SUMMARY REPORT
281 EAGLE LANE (FORMERLY 1404 EAGLE LANE)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC

Revision: 0 Prepared for:

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

and



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

Prepared by:



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

**Contract Number: N62470-14-D-9016** 

CTO WE52

**JUNE 2021** 



# **Table of Contents**

1.0	INTRODUC	CTION	1
1.1 1.2		ND INFORMATION DVAL AND ASSESSMENT PROCESS	
2.0	SAMPLING	ACTIVITIES AND RESULTS	3
2.1 2.2 2.3 2.4	SOIL ANAL GROUNDW	OVAL AND SOIL SAMPLING	4
3.0	PROPERTY	' STATUS	5
4.0	REFERENC	ES	5
Table Table		Tables  Laboratory Analytical Results - Soil  Laboratory Analytical Results - Groundwater	
		Appendices	
Apper	ndix A	Multi-Media Selection Process for LBMH	
Apper	ndix B	UST Assessment Report	
Apper	ndix C	Laboratory Analytical Report - Groundwater	
Apper	ndix D	Regulatory Correspondence	





#### **List of Acronyms**

bgs below ground surface

BTEX benzene, toluene, ethylbenzene, and xylenes

CTO Contract Task Order

COPC constituents of potential concern

ft feet

IDIQ Indefinite Delivery, Indefinite Quantity

IGWA Initial Groundwater Assessment

JV Joint Venture

LBMH Laurel Bay Military Housing MCAS Marine Corps Air Station

NAVFAC Mid-Lant Naval Facilities Engineering Command Mid-Atlantic

NFA No Further Action

PAH polynuclear aromatic hydrocarbon QAPP Quality Assurance Program Plan

RBSL risk-based screening level

SCDHEC South Carolina Department of Health and Environmental Control

Site LBMH area at MCAS Beaufort, South Carolina

UST underground storage tank
VISL vapor intrusion screening level



#### 1.0 INTRODUCTION

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

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

This report summarizes the results the environmental investigation activities associated with the storage of home heating oil and the potential release of petroleum constituents at the referenced property. Based on the results of the investigation, a No Further Action (NFA) determination has been made by the South Carolina Department of Health and Environmental Control (SCDHEC) for 281 Eagle Lane (Formerly 1404 Eagle Lane). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

#### 1.1 Background Information

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





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

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

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

#### 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.

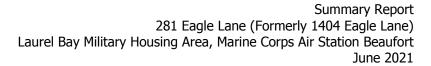
The results of the soil sampling at each former UST location were used to determine if a potential for groundwater contamination exists (i.e., soil results greater than RBSLs) and subsequently to select properties for follow-up initial groundwater assessment (IGWA) sampling. The results of the IGWA sampling (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 281 Eagle Lane (Formerly 1404 Eagle Lane). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1404 Eagle Lane* (MCAS Beaufort, 2009). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Initial Groundwater Investigation Report – May and June 2015* (Resolution Consultants, 2015). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C.

#### 2.1 UST Removal and Soil Sampling

On July 28, 2009, a single 280 gallon heating oil UST was removed from the landscaped area adjacent to the driveway at 281 Eagle Lane (Formerly 1404 Eagle Lane). 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 281 Eagle Lane (Formerly 1404 Eagle Lane) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated April 7, 2015, SCDHEC requested an IGWA for 281 Eagle Lane (Formerly 1404 Eagle Lane) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

#### 2.3 Groundwater Sampling

On June 18, 2015, a temporary monitoring well was installed at 281 Eagle Lane (Formerly 1404 Eagle Lane), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST. The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – May and June 2015* (Resolution Consultants, 2015).



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

#### 2.4 Groundwater Analytical Results

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

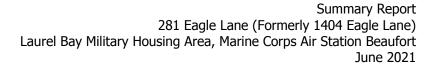
The groundwater results collected from 281 Eagle Lane (Formerly 1404 Eagle Lane) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated that the groundwater was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

#### 3.0 PROPERTY STATUS

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 281 Eagle Lane (Formerly 1404 Eagle Lane). This NFA determination was obtained in a letter dated February 22, 2016. SCDHEC's NFA letter is provided in Appendix D.

#### 4.0 REFERENCES

- Marine Corps Air Station Beaufort, 2009. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report 1404 Eagle Lane, Laurel Bay Military Housing Area, October 2009.
- Resolution Consultants, 2015. *Initial Groundwater Investigation Report May and June 2015* for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina, October 2015.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2013. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 2.0*, April 2013.





- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2015. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 3.0*, May 2015.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2016. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 3.1*, February 2016.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2017. *R.61-92, Part 280, Underground Storage Tank Control Regulations*, March 2017.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2018. *Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service*, March 2018.
- South Carolina Department of Health and Environmental Control Bureau of Water, 2016. *R.61-71, Well Standards*, June 2016.

## **Tables**



# Table 1 Laboratory Analytical Results - Soil 281 Eagle Lane (Formerly 1404 Eagle Lane) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Results Sample Collected 07/28/09						
olatile 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 Ana	lyzed by EPA Method 8270D (mg/kg)							
Benzo(a)anthracene	0.66	ND						
Benzo(b)fluoranthene	0.66	ND						
Benzo(k)fluoranthene	0.66	ND						
Chrysene	0.66	ND						
Dibenz(a,h)anthracene	0.66	ND						

#### Notes:

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

<sup>&</sup>lt;sup>(1)</sup> South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 2.0 (SCDHEC, April 2013).

# Table 2 Laboratory Analytical Results - Groundwater 281 Eagle Lane (Formerly 1404 Eagle Lane) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Site-Specific Groundwater VISLs (µg/L) <sup>(2)</sup>	Results Sample Collected 06/18/15					
/olatile 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 8270	D (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:

(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<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

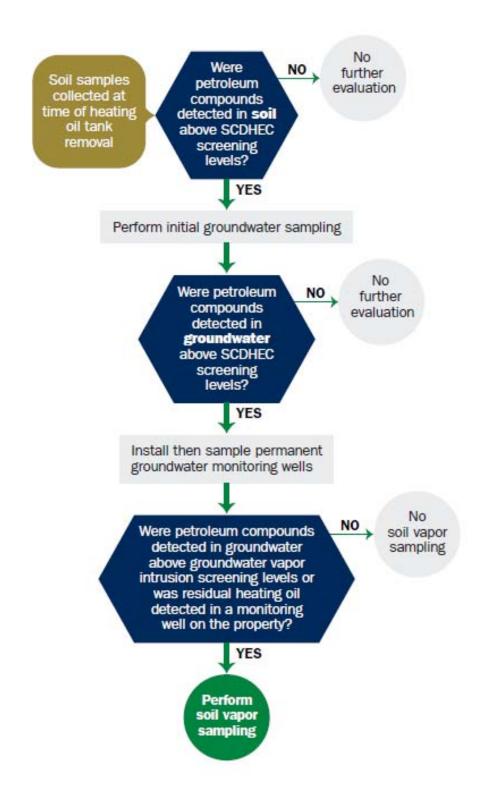
μg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

<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).

# Appendix A Multi-Media Selection Process for LBMH





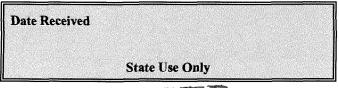
**Appendix A - Multi-Media Selection Process for LBMH** 

# Appendix B UST Assessment Report



# South Carolina Department of Health and Environmental Control (SCDHEC)

# **Underground Storage Tank (UST) Assessment Report**



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

RECEIVE)

OCT 0 8 2009

SO DHEC - Buresu of Land & Waste Management

### I. OWNERSHIP OF UST (S)

	Commanding Officer		(Craig Ehde)				
Owner Name (Corporation, Individual, Public Agency, Other)							
P.O. Box 55001							
Mailing Address							
Beaufort,	South Car	olina 2	9904-5001				
City	State		Zip Code				
843	228-		Craig				
Area Code	Telephone Ni	ımber	Contact Per	son			

# II. SITE IDENTIFICATION AND LOCATION

Permit I.D. #						
_Laurel Bay Milit	ary Housing Area,	Marine Co	orps Air	Station,	Beaufort,	SC
Facility Name or Compar	y Site Identifier		_	<u>-</u> -		
	, Laurel Bay Milit	ary Hous	ing Area			wash-
Street Address or State Ro	oad (as applicable)					
Beaufort,	Beaufort					****
City	County					

Attachment 2

# III. INSURANCE INFORMATION

	Insura	nce Statement						
qualify to receive state monies to	pay for appropriate d, written confirma	at Permit ID Number may e site rehabilitation activities. Before participation is ation of the existence or non-existence of an environmental completed.						
Is there now, or has there of UST release? YES		ance policy or other financial mechanism that covers this one)						
If you answered <b>Y</b> l	ES to the above que	estion, please complete the following information:						
My The The	My policy provider is: The policy deductible is: The policy limit is:							
If you have this type of ins	surance, please incl	lude a copy of the policy with this report.						
	IV. REQUEST	Γ FOR SUPERB FUNDING						
I DO / DO NOT wish to	o participate in the	SUPERB Program. (Circle one.)						
V. CI	ERTIFICATION	N (To be signed by the UST owner)						
I certify that I have personally attached documents; and that information, I believe that the si	examined and am based on my inquibmitted informa	n familiar with the information submitted in this and all uiry of those individuals responsible for obtaining this tion is true, accurate, and complete.						
Name (Type or print.)								
Signature	- manufacture di -							
To be completed by Notar	ry Public:							
Sworn before me this	day of	, 20						
(Name)								
Notary Public for the state of	incipand outsi	1. Canalina						

1404Eagle
Heating oil
280 gal
Late 1950s
Steel
Mid 1980s
6'4"
No
No
Removed
7/28/09
Yes
Yes
he ground (attach disposal manifests) the ground and disposed of at a
hment "A."

# VII. PIPING INFORMATION

	1404Eagle	
	Steel	
Construction Material(ex. Steel, FRP)	& Copper	
Distance from UST to Dispenser	N/A	1
Number of Dispensers	N/A	
Type of System Pressure or Suction	Suction	
Was Piping Removed from the Ground? Y/N	Yes	
Visible Corrosion or Pitting Y/N	Yes	
Visible Holes Y/N	No	
Age	Late 1950s	
If any corrosion, pitting, or holes were observed,	describe the location and extent for each	ch piping
	1 the	7
Corrosion and pitting were found	d on the surface of the st	ceel v
nine Conner supply and return		
pipe. Copper supply and return		
pipe. Copper supply and return		
pipe. Copper supply and return		
	lines were sound.	
VIII. BRIEF SITE DESCR	Ines were sound.  IPTION AND HISTORY	steel
	IPTION AND HISTORY onstructed of single wall	
VIII. BRIEF SITE DESCR The USTs at the residences are co	Ines were sound.  IPTION AND HISTORY  Instructed of single wall  For heating. These USTs we	ere
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VIII. BRIEF SITE DESCR The USTs at the residences are co	Ines were sound.  IPTION AND HISTORY  Instructed of single wall  For heating. These USTs we	ere
VIII. BRIEF SITE DESCR The USTs at the residences are co	Ines were sound.  IPTION AND HISTORY  Instructed of single wall  For heating. These USTs we	ere
VIII. BRIEF SITE DESCR The USTs at the residences are co	Ines were sound.  IPTION AND HISTORY  Instructed of single wall  For heating. These USTs we	ere

# IX. SITE CONDITIONS

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

# X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 96012001

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
1404 Eagle	Excav at fill end	Soil	Sandy	6'4"	7/28/09 1400 hrs	P. Shaw	
			_				
8							
9							
10							
11	:						
12							
13							
14							
15							
16							
17							
18							
19							
20							

<sup>\* =</sup> 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.

