Red Label)	Harmanner 222	NaOH (Orange Label)	H <sub>7</sub> SO <sub>4</sub> Glass(Yellow Label)	N None (Black Label)	Groundwater	Wastewater	Drinking Water	X Sol	-	×××× BTEX + Napth - 8260	X X 20D		123							/ RUSH TAT (Pre-Schedule
linguished by	Date 12/17/ Gate	10	Tir 09 Tin	00	1	ved by:	1	<u>ب</u> خ	Shipm	1		-L 		Dati	e	EDE:	X Tim	e		Tempe VOCs I	rature	Upon I			<i>\</i>	<b>1</b>	 Y

# ATTACHMENT A

1.6	<b>DN-H</b>		- ifeet Dee		1.	-6					
NON-HAZARDOUS MANIFEST	enerator's US EPA	A ID NO. IVI	anifest Doc	140.	2. Page 1						
3. Generator's Mailing Address:	Gen	erator's Site Address (if a	lifferent than m	ailing):		est Number	1				
MCAS, BEAUFORT			W	MNA	0031	6804					
LAUREL BAY HOUSING					1	B. State	Generator	's ID			
BEAUFORT, SC 29907 4. Generator's Phone 843-228-64											
4. Generator's Phone 843-228-64 5. Transporter 1 Company Name	01	6. US EPA II	0 Number				CONTRACTOR		19.53		
					C. State T	ransporter's l	D	Lenar	3. 5.		
EEG, INC.					D. Transp	orter's Phone	843	-879-04	11		
7. Transporter 2 Company Name		8. US EPA II	0 Number		E Chata T		0	the Point			
		1. 1. 1. 1. 1. 1.				ransporter's I orter's Phone			-		
9. Designated Facility Name and Site Addres	SS	10. US EPA	ID Number	-		siter stillene			1		
HICKORY HILL LANDFILL					G. State F	acility ID	at	May 19	R		
2621 LOW COUNTRY ROAD					H. State Facility Phone 843-987-4643						
RIDGELAND, SC 29936											
11. Description of Waste Materials				ntainers	13. Total Quantity	14. Unit Wt./Vol.	I,	Misc. Comm	ents		
a. HEATING OIL TANKS FILLED WITH	SAND		No.	Туре	Quantity	vvt./vol.					
				204	9.76	a start at					
WM Profile #	102655SC			)							
a.					Ster.						
							1				
WM Profile #							Ster with	-	3/2		
			Nicks	Alexy			2.18 3				
WM Profile #	and the second		846-19 J				1	-	-		
a. Maay faar			142.00	10 20 20 20	No and	TESSO D	and the second		1		
			and the second	1. T.			2 4 20	CONNET State			
WM Profile #	Statis Remain						1.0.3.5.9	40.00			
Additional Descriptions for Materials Liste	ed Above		K. Disposi	al Location			1251				
			Cell		CONCE.	NER .	Level	1.34			
	No. 194	Charles and Charles	Grid		/	1. 19-00-					
					5	a number	ADDI		ide		
5. Special Handling Instructions and Addition	al Information	BARRACUDA	4)	903	PAR	VICUOR	1915	APRA	200		
	nal Information	BARRACUDA	4)	905	BARR	Acuda	B	ARRA	- au		
D922 BARRACUDA	nal Information	BARRAQUÍA BARRAQUÍA EMERGENCY CON	Contract Contract of		BARR	acuda	ig B	ARRA			
D922 BARRACUDA urchase Order #	3914	BARRACUS	Contract Contract of		BARR	Acud A	B	ARRA			
DAZY BARRACULA urchase Order # 6. GENERATOR'S CERTIFICATE: hereby certify that the above-described mate	3914 erials are not have	BARRACUC EMERGENCY CON	ITACT / PHC	INE NO.: Int 261 or a	ny applicable	state law, ha					
DARKACALA urchase Order # 6. GENERATOR'S CERTIFICATE: hereby certify that the above-described mate ccurately described, classified and packaged	3914 erials are not have	EMERGENCY CON EMERGENCY CON	ITACT / PHC ed by CFR Pa tation accor	INE NO.: Int 261 or a	ny applicable	state law, ha	ave been fu	ully and			
DARKACULA urchase Order # 6. GENERATOR'S CERTIFICATE: hereby certify that the above-described mate ccurately described, classified and packaged rinted Name	3914 erials are not have	BARRACUC EMERGENCY CON	ITACT / PHC ed by CFR Pa tation accor	INE NO.: Int 261 or a	ny applicable	state law, ha					
DADA BARAACULA urchase Order # 6. GENERATOR'S CERTIFICATE: hereby certify that the above-described mate ccurately described, classified and packaged rinted Name Martes H. Hercon	erials are not haz and are in prope	EMERGENCY CON EMERGENCY CON cardous wastes as define the condition for transpor Signature "On behalf	ITACT / PHC ed by CFR Pa tation accor	INE NO.: Int 261 or a	ny applicable	state law, ha	ave been fu	ully and	6		
DADA BARRACULA urchase Order # 6. GENERATOR'S CERTIFICATE: hereby certify that the above-described mature ccurately described, classified and packaged rinted Name 7. Transporter 1 Acknowledgement of Recei Printed Name	erials are not have and are in properties of Materials	BARRACUC EMERGENCY CON cardous wastes as define er condition for transpor Signature "On behall Signature	ITACT / PHC ed by CFR Pa tation accor	INE NO.: Int 261 or a	ny applicable	state law, ha	ave been fu	ully and	Y		
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5. GENERATOR'S CERTIFICATE: hereby certify that the above-described mate curately described, classified and packaged inted Name 7. Transporter 1 Acknowledgement of Recei Printed Name	erials are not have and are in properties of Materials	BARRACUC EMERGENCY CON cardous wastes as define er condition for transpor Signature "On behall Signature	ITACT / PHC ed by CFR Pa tation accor	INE NO.: Int 261 or a	ny applicable	state law, ha	Month	ully and Day	Y		
Description of the second seco	erials are not have and are in properties of Materials	BARRACUC EMERGENCY CON cardous wastes as define r condition for transpor Signature "On behalt Signature	ITACT / PHC ed by CFR Pa tation accor	INE NO.: Int 261 or a	ny applicable	state law, ha	Month	Day	Y		
Description of Final Treatment/Disposal	erials are not have and are in proper ipt of Materials	BARRACUC EMERGENCY CON Eardous wastes as define er condition for transpor Signature "On behalt Signature Signature	ed by CFR Pa tation accor	INE NO.: Int 261 or and ding to app	ny applicable licable regul	state law, ha	Month	Day Day Day Day Day	Y Y Y Y		
Description of the above listed treatment printed Name 0. Certificate of Final Treatment/Disposal certify, on behalf of the above listed treatment plicable laws, regulations, permits and licen	erials are not have and are in proper ipt of Materials ipt of Materials ent facility, that to uses on the dates	BARRACUC EMERGENCY CON Eardous wastes as define r condition for transpor Signature "On behald Signature Signature Signature b the best of my knowlee listed above.	ed by CFR Patation accor	INE NO.: Int 261 or and ding to app	ny applicable licable regul	state law, ha	Month	Day Day Day Day Day	Y Y Y Y		
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Purchase Order # 16. GENERATOR'S CERTIFICATE: hereby certify that the above-described mate accurately described, classified and packaged Printed Name Printed Name	erials are not have and are in proper ipt of Materials ipt of Materials ent facility, that to uses on the dates	BARRACUC EMERGENCY CON Eardous wastes as define r condition for transpor Signature "On behald Signature Signature Signature b the best of my knowlee listed above.	d by CFR Patation accor	INE NO.: Int 261 or and ding to app	ny applicable licable regul	state law, ha	Month	Day Day Day Day Day	- Ye Уе Уе		