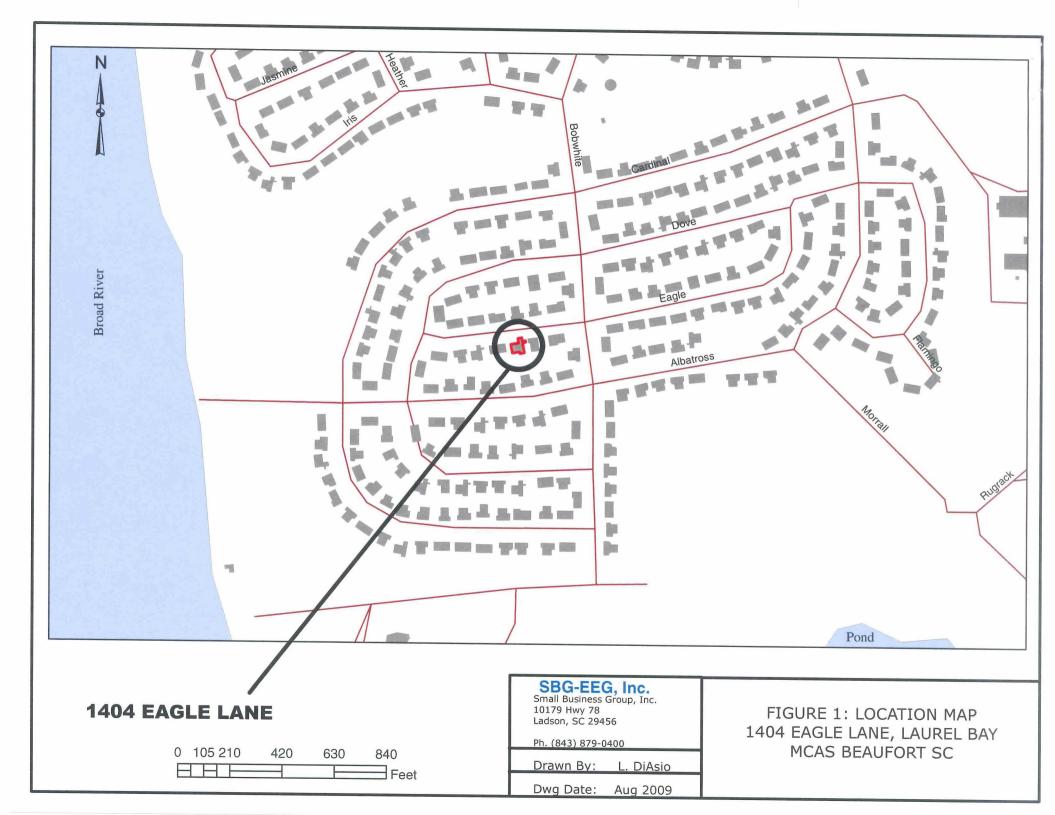
# XII. RECEPTORS

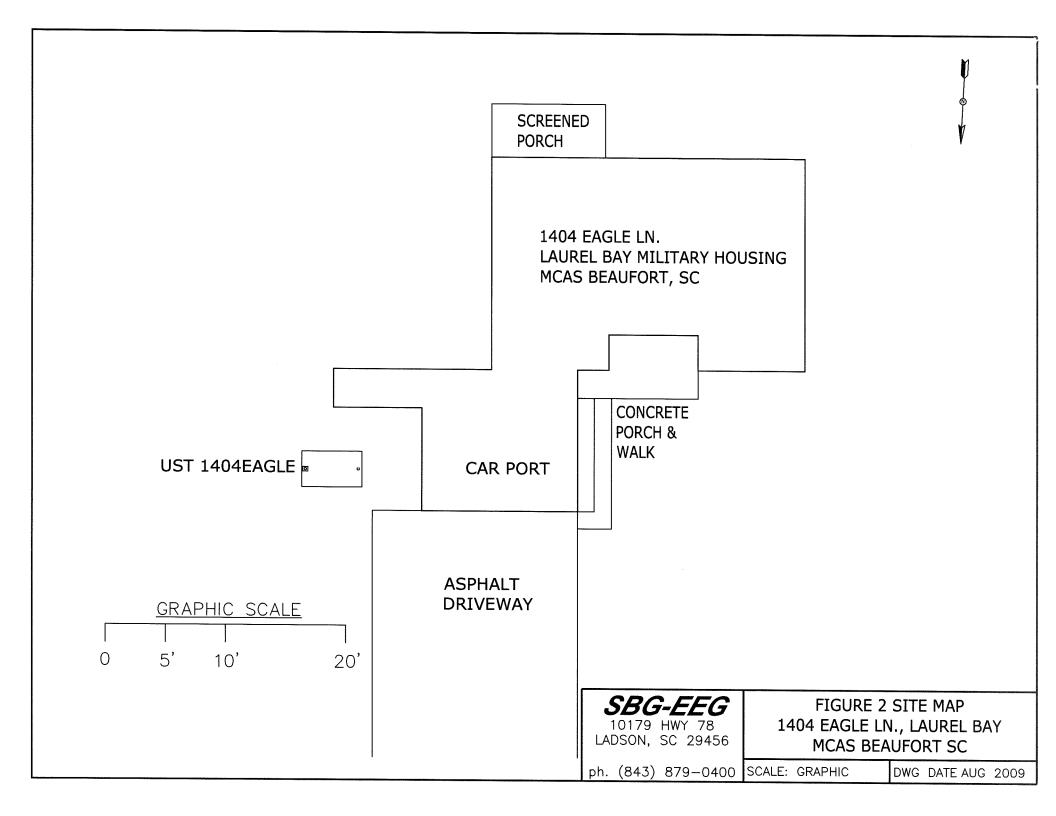
		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?		Х
	If yes, indicate type of receptor, distance, and direction on site map.		
В.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		Х
	If yes, indicate 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 & 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.		

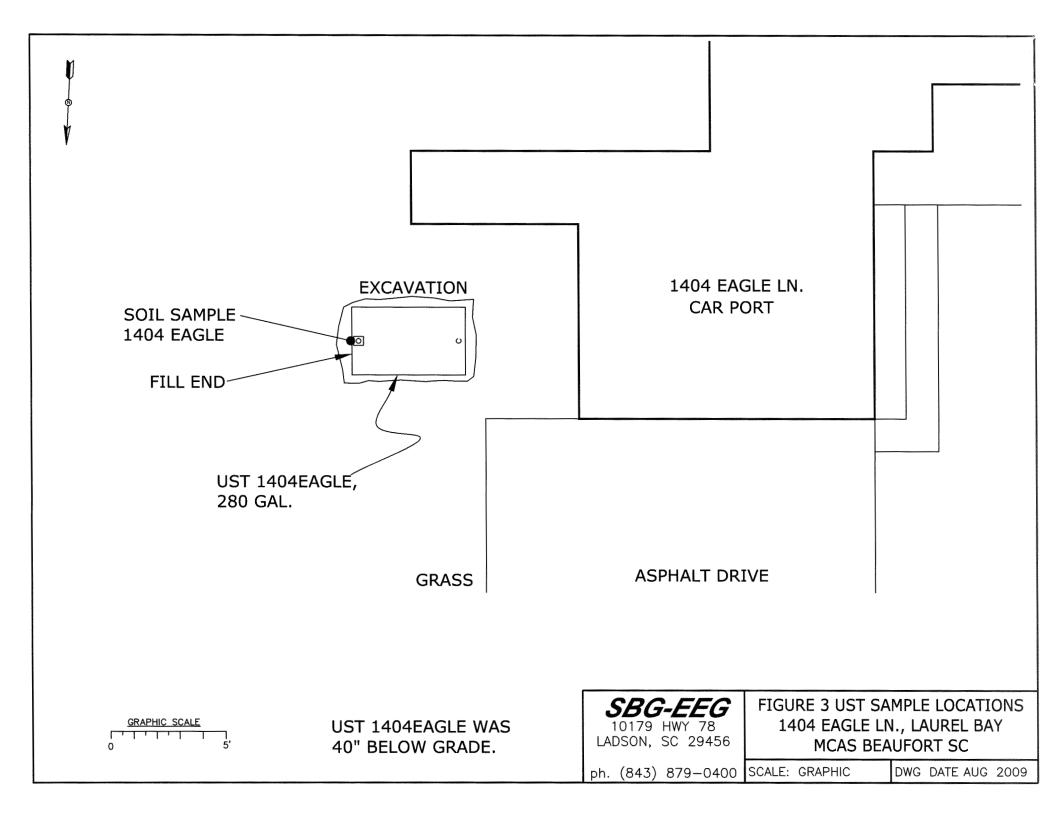
## XIII. SITE MAP

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 1404Eagle prior to removal.



Picture 2: UST 1404Eagle site after completion of work.

# XIV. SUMMARY OF ANALYSIS RESULTS

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

			,	_,	 	
CoC UST	1404Eagle					
Benzene	ND					
Toluene	ND					
Ethylbenzene	ND					
Xylenes	ND					
Naphthalene	ND					
Benzo (a) anthracene	ND					
Benzo (b) fluoranthene	ND				, , , , ,	
Benzo (k) fluoranthene	ND					
Chrysene	ND					
Dibenz (a, h) anthracene	ND					
TPH (EPA 3550)						
				1		
СоС		i				
Benzene						E
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			I	
COC		W-1	W-2	W -3	W -4
į.	(µg/l)	1		1	1
Free Product	N				
Thickness	None				
<u> </u>			<u> </u>	<u> </u>	
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)



September 09, 2009 1:08:59PM

Attn:

Client: EEG - Small Business Group, Inc. (2449) Work Order: NSG2786

10179 Highway 78 Project Name: Laurel Bay Housing Project

 Ladson, SC 29456
 Project Nbr: [none]

 Tom McElwee
 P/O Nbr: 08087

 Date Received: 07/31/09

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
1379 Dove	NSG2786-01	07/27/09 13:30
1393 Dove-2	NSG2786-02	07/27/09 09:45
1401 Eagle	NSG2786-03	07/28/09 09:20
1400 Eagle	NSG2786-04	07/28/09 09:35
1407 Eagle-I	NSG2786-05	07/28/09 13:45
1407 Eagle-2	NSG2786-06	07/28/09 14:45
1404 Eagle	NSG2786-07	07/28/09 14:00

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

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

Additional Laboratory Comments:

REVISED REPORT: 09/09/09 KAH - To correct sample ID for NSG2786-02 from 1397 Dove-2 to 1393 Dove-2

as shown on the COC. This report replaces the one generated on 08/14/09 @ 15:56.

South Carolina Certification Number: 84009001

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

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

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

Estimated uncertainty is available upon request.

This report has been electronically signed.

Lens & Hage

Report Approved By:

Ken A. Hayes

Senior Project Manager



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

10179 Highway 78

Ladson, SC 29456 Tom McElwee

Attn

Work Order: NSG2786

Project Name: Laurel Bay Housing Project

Project Number: [none]

Received: 07/31/09 08:15

#### ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSG2786-01 (1379 D	ove - Soil) Sam	oled: 07/2	7/09 13:30						
General Chemistry Parameters									
% Dry Solids	82.3		%	0.500	1	08/12/09 13:07	SW-846	AJK	9081657
Selected Volatile Organic Compound	s by EPA Method	8260B							
Benzene	ND		mg/kg dry	0.00198	1	08/07/09 17:06	SW846 8260B	МЈН	9080051
Ethylbenzene	0.00217		mg/kg dry	0.00198	1	08/07/09 17:06	SW846 8260B	МЈН	9080051
Naphthalene	0.00832		mg/kg dry	0.00496	I	08/07/09 17:06	SW846 8260B	MJH	9080051
Toluene	ND		mg/kg dry	0.00198	1	08/07/09 17:06	SW846 8260B	МЈН	9080051
Xylenes, total	ND		mg/kg dry	0.00496	1	08/07/09 17:06	SW846 8260B	МЈН	9080051
Surr: 1,2-Dichloroethane-d4 (67-138%)	112 %					08/07/09 17:06	SW846 8260B	МЈН	908005
Surr: Dibromofluoromethane (75-125%)	101 %		ř			08/07/09 17:06	SW846 8260B	МЈН	908005
Surr: Toluene-d8 (76-129%)	107 %					08/07/09 17:06	SW846 8260B	МЈН	908005
Surr: 4-Bromofluorobenzene (67-147%)	118 %					08/07/09 17:06	SW846 8260B	МЈН	908005
Polyaromatic Hydrocarbons by EPA	82 <b>7</b> 0D								
Acenaphthene	ND		mg/kg dry	0.0812	1	08/13/09 18:31	SW846 8270D	BES	9081287
Acenaphthylene	ND		mg/kg dry	0.0812	1	08/13/09 18:31	SW846 8270D	BES	9081287
Anthracene	ND		mg/kg dry	0.0812	1	08/13/09 18:31	SW846 8270D	BES	9081287
Benzo (a) anthracene	ND		mg/kg dry	0.0812	1	08/13/09 18:31	SW846 8270D	BES	9081287
Benzo (a) pyrene	ND		mg/kg dry	0.0812	1	08/13/09 18:31	SW846 8270D	BES	9081287
Benzo (b) fluoranthene	ND		mg/kg dry	0.0812	1	08/13/09 18:31	SW846 8270D	BES	9081287
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0812	1	08/13/09 18:31	SW846 8270D	BES	9081287
Benzo (k) fluoranthene	ND		mg/kg dry	0.0812	1	08/13/09 18:31	SW846 8270D	BES	9081287
Chrysene	ND		mg/kg dry	0.0812	1	08/13/09 18:31	SW846 8270D	BES	9081287
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0812	1	08/13/09 18:31	SW846 8270D	BES	9081287
Fluoranthene	ND		mg/kg dry	0.0812	1	08/13/09 18:31	SW846 8270D	BES	9081287
Fluorene	ND		mg/kg dry	0.0812	1	08/13/09 18:31	SW846 8270D	BES	9081287
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0812	1	08/13/09 18:31	SW846 8270D	BES	9081287
Naphthalene	ND		mg/kg dry	0.0812	1	08/13/09 18:31	SW846 8270D	BES	9081287
Phenanthrene	ND		mg/kg dry	0.0812	I	08/13/09 18:31	SW846 8270D	BES	9081287
Pyrene	ND		mg/kg dry	0.0812	1	08/13/09 18:31	SW846 8270D	BES	9081287
1-Methylnaphthalene	ND		mg/kg dry	0.0812	1	08/13/09 18:31	SW846 8270D	BES	9081287
2-Methylnaphthalene	ND		mg/kg dry	0.0812	i	08/13/09 18:31	SW846 8270D	BES	9081287
Surr: Terphenyl-d14 (18-120%)	89 %					08/13/09 18:31	SW846 8270D	BES	9081287
Surr: 2-Flu•r•biphenyl (14-120%)	80 %					08/13/09 18:31	SW846 8270D	BES	9081287
Surr: Nitrobenzene-d5 (17-120%)	82 %					08/13/09 18:31	SW846 8270D	BES	9081287



Attn

Client EEG - Small Business Group, Inc. (2449) Work Order: NSG2786

10179 Highway 78Project Name:Laurel Bay Housing ProjectLadson, SC 29456Project Number:[none]

Tom McElwee Received: 07/31/09 08:15

#### ANALYTICAL REPORT

		Diludian Analysis							
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
·		Ü				2 410/ 11440	Method	7111111950	Duten
Sample ID: NSG2786-02 (1393 D	ove-2 - Soil) Sai	mpled: 07	/27/09 09:45						
General Chemistry Parameters									
% Dry Solids	87.9		%	0.500	1	08/12/09 13:07	SW-846	AJK	9081657
Selected Volatile Organic Compound	s by EPA Method	8260B							
Benzene	ND		mg/kg dry	0.00194	1	08/07/09 17:44	SW846 8260B	MJH	9080051
Ethylbenzene	0.338		mg/kg dry	0.0954	50	08/07/09 18:22	SW846 8260B	MJH	9080051
Naphthalene	3.78		mg/kg dry	0.239	50	08/07/09 18:22	SW846 8260B	MJH	9080051
Toluene	0.0189		mg/kg dry	0.00194	1	08/07/09 17:44	SW846 8260B	MJH	9080051
Xylenes, total	0.481		mg/kg dry	0.239	50	08/07/09 18:22	SW846 8260B	MJH	9080051
Surr: 1,2-Dichloroethane-d4 (67-138%)	117%					08/07/09 17:44	SW846 8260B	МЈН	9080051
Surr: 1,2-Dichloroethane-d4 (67-138%)	95 %					08/07/09 18:22	SW846 8260B	МЈН	9080051
Surr: Dibromofluoromethane (75-125%)	101 %					08/07/09 17.44	SW846 8260B	МЈН	9080051
Surr: Dibromofluoromethane (75-125%)	93 %					08/07/09 18.22	SW846 8260B	МЈН	9080051
Surr: Toluene-d8 (76-129%)	646 %	ZX				08/07/09 17:44	SW846 8260B	МЈН	9080051
Surr: Toluene-d8 (76-129%)	102 %					08/07/09 18:22	SW846 8260B	МЈН	9080051
Surr: 4-Bromofluorobenzene (67-147%)	1140 %	ZX				08/07/09 17:44	SW846 8260B	МЈН	9080051
Surr: 4-Bromofluorobenzene (67-147%)	117 %					08/07/09 18:22	SW846 8260 <b>B</b>	МЈН	9080051
Polyaromatic Hydrocarbons by EPA 8	3270D								
Acenaphthene	ND		mg/kg dry	0.0751	1	08/13/09 18:54	SW846 8270D	BES	9081287
Acenaphthylene	ND		mg/kg dry	0.0751	1	08/13/09 18:54	SW846 8270D	BES	9081287
Anthracene	ND		mg/kg dry	0.0751	1	08/13/09 18:54	SW846 8270D	BES	9081287
Benzo (a) anthracene	ND		mg/kg dry	0.0751	1	08/13/09 18:54	SW846 8270D	BES	9081287
Benzo (a) pyrene	ND		mg/kg dry	0.0751	l	08/13/09 18:54	SW846 8270D	BES	9081287
Benzo (b) fluoranthene	ND		mg/kg dry	0.0751	1	08/13/09 18:54	SW846 8270D	BES	9081287
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0751	1	08/13/09 18:54	SW846 8270D	BES	9081287
Benzo (k) fluoranthene	ND		mg/kg dry	0.0751	1	08/13/09 18:54	SW846 8270D	BES	9081287
Chrysene	ND		mg/kg dry	0.0751	1	08/13/09 18:54	SW846 8270D	BES	9081287
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0751	1	08/13/09 18:54	SW846 8270D	BES	9081287
Fluoranthene	ND		mg/kg dry	0.0751	1	08/13/09 18:54	SW846 8270D	BES	9081287
Fluorene	ND		mg/kg dry	0.0751	1	08/13/09 18:54	SW846 8270D	BES	9081287
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0751	1	08/13/09 18:54	SW846 8270D	BES	9081287
Naphthalene	ND		mg/kg dry	0.0751	1	08/13/09 18:54	SW846 8270D	BES	9081287
Phenanthrene	ND		mg/kg dry	0.0751	1	08/13/09 18:54	SW846 8270D	BES	9081287
Pyrene	ND		mg/kg dry	0.0751	1	08/13/09 18:54	SW846 8270D	BES	9081287
1-Methylnaphthalene	ND		mg/kg dry	0.0751	1	08/13/09 18:54	SW846 8270D	BES	9081287
2-Methylnaphthalene	ND		mg/kg dry	0.0751	1	08/13/09 18:54	SW846 8270D	BES	9081287
Surr: Terphenyl-d14 (18-120%)	78 %					08/13/09 18:54	SW846 8270D	BES	9081287
Surr: 2-Fluorobiphenyl (14-120%)	64 %					08/13/09 18.54	SW846 8270D	BES	9081287
Surr: Nitrobenzene-d5 (17-120%)	62 %					08/13/09 18:54	SW846 8270D	BES	9081287



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

10179 Highway 78

Ladson, SC 29456 Tom McElwee

Attn

Work Order: NSG2786

Project Name: Laurel Bay Housing Project

Project Number: [none]

Received: 07/31/09 08:15

#### ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSG2786-03 (1401 E	agle - Soil) Sam	pled: 07/2	28/09 09:20						
General Chemistry Parameters									
% Dry Solids	96.2		%	0.500	1	08/12/09 13:07	SW-846	AJK	9081657
Selected Volatile Organic Compound	s by EPA Method	8260B							
Benzene	ND		mg/kg dry	0.00240	1	08/10/09 14:59	SW846 8260B	KxC	9081466
Ethylbenzene	ND		mg/kg dry	0.00240	1	08/10/09 14:59	SW846 8260B	KxC	9081466
Naphthalene	ND		mg/kg dry	0.00600	1	08/10/09 14:59	SW846 8260B	KxC	9081466
Toluene	ND		mg/kg dry	0.00240	1	08/10/09 14:59	SW846 8260B	KxC	9081466
Xylenes, total	ND		mg/kg dry	0.00600	1	08/10/09 14:59	SW846 8260B	KxC	9081466
Surr: 1,2-Dichloroethane-d4 (67-138%)	83 %		00,			08/10/09 14:59	SW846 8260B	KxC	9081460
Surr: Dibromofluoromethane (75-125%)	95 %					08/10/09 14:59	SW846 8260B	KxC	9081460
Surr: Toluene-d8 (76-129%)	102 %					08/10/09 14:59	SW846 8260B	KxC	9081466
Surr: 4-Bromofluorobenzene (67-147%)	121 %					08/10/09 14.59	SW846 8260B	KxC	9081466
Polyaromatic Hydrocarbons by EPA 8	3270D								
Acenaphthene	ND		mg/kg dry	0.0696	1	08/13/09 19:16	SW846 8270D	BES	9081287
Acenaphthylene	ND		mg/kg dry	0.0696	1	08/13/09 19:16	SW846 8270D	BES	9081287
Anthracene	ND		mg/kg dry	0.0696	1	08/13/09 19:16	SW846 8270D	BES	9081287
Benzo (a) anthracene	0.0946		mg/kg dry	0.0696	I	08/13/09 19:16	SW846 8270D	BES	9081287
Benzo (a) pyrene	ND		mg/kg dry	0.0696	1	08/13/09 19:16	SW846 8270D	BES	9081287
Benzo (b) fluoranthene	0.0876		mg/kg dry	0.0696	1	08/13/09 19:16	SW846 8270D	BES	9081287
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0696	1	08/13/09 19:16	SW846 8270D	BES	9081287
Benzo (k) fluoranthene	ND		mg/kg dry	0.0696	1	08/13/09 19:16	SW846 8270D	BES	9081287
Chrysene	0.146		mg/kg dry	0.0696	1	08/13/09 19:16	SW846 8270D	BES	9081287
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0696	1	08/13/09 19:16	SW846 8270D	BES	9081287
Fluoranthene	0.550		mg/kg dry	0.0696	1	08/13/09 19:16	SW846 8270D	BES	9081287
Fluorene	ND		mg/kg dry	0.0696	1	08/13/09 19:16	SW846 8270D	BES	9081287
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0696	1	08/13/09 19:16	SW846 8270D	BES	9081287
Naphthalene	ND		mg/kg dry	0.0696	1	08/13/09 19:16	SW846 8270D	BES	9081287
Phenanthrene	ND		mg/kg dry	0.0696	1	08/13/09 19:16	SW846 8270D	BES	9081287
Pyrene	0.663		mg/kg dry	0.0696	1	08/13/09 19:16	SW846 8270D	BES	9081287
1-Methylnaphthalene	ND		mg/kg dry	0.0696	1	08/13/09 19:16	SW846 8270D	BES	9081287
2-Methylnaphthalene	ND		mg/kg dry	0.0696	1	08/13/09 19:16	SW846 8270D	BES	9081287
Surr: Terphenyl-d14 (18-120%)	85 %					08/13/09 19.16	SW8468270D	BES	9081287
Surr: 2-Fluorobiphenyl (14-120%)	66 %					08/13/09 19:16	SW846 8270D	BES	9081287
Surr: Nitrobenzene-d5 (17-120%)	72 %					08/13/09 19.16	SW846 8270D	BES	9081287