Appendix C Laboratory Analytical Report - Groundwater



# Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Description: BEALB905TW01WG20170228

Laboratory ID: SC02051-003 Matrix: Aqueous

Date Sampled:02/28/2017 1025

Date Received: 03/02/2017											
RunPrep Method15030B	Analytical Method E 8260B		<b>Analysis Da</b> 3/03/2017 2		•	Date	<b>Batch</b> 36205				
Parameter		CA Numbe		alytical lethod	Result	Q	LOQ	LOD	DL	Units	Run
Benzene		71-43-	-2	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Ethylbenzene		100-41-	4	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Naphthalene		91-20-	-3	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Toluene		108-88-	3	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Xylenes (total)		1330-20-	-7	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Surrogate		un 1 Ac covery	ceptance Limits								
Bromofluorobenzene		99	85-114								
Dibromofluoromethane		102	80-119								
1,2-Dichloroethane-d4		93	81-118								
Toluene-d8		98	89-112								

PQL = Practical quantitation limitB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeH = Out of holding timeQ = Surrogate failureND = Not detected at or above the MDLJ = Estimated result < PQL and  $\geq$  MDLP = The RPD between two GC columns exceeds 40%N = Recovery is out of criteriaL = LCS/LCSD failureWhere 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 DriveWest Columbia, SC 29172(803) 791-9700Fax (803) 791-9111www.shealylab.com

Client: AECOM - Resolution Consultants

Description: BEALB905TW01WG20170228

Laboratory ID: SC02051-003

Date Sampled:02/28/2017 1025

Matrix: Aqueous

Date Received: 03/02/2017

RunPrep Method13520C	Analytical Method 8270D		nalysis Date Analyst /10/2017 1906 RBH	•	<b>Date</b> 2017 1656	<b>Batch</b> 36264				
Parameter		CAS Numbe	•	Result	Q	LOQ	LOD	DL	Units	Run
Benzo(a)anthracene		56-55-3	8 8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Benzo(b)fluoranthene		205-99-2	2 8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Benzo(k)fluoranthene		207-08-9	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Chrysene		218-01-9	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Dibenzo(a,h)anthracene		53-70-3	8 8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Surrogate	Q % F	Run 1 Acc Recovery	eptance Limits							
Nitrobenzene-d5		55 4	14-120							
2-Fluorobiphenyl		52 4	44-119							
Terphenyl-d14		80 5	50-134							