THE LEADER IN ENVIRONMENTAL TESTING

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

10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order: NSG2786

Project Name: Laurel Bay Housing Project

Project Number: [none]

Received: 07/31/09 08:15

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSG2786-04 (1400 Ea	agle - Soil) Sam	pled: 07/2	28/09 09:35						
General Chemistry Parameters									
% Dry Solids	89.6		%	0.500	1	08/12/09 13:02	SW-846	AJK	9081656
Selected Volatile Organic Compounds	s by EPA Method	8260B							
Benzene	ND		mg/kg dry	0.00235	Ī	08/07/09 22:38	SW846 8260B	МЈН	9080051
Ethylbenzene	ND		mg/kg dry	0.00235	1	08/07/09 22:38	SW846 8260B	МЈН	9080051
Naphthalene	ND		mg/kg dry	0.00589	1	08/07/09 22:38	SW846 8260B	MJH	9080051
Toluene	ND		mg/kg dry	0.00235	1	08/07/09 22:38	SW846 8260B	МЈН	9080051
Xylenes, total	ND		mg/kg dry	0.00589	ì	08/07/09 22:38	SW846 8260B	МЈН	9080051
Surr: 1,2-Dichloroethane-d4 (67-138%)	100 %					08/07/09 22:38	SW846 8260B	МЈН	908005
Surr: Dibromofluoromethane (75-125%)	98 %					08/07/09 22:38	SW846 8260B	МЈН	908005
Surr: Toluene-d8 (76129%)	101 %					08/07/09 22.38	SW846 8260B	МЈН	908005
Surr: 4-Bromofluorobenzene (67-147%)	116 %					08/07/09 22:38	SW846 8260B	МЈН	908005
Polyaromatic Hydrocarbons by EPA 8	3270D								
Acenaphthene	ND		mg/kg dry	0.0740	1	08/13/09 19:39	SW846 8270D	BES	9081287
Acenaphthylene	ND		mg/kg dry	0.0740	1	08/13/09 19:39	SW846 8270D	BES	9081287
Anthracene	ND		mg/kg dry	0.0740	1	08/13/09 19:39	SW846 8270D	BES	9081287
Benzo (a) anthracene	0.130		mg/kg dry	0.0740	1	08/13/09 19:39	SW846 8270D	BES	9081287
Benzo (a) pyrene	0.131		mg/kg dry	0.0740	1	08/13/09 19:39	SW846 8270D	BES	9081287
Benzo (b) fluoranthene	0.178		mg/kg dry	0.0740	1	08/13/09 19:39	SW846 8270D	BES	9081287
Benzo (g,h,i) perylene	0.0991		mg/kg dry	0.0740	1	08/13/09 19:39	SW846 8270D	BES	9081287
Benzo (k) fluoranthene	0.124		mg/kg dry	0.0740	1	08/13/09 19:39	SW846 8270D	BES	9081287
Chrysene	0.289		mg/kg dry	0.0740	1	08/13/09 19:39	SW846 8270D	BES	9081287
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0740	1	08/13/09 19:39	SW846 8270D	BES	9081287
Fluoranthene	0.169		mg/kg dry	0.0740	1	08/13/09 19:39	SW846 8270D	BES	9081287
Fluorene	0.106		mg/kg dry	0.0740	1	08/13/09 19:39	SW846 8270D	BES	9081287
Indeno (1,2,3-cd) pyrene	0.0781		mg/kg dry	0.0740	1	08/13/09 19:39	SW846 8270D	BES	9081287
Naphthalene	ND		mg/kg dry	0.0740	1	08/13/09 19:39	SW846 8270D	BES	9081287
Phenanthrene	0.291		mg/kg dry	0.0740	1	08/13/09 19:39	SW846 8270D	BES	9081287
Pyrene	0.191		mg/kg dry	0.0740	1	08/13/09 19:39	SW846 8270D	BES	9081287
l-Methylnaphthalene	0.275		mg/kg dry	0.0740	1	08/13/09 19:39	SW846 8270D	BES	9081287
2-Methylnaphthalene	0.258		mg/kg dry	0.0740	I	08/13/09 19:39	SW846 8270D	BES	9081287
Surr: Terphenyl-d14 (18-120%)	79 %					08/13/09 19:39	SW846 8270D	BES	908128
Surr: 2-Fluorobiphenyl (14-120%)	73 %					08/13/09 19:39	SW846 8270D	BES	908128
Surr: Nitrobenzene-d5 (17-120%)	73 %					08/13/09 19:39	SW846 8270D	BES	9081287



10179 Highway 78

Ladson, SC 29456 Tom McElwee

Attn

Work Order: NSG2786

Project Name: Laurel Bay Housing Project

Project Number: [none]

Received: 07/31/09 08:15

		<i>F</i>	ANALYTICAL	REPORT					
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSG2786-05 (1407 E	agle-1 - Soil) Sa	mpled: 07	7/28/09 13:45						
General Chemistry Parameters									
% Dry Solids	83.1		%	0.500	1	08/12/09 13:02	SW-846	AJK	9081656
Selected Volatile Organic Compound	s by EPA Method	8260B							
Benzene	ND		mg/kg dry	0.00219	1	08/07/09 23:09	SW846 8260B	МЈН	9080051
Ethylbenzene	0.0870		mg/kg dry	0.00219	1	08/07/09 23:09	SW846 8260B	MJH	9080051
Naphthalene	11.9		mg/kg dry	0.300	50	08/10/09 16:01	SW846 8260B	KxC	9081466
Toluene	ND		mg/kg dry	0.00219	1	08/07/09 23:09	SW846 8260B	МЈН	9080051
Xylenes, total	0.114		mg/kg dry	0.00547	1	08/07/09 23:09	SW846 8260B	МЈН	9080051
Surr: 1,2-Dichloroethane-d4 (67-138%)	106 %					08/07/09 23:09	SW846 8260B	МЈН	9080051
Surr: 1,2-Dichloroethane-d4 (67-138%)	76 %					08/10/09 16:01	SW846 8260B	KxC	9081466
Surr: Dibromofluoromethane (75-125%)	104%					08/07/09 23:09	SW846 8260B	МЈН	9080051
Surr: Dibromofluoromethane (75-125%)	88 %					08/10/09 16:01	SW846 8260B	KxC	9081466
Surr: Toluene-d8 (76-129%)	139 %	$\mathbf{Z}X$				08/07/09 23:09	SW846 8260B	МЈН	9080051
Surr: Toluene-d8 (76-129%)	101 %					08/10/09 16:01	SW846 8260B	KxC	9081466
Surr: 4-Bromofluorobenzene (67-147%)	785 %	I, ZX				08/07/09 23.09	SW846 8260B	МЈН	9080051
Surr: 4-Bromofluorobenzene (67-147%)	106 %					08/10/09 16.01	SW846 8260B	KxC	9081466
Polyaromatic Hydrocarbons by EPA 8	3270D								
Acenaphthene	ND		mg/kg dry	1.60	20	08/14/09 13:18	SW846 8270D	BES	9081287
Acenaphthylene	ND		mg/kg dry	1.60	20	08/14/09 13:18	SW846 8270D	BES	9081287
Anthracene	ND		mg/kg dry	1.60	20	08/14/09 13:18	SW846 8270D	BES	9081287
Benzo (a) anthracene	ND		mg/kg dry	1.60	20	08/14/09 13:18	SW846 8270D	BES	9081287
Benzo (a) pyrene	ND		mg/kg dry	1.60	20	08/14/09 13:18	SW846 8270D	BES	9081287
Benzo (b) fluoranthene	ND		mg/kg dry	1.60	20	08/14/09 13:18	SW846 8270D	BES	9081287
Benzo (g,h,i) perylene	ND		mg/kg dry	1.60	20	08/14/09 13:18	SW846 8270D	BES	9081287
Benzo (k) fluoranthene	ND		mg/kg dry	1.60	20	08/14/09 13:18	SW846 8270D	BES	9081287
Chrysene	ND		mg/kg dry	1.60	20	08/14/09 13:18	SW846 8270D	BES	9081287
Dibenz (a,h) anthracene	ND		mg/kg dry	1.60	20	08/14/09 13:18	SW846 8270D	BES	9081287
Fluoranthene	ND		mg/kg dry	1.60	20	08/14/09 13:18	SW846 8270D	BES	9081287
Fluorene	3.13		mg/kg dry	1.60	20	08/14/09 13:18	SW846 8270D	BES	9081287
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	1.60	20	08/14/09 13:18	SW846 8270D	BES	9081287
Naphthalene	8.96		mg/kg dry	1.60	20	08/14/09 13:18	SW846 8270D	BES	9081287
Phenanthrene	7.36		mg/kg dry	1.60	20	08/14/09 13:18	SW846 8270D	BES	9081287
Pyrene	ND		mg/kg dry	1.60	20	08/14/09 13:18	SW846 8270D SW846 8270D	BES	9081287
1-Methylnaphthalene	28.4		mg/kg dry	1.60	20	08/14/09 13:18		BES	9081287
2-Methylnaphthalene	38.9		mg/kg dry	1.60	20	08/14/09 13:18	SW846 8270D	BES	9081287
Surr: Terphenyl-d14 (18-120%)	84 %					08/14/09 13:18	SW846 8270D	BES	9081287
Surr: 2-Fluorobiphenyl (14-120%)	99 %					08/14/09 13:18	SW846 8270D	BES	9081287
Surr: Nitrobenzene-d5 (17-120%)	126 %	$\mathbf{Z}X$				08/14/09 13:18	SW846 8270D	BES	9081287



Ladson, SC 29456 Tom McElwee

Attn

10179 Highway 78

NSG2786 Work Order:

Project Name: Laurel Bay Housing Project

[none] Project Number:

07/31/09 08:15 Received:

					Dilution	Analysis		_	
Analyte	Result	Flag	Units	MRL	Factor	Date/Time	Method	Analyst	Batch
Sample ID: NSG2786-06 (1407 E	agle-2 - Soil) Sa	mpled: 07	7/28/09 14:45						
General Chemistry Parameters									
% Dry Solids	85.0		%	0.500	1	08/12/09 13:02	SW-846	AJK	9081656
Selected Volatile Organic Compound	ls by EPA Method	8260B							
Benzene	ND		mg/kg dry	0.00210	1	08/10/09 14:28	SW846 8260B	KxC	9081466
Ethylbenzene	0.00397		mg/kg dry	0.00210	1	08/10/09 14:28	SW846 8260B	KxC	9081466
Naphthalene	0.0126		mg/kg dry	0.00525	1	08/10/09 14:28	SW846 8260B	KxC	9081466
Toluene	0.0279		mg/kg dry	0.00210	I	08/10/09 14:28	SW846 8260B	KxC	9081466
Xylenes, total	0.00774		mg/kg dry	0.00525	1	08/10/09 14:28	SW846 8260B	KxC	9081466
Surr: 1,2-Dichloroethane-d4 (67-138%)	94 %					08/10/09 14:28	SW846 8260B	KxC	9081466
Surr: Dibromofluoromethane (75-125%)	100 %					08/10/09 14:28	SW846 8260B	KxC	9081466
Surr: Toluene-d8 (76-129%)	112 %					08/10/09 14:28	SW846 8260B	KxC	9081466
Surr: 4-Bromofluorobenzene (67-147%)	106 %					08/10/09 14.28	SW846 8260B	KxC	9081466
Polyaromatic Hydrocarbons by EPA	8270D								
Acenaphthene	ND		mg/kg dry	0.0776	I	08/13/09 20:24	SW846 8270D	BES	9081287
Acenaphthylene	ND		mg/kg dry	0.0776	1	08/13/09 20:24	SW846 8270D	BES	9081287
Anthracene	ND		mg/kg dry	0.0776	I	08/13/09 20:24	SW846 8270D	BES	9081287
Benzo (a) anthracene	ND		mg/kg dry	0.0776	1	08/13/09 20:24	SW846 8270D	BES	9081287
Benzo (a) pyrene	ND		mg/kg dry	0.0776	1	08/13/09 20:24	SW846 8270D	BES	9081287
Benzo (b) fluoranthene	ND		mg/kg dry	0.0776	1	08/13/09 20:24	SW846 8270D	BES	9081287
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0776	1	08/13/09 20:24	SW846 8270D	BES	9081287
Benzo (k) fluoranthene	ND		mg/kg dry	0.0776	1	08/13/09 20:24	SW846 8270D	BES	9081287
Chrysene	ND		mg/kg dry	0.0776	I	08/13/09 20:24	SW846 8270D	BES	9081287
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0776	1	08/13/09 20:24	SW846 8270D	BES	9081287
Fluoranthene	ND		mg/kg dry	0.0776	1	08/13/09 20:24	SW846 8270D	BES	9081287
Fluorene	ND		mg/kg dry	0.0776	1	08/13/09 20:24	SW846 8270D	BES	9081287
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0776	1	08/13/09 20:24	SW846 8270D	BES	9081287
Naphthalene	ND		mg/kg dry	0.0776	1	08/13/09 20:24	SW846 8270D	BES	9081287
Phenanthrene	ND		mg/kg dry	0.0776	1	08/13/09 20:24	SW846 8270D	BES	9081287
Pyrene	ND		mg/kg dry	0.0776	1	08/13/09 20:24	SW846 8270D	BES	9081287
1-Methylnaphthalene	ND		mg/kg dry	0.0776	1	08/13/09 20:24	SW846 8270D	BES	9081287
2-Methylnaphthalene	ND		mg/kg dry	0.0776	1	08/13/09 20:24	SW846 8270D	BES	9081287
Surr: Terphenyl-d14 (18-120%)	95 %					08/13/09 20:24	SW846 8270D	BES	9081287
Surr: 2-Fluorobiphenyl (14-120%)	91 %					08/13/09 20.24	SW846 8270D	BES	9081287
Surr: Nitrobenzene-d5 (17-120%)	59 %					08/13/09 20:24	SW846 8270D	BES	9081287



NSG2786 Work Order:

10179 Highway 78

Client

Attn

Laurel Bay Housing Project Project Name:

Ladson, SC 29456

Tom McElwee

[none] Project Number: 07/31/09 08:15

Received:

			ANALYTICAL	REPURI					
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSG2786-07 (1404 Ea	agle - Soil) Sam		28/09 14:00						
General Chemistry Parameters									
% Dry Solids	80.0		%	0.500	1	08/12/09 13:02	SW-846	AJK	9081656
-			76	0.500	.1	08/12/09 13.02	311 010	AJK	7001050
Selected Volatile Organic Compounds	s by EPA Method	l 8260B							
Benzene	ND	RL1	mg/kg dry	0.118	50	08/10/09 17:02	SW846 8260B	KxC	9081466
Ethylbenzene	ND	RL1	mg/kg dry	0.118	50	08/10/09 17:02	SW846 8260B	KxC	9081466
Naphthalene	ND	RLI	mg/kg dry	0.294	50	08/10/09 17:02	SW846 8260B	KxC	9081466
Toluene	ND	RL1	mg/kg dry	0.118	50	08/10/09 17:02	SW846 8260B	KxC	9081466
Xylenes, total	ND	RL1	mg/kg dry	0.294	50	08/10/09 17:02	SW846 8260B	KxC	9081466
Surr: 1,2-Dichloroethane-d4 (67-138%)	76 %					08/10/09 17.02	SW846 8260B	KxC	908146
Surr: Dibromofluoromethane (75-125%)	89 %					08/10/09 17:02	SW846 8260B	KxC	908146
Surr: T•luene-d8 (76-129%)	101 %					08/10/09 17:02	SW846 8260B	KxC	908146
Surr: 4-Bromofluorobenzene (67-147%)	93 %					08/10/09 17.02	SW846 8260B	KxC	908146
Polyaromatic Hydrocarbons by EPA 8	8270D								
Acenaphthene	ND		mg/kg dry	0.165	2	08/13/09 20:47	SW846 8270D	BES	9081287
Acenaphthylene	ND		mg/kg dry	0.165	2	08/13/09 20:47	SW846 8270D	BES	9081287
Anthracene	ND		mg/kg dry	0.165	2	08/13/09 20:47	SW846 8270D	BES	9081287
Benzo (a) anthracene	ND		mg/kg dry	0.165	2	08/13/09 20:47	SW846 8270D	BES	9081287
Benzo (a) pyrene	0.535		mg/kg dry	0.165	2	08/13/09 20:47	SW846 8270D	BES	9081287
Benzo (b) fluoranthene	ND		mg/kg dry	0.165	2	08/13/09 20:47	SW846 8270D	BES	9081287
Benzo (g,h,i) perylene	0.253		mg/kg dry	0.165	2	08/13/09 20:47	SW846 8270D	BES	9081287
Benzo (k) fluoranthene	ND		mg/kg dry	0.165	2	08/13/09 20:47	SW846 8270D	BES	9081287
Chrysene	ND		mg/kg dry	0.165	2	08/13/09 20:47	SW846 8270D	BES	9081287
Dibenz (a,h) anthracene	ND		mg/kg dry	0.165	2	08/13/09 20:47	SW846 8270D	BES	9081287
Fluoranthene	ND		mg/kg dry	0.165	2	08/13/09 20:47	SW846 8270D	BES	9081287
Fluorene	ND		mg/kg dry	0.165	2	08/13/09 20:47	SW846 8270D	BES	9081287
Indeno (1,2,3-cd) pyrene	0.200		mg/kg dry	0.165	2	08/13/09 20:47	SW846 8270D	BES	9081287
Naphthalene	ND		mg/kg dry	0.165	2	08/13/09 20:47	SW846 8270D	BES	9081287
Phenanthrene	ND		mg/kg dry	0.165	2	08/13/09 20:47	SW846 8270D	BES	9081287
Pyrene	ND		mg/kg dry	0.165	2	08/13/09 20:47	SW846 8270D	BES	9081287
1-Methylnaphthalene	ND		mg/kg dry	0.165	2	08/13/09 20:47	SW846 8270D	BES	9081287
2-Methylnaphthalene	ND		mg/kg dry	0.165	2	08/13/09 20:47	SW846 8270D	BES	9081287
Surr: Terphenyl-d14 (18-120%)	39 %					08/13/09 20.47	SW846 8270D	BES	908128
Surr: 2-Fluorobiphenyl (14-120%)	33 %					08/13/09 20:47	SW846 8270D	BES	908128
Surr: Nitrobenzene-d5 (17-120%)	35 %					08/13/09 20:47	SW846 8270D	BES	9081287



10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order: NSG2786

Project Name: Laurel Bay Housing Project

Project Number: [none]

Received: 07/31/09 08:15

#### SAMPLE EXTRACTION DATA

			Wt/Vol				Extraction
Parameter	Batch	Lab Number	Extracted	Extracted Vol	Date	Analyst	Method
Polyaromatic Hydrocarbons by EPA	8270D						
SW846 8270D	9081287	NSG2786-01	30.07	1.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2786-02	30.45	1.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2786-03	30.01	1.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2786-04	30.31	1.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2786-05	30.15	1.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2786-05RE1	30.15	1.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2786-06	30.47	1.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2786-07	30.49	1.00	08/08/09 14:37	AJF	EPA 3550C
Selected Volatile Organic Compoun-	ds by EPA Method	8260B					
SW846 8260B	9080051	NSG2786-01	6.13	5.00	07/27/09 13:30	СНН	EPA 5035
SW846 8260B	9080051	NSG2786-02	5.86	5.00	07/27/09 09:45	СНН	EPA 5035
SW846 8260B	9080051	NSG2786-02RE1	5.96	5.00	07/27/09 09:45	СНН	EPA 5035
SW846 8260B	9080051	NSG2786-03	4.41	5.00	07/28/09 09:20	СНН	EPA 5035
SW846 8260B	9081466	NSG2786-03RE1	4,33	5.00	07/28/09 09:20	СНН	EPA 5035
SW846 8260B	9080051	NSG2786-04	4.74	5.00	07/28/09 09:35	СНН	EPA 5035
SW846 8260B	9080051	NSG2786-05	5.50	5.00	07/28/09 13:45	СНН	EPA 5035
SW846 8260B	9081466	NSG2786-05RE1	5.01	5.00	07/28/09 13:45	СНН	EPA 5035
SW846 8260B	9080051	NSG2786-06	5.66	5.00	07/28/09 14:45	СНН	EPA 5035
SW846 8260B	9081466	NSG2786-06RE1	5.60	5,00	07/28/09 14:45	СНН	EPA 5035
SW846 8260B	9080051	NSG2786-07	5.12	5.00	07/28/09 14:00	СНН	EPA 5035
SW846 8260B	9081466	NSG2786-07RE1	5.31	5.00	07/28/09 14:00	СНН	EPA 5035



1**●**179 Highway 78

Ladson, SC 29456 Tom McElwee

Attn

Work Order: NSG2786

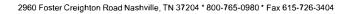
Project Name: Laurel Bay Housing Project

Project Number: [none]