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  $J = Estimated result < PQL and <math>\ge MDL$  $\mathsf{P}=\mathsf{The}\;\mathsf{RPD}$  between two GC columns exceeds 40% N = Recovery is out of criteria L = LCS/LCSD failure S = MS/MSD failure Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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





August 24, 2016

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 Tank Assessment Reports

Dear Mr. Drawdy:

The South Carolina Department of Health and Environmental Control (the Department) received the Underground Storage Tanks (USTs) Assessment Reports for the addresses listed in the attachment. 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 <u>et seq</u>., as amended).

The Department has reviewed the referenced 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 these sites.

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,

LIPT

Laurel Petrus, Environmental Engineer Associate RCRA Federal Facilities Section

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

### Attachment to: Petrus to Drawdy, August 24, 2016 Subject: IGWA, Laurel Bay Underground Tank Assessment Reports

### Draft Final Initial Groundwater Investigation Report for (41 addresses)

122 Banyan	905 Barracuda	
159 Cypress Tank 2	921 Barracuda	
221 Cypress	935 Albacore	
283 Birch Tank 2	946 Albacore	
328 Ash Tank 2	1037 Iris	
346 Ash	1039 Iris	
359 Aspen	1110 Iris	
370 Aspen	1134 Iris	
377 Aspen	1143 Iris	
409 Elderberry	1202 Cardinal	
486 Laurel Bay	1212 Cardinal	
515 Laurel Bay	1222 Cardinal	10
542 Laurel Bay	1224 Cardinal	
593 Aster	1226 Dove	
630 Dahlia	1236 Dove	
693 Camellia	1245 Dove	
723 Blue Bell	1247 Dove	
774 Althea	1274 Albatross	1995.
860 Dolphin	1319 Albatross	
873 Cobia	1337 Albatross	
883 Cobia		



July 27, 2017

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

RE: Draft Final Initial Groundwater Investigation Report, February and March 2017

Dear Mr. Drawdy:

The South Carolina Department of Health and Environmental Control (DHEC) received groundwater data from temporary monitoring well installations in the Draft Final Groundwater Investigation Report, Laurel Bay Military Housing Area for the fifty two (52) addresses shown in the attachment. 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 DHEC's request, groundwater samples were collected from the attached referenced addresses. DHEC 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 groundwater monitoring wells should be installed at the three (3) stated addresses. For the remaining forty nine (49) addresses, there is no indication of contamination on the property and therefore no further investigation is required at this time.

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

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

Sincerely,

Lalpt

Laurel Petrus, Environmental Engineer Associate Bureau of Land and Waste Management

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

Draft Final Initial Groundwater Investigation Report for (52 addresses)

Permanent Well Installation recommedation (3 Addresses):

- 254 Beech Street (110 ug/L)
- o 268 Beech Street (28 ug/L)
- o 774 Althea Street (35 ug/L)

No Further Action recommendation (49 addresses):

113 Birch Drive 0 121 Banyan Drive 0 122 Banyan Drive 0 **159 Cypress Street** 0 221 Cypress Street 0 274 Birch Drive 0 279 Birch Drive 0 283 Birch Drive 0 328 Ash Street 0 346 Ash Street 0 359 Aspen Street 0 370 Aspen Street 0 377 Aspen Street 0 409 Elderberry Drive 0 465 Dogwood Drive 0 480 Laurel Bay Boulevard 0 486 Laurel Bay Boulevard 0 515 Laurel Bay Boulevard Q 542 Laurel Bay Boulevard 0 593 Aster Street 0 630 Dahlia Drive 0 641 Dahlia Drive 0 693 Camelia Drive 0 723 Bluebell Lane 0 860 Dolphin Street 0 873 Cobia Drive 0 883 Cobia Drive 0 905 Barracuda Drive 0 921 Barracuda Drive 0 935 Albacore Street 0 946 Albacore Street 0 1037 Iris Lane 0 1039 Iris Lane 0 1110 Iris Lane 0 1134 Iris Lane 0 1143 Iris Lane 0 1177 Bobwhite Drive 0 1202 Cardinal Lane 0 0 1212 Cardinal Lane 0 1222 Cardinal Lane 1224 Cardinal Lane 0 1226 Dove Lane 0 1236 Dove Lane 0 1245 Dove Lane 0 1247 Dove Lane 0 0 1274 Albatross Drive 1319 Albatross Drive 0 1337 Albatross Drive 0 1346 Cardinal Lane 0