Received: 07/31/09 08:15

## PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Selected Volatile Organic Com	pounds by EPA Method	8260B				
9080051-BLK1	· ·					
Benzene	< 0.000670		mg/kg wet	9080051	9080051-BLK1	08/07/09 15:48
Ethylbenzene	< 0.000670		mg/kg wet	9080051	9080051-BLK1	08/07/09 15:48
Naphthalene	< 0.00170		mg/kg wet	9080051	9080051-BLK1	08/07/09 15:48
Toluene	<0.000400		mg/kg wet	9080051	9080051-BLK1	08/07/09 15:48
Xylenes, total	< 0.00130		mg/kg wet	9080051	9080051-BLK1	08/07/09 15:48
Surrogate: 1,2-Dichloroethane-d4	106%			9080051	9080051-BLK1	08/07/09 15:48
Surrogate: Dibromofluoromethane	100%			9080051	9080051-BLK1	08/07/09 15:48
Surrogate: Toluene-d8	103%			9080051	9080051-BLK1	08/07/09 15:48
Surrogate: 4-Bromofluorobenzene	109%			9080051	9080051-BLK1	08/07/09 15:48
9081466-BLK1						
Benzene	< 0.000670		mg/kg wet	9081466	9081466-BLK1	08/10/09 12:25
Ethylbenzene	< 0.000670		mg/kg wet	9081466	9081466-BLK1	08/10/09 12:25
Naphthalene	< 0.00170		mg/kg wet	9081466	9081466-BLK1	08/10/09 12:25
Toluene	< 0.000400		mg/kg wet	9081466	9081466-BLK1	08/10/09 12:25
Xylenes, total	< 0.00130		mg/kg wet	9081466	9081466-BLK1	08/10/09 12:25
Surrogate: 1,2-Dichloroethane-d4	88%			9081466	9081466-BLK1	08/10/09 12:25
Surrogate: Dibromofluoromethane	96%			9081466	9081466-BLK1	08/10/09 12:25
Surrogate: Toluene-d8	101%			9081466	9081466-BLK1	08/10/09 12:25
Surrogate: 4-Bromofluorobenzene	101%			9081466	9081466-BLK1	08/10/09 12:25
Polyaromatic Hydrocarbons by	EPA 8270D					
9081287-BLK1	.0.000			0001007	0001005 51 1/1	00/12/00 17 46
Acenaphthene	<0.0320		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Acenaphthylene	<0.0310		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Anthracene	<0.0330		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Benzo (a) anthracene	<0.0380		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Benzo (a) pyrene	<0.0300		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Benzo (b) fluoranthene	<0.0300		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Benzo (g,h,i) perylene	<0.0300		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Benzo (k) fluoranthene	<0.0300		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Chrysene	<0.0400		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Dibenz (a,h) anthracene	<0.0310		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Fluoranthene	<0.0340		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Fluorene	<0.0360		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Indeno (1,2,3-cd) pyrene	< 0.0310		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
	< 0.0410		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Naphthalene						
Phenanthrene	<0.0340		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Phenanthrene Pyrene	<0.0340 <0.0410		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Phenanthrene	<0.0340					





10179 Highway 78 Ladson, SC 29456

Attn Tom McElwee

Work Order: NSG2786

Project Name: Laurel Bay Housing Project

Project Number: [none]
Received: 07/31/09 08:15

## PROJECT QUALITY CONTROL DATA Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 82	70D					
9081287-BLK1						
Surrogate: Terphenyl-d14	90%			9081287	9081287-BLK1	08/13/09 17:46
Surrogate: 2-Fluorobiphenyl	81%			9081287	9081287-BLK1	08/13/09 17:46
Surrogate: Nitrobenzene-d5	74%			9081287	9081287-BLK1	08/13/09 17:46



10179 Highway 78 Ladson, SC 29456 Tom McElwee

Attn

Work Order: NSG2786

Project Name: Laurel Bay Housing Project

Project Number: [none]

Received: 07/31/09 08:15

# PROJECT QUALITY CONTROL DATA Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters 9081656-DUP1 % Dry Solids	89.6	89.2		%	0.4	20	9081656	NSG2786-04		08/12/09 13:02
<b>9081657-DUP1</b> % Dry Solids	97.2	97.4		%	0.2	20	9081657	NSG2708-04		08/12/09 13:07



10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order: NSG2786

Project Name: Laurel Bay Housing Project

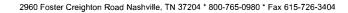
Target

Project Number: [none]
Received: 07/31/09 08:15

## PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Range	Batch	Date/Time
Selected Volatile Organic Compoun	ds by EPA Method 82	60B						
9080051-BS1								
Benzene	50.0	48.5		ug/kg	97%	78 - 126	9080051	08/07/09 13:42
Ethylbenzene	50.0	49.8		ug/kg	100%	79 - 130	9080051	08/07/09 13:42
Naphthalene	50.0	53.1		ug/kg	106%	72 - 150	9080051	08/07/09 13:42
Toluene	50.0	50.3		ug/kg	101%	76 - 126	9080051	08/07/09 13:42
Xylenes, total	150	146		ug/kg	98%	80 - 130	9080051	08/07/09 13:42
Surrogate: 1, 2-Dichloroethane-d4	50.0	56.5			113%	67 - 138	9080051	08/07/09 13:42
Surrogate: Dibromofluoromethane	50,0	53.6			107%	75 - 125	9080051	08/07/09 13:42
Surrogate: Toluene-d8	50.0	53.1			106%	76 - 129	9080051	08/07/09 13:42
Surrogate: 4-Bromofluorobenzene	50.0	51.7			103%	67 - 147	9080051	08/07/09 13:42
9081466-BS1								
Benzene	50.0	49.7		ug/kg	99%	78 - 126	9081466	08/10/09 10:52
Ethylbenzene	50.0	54.0		ug/kg	108%	79 - 130	9081466	08/10/09 10:52
Naphthalene	50.0	50.3		ug/kg	101%	72 - 150	9081466	08/10/09 10:52
Toluene	50.0	52.4		ug/kg	105%	76 - 126	9081466	08/10/09 10:52
Xylenes, total	150	158		ug/kg	106%	80 - 130	9081466	08/10/09 10:52
Surrogate: 1,2-Dichloroethane-d4	50.0	42.8			86%	67 - 138	9081466	08/10/09 10:52
Surrogate: Dibromofluoromethane	50.0	48.6			97%	75 - 125	9081466	08/10/09 10:52
Surrogate: Toluene-d8	50.0	49.9			100%	76 - 129	9081466	08/10/09 10:52
Surrogate: 4-Bromofluorobenzene	50.0	47.1			94%	67 - 147	9081466	08/10/09 10:52
Polyaromatic Hydrocarbons by EPA	8270D							
9081287-BS1								
Acenaphthene	1.67	1.36	MNR1	mg/kg wet	82%	49 - 120	9081287	08/13/09 18:08
Acenaphthylene	1.67	1.47	MNR1	mg/kg wet	88%	52 - 120	9081287	08/13/09 18:08
Anthracene	1.67	1.63	MNR1	mg/kg wet	98%	58 - 120	9081287	08/13/09 18:08
Benzo (a) anthracene	1.67	1.46	MNR1	mg/kg wet	87%	57 - 120	9081287	08/13/09 18:08
Benzo (a) pyrene	1.67	1.54	MNR1	mg/kg wet	92%	55 - 120	9081287	08/13/09 18:08
Benzo (b) fluoranthene	1.67	1.37	MNR1	mg/kg wet	82%	51 - 123	9081287	08/13/09 18:08
Benzo (g,h,i) perylene	1.67	1.52	MNR1	mg/kg wet	91%	49 - 121	9081287	08/13/09 18:08
Benzo (k) fluoranthene	1.67	1.48	MNR1	mg/kg wet	89%	42 - 129	9081287	08/13/09 18:08
Chrysene	1.67	1.39	MNR1	mg/kg wet	84%	55 - 120	9081287	08/13/09 18:08
Dibenz (a,h) anthracene	1.67	1.50	MNR1	mg/kg wet	90%	50 - 123	9081287	08/13/09 18:08
Fluoranthene	1.67	1.49	MNR1	mg/kg wet	89%	58 - 120	9081287	08/13/09 18:08
Fluorene	1.67	1.40	MNR1	mg/kg wet	84%	54 - 120	9081287	08/13/09 18:08
Indeno (1,2,3-cd) pyrene	1.67	1.53	MNR1	mg/kg wet	92%	50 - 122	9081287	08/13/09 18:08
Naphthalene	1.67	1.12	MNR1	mg/kg wet	67%	28 - 120	9081287	08/13/09 18:08
Phenanthrene	1.67	1.43	MNR1	mg/kg wet	86%	56 - 120	9081287	08/13/09 18:08
Pyrene	1.67	1.46	MNR1	mg/kg wet	8 <b>7</b> %	56 - 120	9081287	08/13/09 18:08
1-Methylnaphthalene	1.67	1.10	MNR1	mg/kg wet	66%	36 - 120	9081287	08/13/09 18:08
2-Methylnaphthalene	1.67	1.15	MNR1	mg/kg wet	69%	36 ~ 120	9081287	08/13/09 18:08

Analyzed



Laurel Bay Housing Project



Client

Attn

EEG - Small Business Group, Inc. (2449) Work Order: NSG2786

10179 Highway 78 Project Name:
Ladson, SC 29456 Project Numbe

 Ladson, SC 29456
 Project Number:
 [none]

 Tom McElwee
 Received:
 07/31/09 08:15

## PROJECT QUALITY CONTROL DATA LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by E	EPA 8270D							
9081287-BS1								
Surrogate: Terphenyl-d14	1.67	1.28			77%	18 - 120	9081287	08/13/09 18:08
Surrogate: 2-Fluorobiphenyl	1.67	1.20			72%	14 - 120	9081287	08/13/09 18:08
Surrogate: Nitrobenzene-d5	1.67	1.03			62%	17 - 120	9081287	08/13/09 18:08



10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order: NSG2786

Project Name: Laurel Bay Housing Project

Project Number: [none]
Received: 07/31/09 08:15

# PROJECT QUALITY CONTROL DATA LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Selected Volatile Organic Compound	is by EPA	Method 826	60B									
9080051-BSD1												
Benzene		54.3		ug/kg	50.0	109%	78 - 126	11	50	9080051		08/07/09 14:13
Ethylbenzene		58.4		ug/kg	50.0	117%	79 - 130	16	50	9080051		08/07/09 14:13
Naphthalene		66.2		ug/kg	50.0	132%	72 - 150	22	50	9080051		08/07/09 14:13
Toluene		53.9		ug/kg	50.0	108%	76 - 126	7	50	9080051		08/07/09 14:13
Xylenes, total		172		ug/kg	150	115%	80 - 130	16	50	9080051		08/07/09 14:13
Surrogate: 1,2-Dichloroethane-d4		51.1		ug/kg	50.0	102%	67 - 138			9080051		08/07/09 14:13
Surrogate: Dibromofluoromethane		50.5		ug/kg	50.0	101%	75 - 125			9080051		08/07/09 14:13
Surrogate: Toluene-d8		50.4		ug/kg	50.0	101%	76 - 129			9080051		08/07/09 14:13
Surrogate: 4-Bromofluorobenzene		49.7		ug/kg	50.0	99%	67 - 147			9080051		08/07/09 14:13
9081466-BSD1												
Benzene		47.7		ug/kg	50.0	95%	78 - 126	4	50	9081466		08/10/09 11:23
Ethylbenzene		51.5		ug/kg	50.0	103%	79 - 130	5	50	9081466		08/10/09 11:23
Naphthalene		48.8		ug/kg	50.0	98%	72 - 150	3	50	9081466		08/10/09 11:23
Toluene		49.7		ug/kg	50.0	99%	76 - 126	5	50	9081466		08/10/09 11:23
Xylenes, total		151		ug/kg	150	100%	80 - 130	5	50	9081466		08/10/09 11:23
Surrogate: 1,2-Dichloroethane-d4		42.2		ug/kg	50.0	84%	67 - 138			9081466		08/10/09 11:23
Surrogate: Dibromofluoromethane		48.0		ug/kg	50.0	96%	75 - 125			9081466		08/10/09 11:23
Surrogate: Toluene-d8		50.6		ug/kg	50.0	101%	76 - 129			9081466		08/10/09 11:23
Surrogate: 4-Bromofluorobenzene		49.4		ug/kg	50.0	99%	67 - 147			9081466		08/10/09 11:23



THE LEADER IN ENVIRONMENTAL TESTING

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

10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order: NSG2786

Project Name: Laurel Bay Housing Project

Project Number: [none]
Received: 07/31/09 08:15

## PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Orig. Val.	MS Val	Q Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Selected Volatile Organic Compou	nds by EPA Me	thod 8260B							
9080051-MS1									
Benzene	ND	50.2	ug/kg	50.0	100%	42 - 141	9080051	NSG2787-04	08/08/09 00:43
Ethylbenzene	ND	54.3	ug/kg	50.0	109%	21 - 165	9080051	NSG2787-04	08/08/09 00:43
Naphthalene	3.32	70.9	ug/kg	50.0	135%	10 - 160	9080051	NSG2787-04	08/08/09 00:43
Toluene	ND	50.6	ug/kg	50.0	101%	45 - 145	9080051	NSG2787-04	08/08/09 00:43
Xylenes, total	ND	154	ug/kg	150	103%	31 - 159	9080051	NSG2787-04	08/08/09 00:43
Surrogate: 1,2-Dichloroethane-d4		51.8	ug/kg	50.0	104%	67 - 138	9080051	NSG2787-04	08/08/09 00:43
Surrogate: Dibromofluoromethane		50.4	ug/kg	50.0	101%	75 - 125	9080051	NSG2787-04	08/08/09 00:43
Surrogate: Toluene-d8		49.9	ug/kg	50.0	100%	76 - 129	9080051	NSG2787-04	08/08/09 00:43
Surrogate: 4-Bromofluorobenzene		52.8	ug/kg	50.0	106%	67 - 147	9080051	NSG2787-04	08/08/09 00:43
9081466-MS1									
Benzene	ND	5.61	mg/kg dr	y 5.40	104%	42 - 141	9081466	NSG2728-06	08/10/09 21:09
Ethylbenzene	ND	6.11	mg/kg dr	y 5.40	113%	21 - 165	9081466	NSG2728-06	08/10/09 21:09
Naphthalene	ND	5.18	mg/kg dr	y 5.40	96%	10 - 160	9081466	NSG2728-06	08/10/09 21:09
Toluene	ND	5.84	mg/kg dr	y 5.40	108%	45 - 145	9081466	NSG2728-06	08/10/09 21:09
Xylenes, total	ND	18.1	mg/kg dr	y 16.2	111%	31 - 159	9081466	NSG2728-06	08/10/09 21:09
Surrogate: 1,2-Dichloroethane-d4		39.5	ug/kg	50.0	79%	67 - 138	9081466	NSG2728-06	08/10/09 21:09
Surrogate: Dibromofluoromethane		46.9	ug/kg	50.0	94%	75 - 125	9081466	NSG2728-06	08/10/09 21:09
Surrogate: Toluene-d8		49.3	ug/kg	50.0	99%	76 - 129	9081466	NSG2728-06	08/10/09 21:09
Surrogate: 4-Bromofluorobenzene		47.6	ug/kg	50.0	95%	67 - 147	9081466	NSG2728-06	08/10/09 21:09



10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

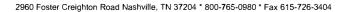
Work Order: NSG2786

Project Name: Laurel Bay Housing Project

Project Number: [none]
Received: 07/31/09 08:15

# PROJECT QUALITY CONTROL DATA Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Selected Volatile Organic Compou	inds by EPA l	Method 826	0B									
9080051-MSD1												
Benzene	ND	45.3		ug/kg	50.0	91%	42 - 141	10	50	9080051	NSG2787-04	08/08/09 01:14
Ethylbenzene	ND	47.0		ug/kg	50.0	94%	21 - 165	14	50	9080051	NSG2787-04	08/08/09 01:14
Naphthalene	3.62	57.3		ug/kg	50.0	107%	10 - 160	21	50	9080051	NSG2787-04	08/08/09 01:14
Toluene	ND	45.4		ug/kg	50.0	91%	45 - 145	11	50	9080051	NSG2787-04	08/08/09 01:14
Xylenes, total	ND	134		ug/kg	150	89%	31 - 159	14	50	9080051	NSG2787-04	08/08/09 01:14
Surrogate: 1,2-Dichloroethane-d4		51.6		ug/kg	50.0	103%	67 - 138			9080051	NSG2787-04	08/08/09 01:14
Surrogate: Dibromofluoromethane		51.0		ug/kg	50.0	102%	75 - 125			9080051	NSG2787-04	08/08/09 01:14
Surrogate: Toluene-d8		50.9		ug/kg	50.0	102%	76 - 129			9080051	NSG2787-04	08/08/09 01:14
Surrogate: 4-Bromofluorobenzene		52.3		ug/kg	50.0	105%	67 - 147			9080051	NSG2787-04	08/08/09 01:14
9081466-MSD1												
Benzene	ND	5.30		mg/kg dry	5.40	98%	42 - 141	6	50	9081466	NSG2728-06	08/10/09 21:40
Ethylbenzene	ND	5.67		mg/kg dry	5.40	105%	21 - 165	7	50	9081466	NSG2728-06	08/10/09 21:40
Naphthalene	ND	4.88		mg/kg dry	5.40	90%	10 - 160	6	50	9081466	NSG2728-06	08/10/09 21:40
Toluene	ND	5.42		mg/kg dry	5.40	100%	45 - 145	7	50	9081466	NSG2728-06	08/10/09 21:40
Xylenes, total	ND	16.8		mg/kg dry	16.2	104%	31 - 159	7	50	9081466	NSG2728-06	08/10/09 21:40
Surrogate: 1,2-Dichloroethane-d4		42.2		ug/kg	50.0	84%	67 - 138			9081466	NSG2728-06	08/10/09 21:40
Surrogate: Dibromofluoromethane		47.6		ug/kg	50.0	95%	75 - 125			9081466	NSG2728-06	08/10/09 21:40
Surrogate: Toluene-d8		49.6		ug/kg	50.0	99%	76 - 129			9081466	NSG2728-06	08/10/09 21:40
Surrogate: 4-Bromofluorobenzene		46.8		ug/kg	50.0	94%	67 - 147			9081466	NSG2728-06	08/10/09 21:40





THE LEADER IN ENVIRONMENTAL TESTING

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

10179 Highway 78 Ladson, SC 29456

Attn Tom McElwee

Work Order: NSG2786

Project Name: Laurel Bay Housing Project

Project Number: [none]
Received: 07/31/09 08:15

#### **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			





10179 Highway 78 Ladson, SC 29456

Attn Tom McElwee

Work Order:

NSG2786

Project Name:

Laurel Bay Housing Project

Project Number: [none]

Received:

07/31/09 08:15

#### DATA QUALIFIERS AND DEFINITIONS

Internal Standard recovery was outside of method limits. Matrix interference was confirmed by reanalysis.

MNR1 There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike.

**RL1** Reporting limit raised due to sample matrix effects.

**ZX** Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

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

#### METHOD MODIFICATION NOTES



## COOLER RECEIPT



NSG2786

Cooler Received/Opened On 7/31/2009 @ 0815	
1. Tracking #(last 4 digits, FedEx)	
Courier: FedEx IR Gun ID 97460373	
2. Temperature of rep. sample or temp blank when opened: 3,3 Degrees Celsius	
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen?	YES NONA
4. Were custody seals on outside of cooler?	(ESNONA
If yes, how many and where:	1 (back)
5. Were the seals intact, signed, and dated correctly?	YE9NONA
6. Were custody papers inside cooler?	ESNONA
I certify that I opened the cooler and answered questions 1-6 (intial)	<u></u>
7. Were custody seals on containers: YES YO and Intact	YESNO.
Were these signed and dated correctly?	YESNO. NA
8. Packing mat'l used? Bulblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper	Other None
9. Cooling process: Cee lce-pack lce (direct contact) Dry ice	Other None
10. Did all containers arrive in good condition (unbroken)?	ES! NONA
11. Were all container labels complete (#, date, signed, pres., etc)?	ESNONA
12. Did all container labels and tags agree with custody papers?	ES., NONA
13a. Were VOA vials received?	YES).NONA
b. Was there any observable headspace present in any VOA vial?	YESNO.
14. Was there a Trip Blank in this cooler? YESNO If multiple coolers, sequence	e #
I certify that I unloaded the cooler and answered questions 7-14 (intial)	
15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level?	YESNO NA
b. Did the bottle labels indicate that the correct preservatives were used	(ES)NONA
16. Was residual chlorine present?	YESNO
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial)	<u>_</u>
17. Were custody papers properly filled out (ink, signed, etc)?	(ES).NONA
18. Did you sign the custody papers in the appropriate place?	ESNONA
19. Were correct containers used for the analysis requested?	ES)NONA
20. Was sufficient amount of sample sent in each container?	ESNONA
I certify that I entered this project into LIMS and answered questions 17-20 (intial)	(W)_
I certify that I attached a label with the unique LIMS number to each container (intial)	
21. Were there Non-Conformance issues at login? YES, NO Was a PIPE generated? YES, NO	10.)#

THE LEADER IN ENVIRONMENTA		Nashville 2960 Fost Nashville,	er Crei	ghto	n			To	oll Fr	ee:	800-	-726- -765- -726-	098	0							met	hods	, is thi	_	being	-	nalytica icted fo					
Client Name/Account #:	EEG # 2449																_							C	omplia	nce M	onitorin	ıg?	Yes		_ No	٥_
Address:	10179 Highway	78															_								Enforc	ement	Action	?	Yes		_ No	٥_
City/State/Zip:	Ladson, SC 294	56				-										_			Site	State:	sc											
Project Manager:	Tom McElwee e	mail: mcelw	ee@ee	ginc.r	net			<b></b>												PO#		C	28	٠ <sub>-</sub> ڪ (	7							
Telephone Number:	843.412,2097					F	ax No	o.: _}	54	3	ے ۔۔	87	9	0	40	7/	_		TA Q	ote #:	:											
Sampler Name: (Print)	PRAS	131	AL	V							•	_													Project							_
Sampler Signature:	P	111					_	7									_			ject #:												
							7	<del>^</del> +	rese	rvativ	ve		1		М	latrix	χ							An	alyze i	or:					7	_
Sample ID / Description  7379 Doug	Date Sampled	Time Sampled	No. of Containers Shipped	X Grab	Composite	Field Filtered	100	HNO, (Red Label)	NaOH ( Orange Label)	H <sub>2</sub> SO <sub>4</sub> Plastic (Yellow Label)	H2SO, Glass(Yellow Label)	None (Black Label)	Other (Specify)	Wastemater	Wastewater Drinking Water	Sludge	<del></del>	+	الله BTEX + Napth - 82608	2 PAH - 8270C						4180	m	06-			RUSH TAT (Pre-Schedule)	
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## ATTACHMENT A



# **NON-HAZARDOUS MANIFEST**

PI	lease print or type. (Form designed for use on elite (12-pitch) ty	oewriter.)																	CVAR
(	NON-HAZARDOUS MANIFEST	. Generato	or's US E	PA ID N	0.	1 1	1		Pod	Manif	est nt No.	2		je 1	T				
	Generator's Name and Mailing Address								<u> </u>				W	ifest Nu	NA	1	10	885	3465
	Generator's Phone     Transporter 1 Company Name				,				-					y-1					
l	EEG, Inc.			6. I I	i i	US EF	1 DI A	lumbe I	er I	r f	1 1	-	-	Trans					
	7. Transporter 2 Company Name			<u> </u> В.		US EP	A ID N	lumbe	er .			_	-	sporter Trans		- 101	43 879	9-041	1
			4-	1 1	1 1	1	1 1		Ţ	ĺ	1 1			sporter'			-		
	Designated Facility Name and Site Address			10.		US EP	AIDI	lumbe	r			G	. State	Facilit	y's ID				
	HICKORY HILL LANDFILL ROUTE 1, BOX 121					4						H.	Facil	ity's Ph	one		-		
	11. Description of Waste Materials																13 987		3
	The Description of Waste Materials										12. Co No.	ontaine I T			13. Total Quanti	÷.,	14. Unit Wt./Vo	Misc	I. . Comments
	aHeating Oil Tank filled with Sand										110.		ype		1.5	-07	TN	I Wilde	. Comments
GENERATOR	WM Profile	#	10	2055	8C					0	0 1								
E	b.																		
ATO	WM Profile	#								1	T.		.	1	1 1				
R	c.		-			-	-	9	-	_		+	Н				+	-	
	WM Profile	#								7	,			v		iv.			
V.	d sign				-	-			$\dashv$			+	4				-	-	
			4																
	WM Profile	#	1																
	J. Additional Descriptions for Materials Listed Above											K.	Disp	osal l	ocati	ion			
	Landfill Solidification											Ce	ell				Leve	el	
	Bio Remediation			San Carlo								Gr	id						7719
	15. Special Handling Instructions and Additional Inform	nation 137	9 D	agle	2	3	140	00	E	15	5 /2 ·	-3	/		6)	1	109	EA	5/20
	Purchase Order#	, .		El	MERC	BENC'	Y CO	VTAC	CT:	7	5)	14	04	E	75	ler			
	16. GENERATOR'S CERTIFICATION:	왕.			2 × 2					-									
	I hereby certify that the above-desc applicable state law, have been fully for transportation according to appli	and a	ccura	ately	des	ot ha cribe	azar ed, c	dou lass	s w sifie	ast d a	es a nd p	as do back	efin kage	ed b ed, a	y 4( ind	O CF are i	R Par in prop	t 261 per co	or any ndition
	Printed/Typed Name	so for C	6,20		Signa	ture "(	On be	half	Of The	T	1		785	Nation Land	-			Month	Day Year
1	17. Transporter 1 Acknowledgement of Receipt of Mate	rials																	1 1 2 2 3
	Printed/Typed Name	)			Signa	ture	18.	ne	20	R	al	lal	u	Lienanio				Month	Day Year
F	<ol> <li>Transporter 2 Acknowledgement of Receipt of Mate Printed/Typed Name</li> </ol>	rials			Signa	ture			· ·									Month	Day Year
								1									1		l I I
1	19. Certificate of Final Treatment/Disposal																		
Ĺ	I certify, on behalf of the above listed was managed in compliance with all	applica	able l	aws,	reg	ulatio	ons,	pe	rmit	s a	y kr nd li	now	ledo ises	ge, tl s on	ne a the	bov date	e-deso es liste	cribed d abo	waste ve.
12	<ol> <li>Facitify Owner or Operator: Certification of receipt of Printed/Typed Name</li> </ol>	non-haz	ardous			111	by thi	s ma	nifest										
	Jan Collins			S	ignat	R.C	00	U	M	2							K	Month 0 8	Day Year

# Appendix C Laboratory Analytical Report - Groundwater



## **Volatile Organic Compounds by GC/MS**

Client: AECOM - Resolution Consultants

Description: BEALB1404TW01WG20150618

Laboratory ID: QF20008-001

Matrix: Aqueous

Date Sampled:06/18/2015 1555

Date Received: 06/20/2015

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch
1	5030B	8260B	1	06/26/2015 1939 ALL		78249

	CAS	Analytical					
Parameter	Number	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	0.19 ug/L 1

Surrogate	Run 1 Q % Recovery	Acceptance Limits	
Bromofluorobenzene	92	75-120	
1,2-Dichloroethane-d4	99	70-120	
Toluene-d8	99	85-120	
Dibromofluoromethane	99	85-115	

PQL = Practical quantitation limit ND = Not detected at or above the MDL  $B = Detected in the method blank \\ J = Estimated result < PQL and <math>\geq MDL$ 

 $\label{eq:power_power} E = \mbox{Quantitation of compound exceeded the calibration range} \\ P = \mbox{The RPD between two GC columns exceeds 40\%}$ 

H = Out of holding timeN = Recovery is out of criteria

Q = Surrogate failure 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

## Semivolatile Organic Compounds by GC/MS (SIM)

Client: AECOM - Resolution Consultants

Description: BEALB1404TW01WG20150618

Matrix: Aqueous

Laboratory ID: QF20008-001

Date Sampled: 06/18/2015 1555

Date Received: 06/20/2015

Run Prep Method **Analytical Method Dilution Analysis Date Analyst** Batch **Prep Date** 1 3520C 8270D (SIM) 06/23/2015 1743 RBH 06/22/2015 1610 77836

_	CAS	Analytical					
Parameter	Number	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		74	15-139
Fluoranthene-d10		77	23-154

PQL = Practical quantitation limit ND = Not detected at or above the MDL B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

H = Out of holding time

Q = Surrogate failure L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

 $J = Estimated result < PQL and <math>\geq MDL$ 

N = Recovery is out of criteria

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





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

April 7, 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 above referenced Underground Storage Tank Assessment Reports for the addresses listed above. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

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

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

If you have any questions, please contact me at <a href="mailto:kriegkm@dhec.sc.gov">kriegkm@dhec.sc.gov</a> or 803-898-0255.

Sincerely,

Kent Krieg

Stat M. W.

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)



#### Catherine B. Templeton, Director

Promoting and protecting the health of the public and the environment

Attachment to:

Krieg to Drawdy Subject: IGWA Dated 4/7/2015

## Laurel Bay Underground Storage Tank Assessment Reports for: (18 addresses/19 tanks)

1186 Bobwhite	1417 Albatross	
1194 Cardinal	1420 Dove	
1354 Cardinal	1421 Albatross Tank 1	
1362 Cardinal	1421 Albatross Tank 2	
1364 Cardinal Tank 1	1427 Albatross	*
1403 Eagle	1429 Albatross	
1404 Eagle	1444 Dove Tank 1	
1405 Eagle	1453 Cardinal	
1408 Eagle	1455 Cardinal	
1410 Eagle		



#### Catherine E. Heigel, Director

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

Division of Waste Management Bureau of Land and Waste Management

February 22, 2016

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

RE: Approval and Concurrence with Draft Final Initial Groundwater Investigation Report-May and June 2015

Laurel Bay Military Housing Area Multiple Properties

Dated October 2015

Dear Mr. Drawdy,

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

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

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

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

Sincerely,

Laurel Petrus

LINA

RCRA Federal Facilities Section

Attachment: Specific Property Recommendations

Cc: Russell Berry, EQC Region 8 (via email)

Shawn Dolan, Resolution Consultants (via email)

Bryan Beck, NAVFAC MIDATLANTIC (via email)

Craig Ehde (via email)

Attachment to: Petrus to Drawdy

Subject: Draft Final Initial Groundwater Investigation Report-May and June 2015

Specific Property Recommendations

Dated February 22, 2016

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

273 Birch Drive	1192 Bobwhite Drive
325 Ash Street	1194 Bobwhite Drive
326 Ash Street	1272 Albatross Drive
336 Ash Street	1352 Cardinal Lane
343 Ash Street	1356 Cardinal Lane
353 Ash Street	1359 Cardinal Lane
430 Elderberry Drive	1360 Cardinal Lane
440 Elderberry Drive	1362 Cardinal Lane
456 Elderberry Drive	1370 Cardinal Lane
458 Elderberry Drive	1382 Dove Lane
468 Dogwood Drive	1384 Dove lane
518 Laurel Bay Blvd	1385 Dove Lane
635 Dahlia Drive	1389 Dove Lane
638 Dahlia Drive	1392 Dove Lane
640 Dahlia Drive	1393 Dove Lane
647 Dahlia Drive	1407 Eagle Lane
648 Dahlia Drive	1411 Eagle Lane
650 Dahlia Drive	1418 Albatross Drive
652 Dahlia Drive	1420 Albatross Drive
760 Althea Street	1426 Albatross Drive
1102 Iris Lane	1429 Albatross Drive
1132 Iris Lane	1434 Dove Lane
1133 Iris Lane	1436 Dove Lane
1144 Iris Lane	1440 Dove Lane
1148 Iris Lane	1442 Dove Lane
1186 Bobwhite Drive	1444 Dove Lane
No Fur	ther Action recommendation (91 addresses):
137 Laurel Bay Blvd	771 Althea Street
139 Laurel Bay Blvd	927 Albacore Street
229 Cypress Street	1015 Foxglove Street
261 Beech Street	1046 Gardenia Drive
276 Birch Drive	1062 Gardenia Drive
278 Birch Drive	1070 Heather Street
291 Birch Drive	1072 Heather Street

300 Ash Street	1107 Iris Lane	
304 Ash Street	1126 Iris Lane	
314 Ash Street	1129 Iris Lane	
322 Ash Street	1138 Iris Lane	
323 Ash Street	1161 Jasmine Street	
324 Ash Street	1167 Jasmine Street	
339 Ash Street	1170 Jasmine Street	
344 Ash Street	1190 Bobwhite Drive	
348 Ash Street	1219 Cardinal Lane	
349 Ash Street	1305 Eagle Lane	
362 Aspen Street	1353 Cardinal Lane	
376 Aspen Street	1354 Cardinal Lane	
380 Aspen Street	1357 Cardinal Lane	
383 Aspen Street	1361 Cardinal Lane	
387 Acorn Drive	1364 Cardinal Lane	->
392 Acorn Drive	1368 Cardinal Lane	
396 Acorn Drive	1377 Dove Lane	
433 Elderberry Drive	1381 Dove Lane	
439 Elderberry Drive	1391 Dove Lane	
442 Elderberry Drive	1403 Eagle Lane	
443 Elderberry Drive	1404 Eagle Lane	
444 Elderberry Drive	1405 Eagle Lane	
445 Elderberry Drive	1406 Eagle Lane	
446 Elderberry Drive	1408 Eagle Lane	
448 Elderberry Drive	1410 Eagle Lane	
449 Elderberry Drive	1412 Eagle Lane	
451 Elderberry Drive	1413 Albatross Drive	732-
453 Elderberry Drive	1414 Albatross Drive	
464 Dogwood Drive	1417 Albatross Drive	
466 Dogwood Drive	1421 Albatross Drive	-0.0
467 Dogwood Drive	1422 Albatross Drive	10311
469 Dogwood Drive	1425 Albatross Drive	
471 Dogwood Drive	1427 Albatross Drive	
475 Dogwood Drive	1430 Dove Lane	
516 Laurel Bay Blvd	1432 Dove Lane	
531 Laurel Bay Blvd	1438 Dove Lane	
532 Laurel Bay Blvd	1453 Cardinal Lane	
645 Dahlia Drive	1455 Cardinal Lane	
763 Althea Street		

Attachment to: Petrus to Drawdy

Subject: Draft Final Initial Groundwater Investigation Report-May and June 2015

Specific Property Recommendations Dated February 22, 2016, Page 2