SUMMARY REPORT
101 BIRCH ROAD (FORMERLY 276 BIRCH ROAD)
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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**Naval Facilities Engineering Command Atlantic** 

9324 Virginia Avenue Norfolk, Virginia 23511-3095

Prepared by:



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Contract Number: N62470-14-D-9016

CTO WE52

**JUNE 2021** 



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### **List of Acronyms**

bgs below ground surface

BTEX benzene, toluene, ethylbenzene, and xylenes

CTO Contract Task Order

COPC constituents of potential concern

ft feet

IDIQ Indefinite Delivery, Indefinite Quantity

IGWA Initial Groundwater Assessment

JV Joint Venture

LBMH Laurel Bay Military Housing MCAS Marine Corps Air Station

NAVFAC Mid-Lant Naval Facilities Engineering Command Mid-Atlantic

NFA No Further Action

PAH polynuclear aromatic hydrocarbon 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).

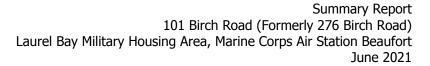
As of January 2014, the LBMH addresses were re-numbered to comply with the E-911 emergency response addressing system; however, in order to remain consistent with historical sampling and reporting for LBMH area, the residences will continue to be referenced with their original address numbers in sample 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 101 Birch Road (Formerly 276 Birch Road). 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, February 2016) and the Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service, (SCDHEC, 2018), are as follows:

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

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



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

The results of the soil sampling at each former UST location were used to determine if a potential for groundwater contamination exists (i.e., soil results greater than RBSLs) and subsequently to select properties for follow-up initial groundwater assessment (IGWA) sampling. The 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 101 Birch Road (Formerly 276 Birch Road). Details regarding the soil investigation at this site are provided in the SCDHEC UST Assessment Report – 276 Birch Road (MCAS Beaufort, 2008) and SCDHEC UST Assessment Report – 276 Birch Road (MCAS Beaufort, 2012). The UST Assessment Reports are provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the Investigation of Ground Water at Leaking Heating Oil UST Sites Report – (Resolution Consultants, 2008) and Initial Groundwater Investigation Report – May and June 2015 (Resolution Consultants, 2015). The laboratory reports that include the pertinent IGWA analytical results for this site is presented in Appendix C.

### 2.1 UST Removal and Soil Sampling

In July 2007 and October 2011, two 280 gallon heating oil USTs were removed at 101 Birch Road (Formerly 276 Birch Road). Tank 1 was removed on July 17, 2007 from underneath the



concrete driveway adjacent to the garage. Tank 2 was removed on October 18, 2011 from the front landscaped bed area adjacent to the front concrete porch. The former UST locations are indicated in the figures of the UST Assessment Reports (Appendix B). The USTs were 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 Reports (Appendix B), the depths to the bases of the USTs were 5'6" (Tank 1) and 4'0" (Tank 2) bgs and a single soil sample was collected for each at that depth. An additional soil sample was collected from the side of the excavation at a depth of 4'8" for Tank 1. The samples were collected from the fill port side of the former USTs to represent a worst case scenario.

Following UST removal, a soil sample was collected from the base of each excavation and the side in the excavation for Tank 1 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 are presented in Table 1. A copy of the laboratory analytical data reports are included in the UST Assessment Reports presented in Appendix B. The laboratory analytical data reports include 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 locations (Tanks 1 and 2) 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 the former UST locations (Tanks 1 and 2) at 101 Birch Road (Formerly 276 Birch Road) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In letters dated September 3, 2008 and May 15, 2014 regarding Tank 1 and Tank 2, respectively, SCDHEC requested IGWAs be conducted at the former UST locations (Tanks 1 and 2) 101 Birch Road (Formerly 276 Birch Road) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letters are provided in Appendix D.

### 2.3 Groundwater Sampling

On July 30, 2008 and May 21, 2015, temporary monitoring wells were installed at 101 Birch Road (Formerly 276 Birch Road), in accordance with the South Carolina Well Standards and





Regulations (R.61-71.H-I, updated May 27, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring wells were placed in the same general location as the former heating oil USTs (Tanks 1 and 2). The former UST locations are indicated in the figures of the UST Assessment Reports (Appendix B). Further details are provided in the *Investigation of Ground Water at Leaking Heating Oil UST Sites Report* (Resolution Consultants, 2008) and 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 wells. 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, May 2016). Field forms are provided in the *Investigation of Ground Water at Leaking Heating Oil UST Sites Report* (Resolution Consultants, 2008) and 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 101 Birch Road (Formerly 276 Birch Road) 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 USTs 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 101 Birch Road (Formerly 276 Birch Road). This NFA determination was obtained in letters dated November 20, 2008 and February 22, 2016, regarding Tank 1 and Tank 2, respectively. SCDHEC's NFA letters are provided in Appendix D.



### 4.0 REFERENCES

- Marine Corps Air Station Beaufort, 2008. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report 276 Birch Road, Laurel Bay Military Housing Area*, January 2008.
- Marine Corps Air Station Beaufort, 2012. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report 276

  Birch Road, Laurel Bay Military Housing Area, February 2012.
- Resolution Consultants, 2008. *Investigation of Ground Water at Leaking Heating Oil UST Sites*Report for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military

  Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina, November 2008.
- 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.



Summary Report 101 Birch Road (Formerly 276 Birch Road) Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort June 2021

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 101 Birch Road (Formerly 276 Birch Road) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Results Samples Collected 07/17/07 and 10/18/11				
Constitution	SEDILE RUSES	276 Birch Bottom 01 07/17/07	276 Birch Side 02 07/17/07	276 Birch 10/18/11		
Volatile Organic Compounds Analyzed	by EPA Method 8260B (mg/kg)					
Benzene	0.003	ND	0.000396	0.0130		
Ethylbenzene	1.15	0.00014	0.000419	0.996		
Naphthalene	0.036	0.00155	0.0102	9.52		
Toluene	0.627	ND	ND	ND		
Xylenes, Total	13.01	ND	ND	1.10		
Semivolatile Organic Compounds Ana	lyzed by EPA Method 8270D (mg/kg)					
Benzo(a)anthracene	0.66	0.849	11	ND		
Benzo(b)fluoranthene	0.66	0.690 7.080		ND		
Benzo(k)fluoranthene	0.66	0.330	2.950	ND		
Chrysene	0.66	0.761	7.230	ND		
Dibenz(a,h)anthracene	0.66	ND	0.118	ND		

#### Notes:

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

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

### Table 2

### Laboratory Analytical Results - Groundwater 101 Birch Road (Formerly 276 Birch Road) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Site-Specific Groundwater VISLs	Results Samples Collected 07/30/08 and 05/21/15		
		(μg/L) <sup>(2)</sup>	276 Birch A 07/30/08	276 Birch Drive 05/21/15	
<b>Volatile Organic Compounds Analyzed</b>	by EPA Method 8260B (	μg/L)			
Benzene	5	16.24	ND	ND	
Ethylbenzene	700	45.95	ND	ND	
Naphthalene	25	29.33	ND	ND	
Toluene	1000	000 105,445 ND		ND	
Xylenes, Total	10,000	2,133	ND	ND	
Semivolatile Organic Compounds Ana	lyzed by EPA Method 82	70D (μg/L)			
Benzo(a)anthracene	10	NA	ND	ND	
Benzo(b)fluoranthene	10	NA	ND	ND	
Benzo(k)fluoranthene	10	NA NA	ND	ND	
Chrysene	10	NA NA	ND	ND	
Dibenz(a,h)anthracene	10	NA	ND	ND	

#### Notes:

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

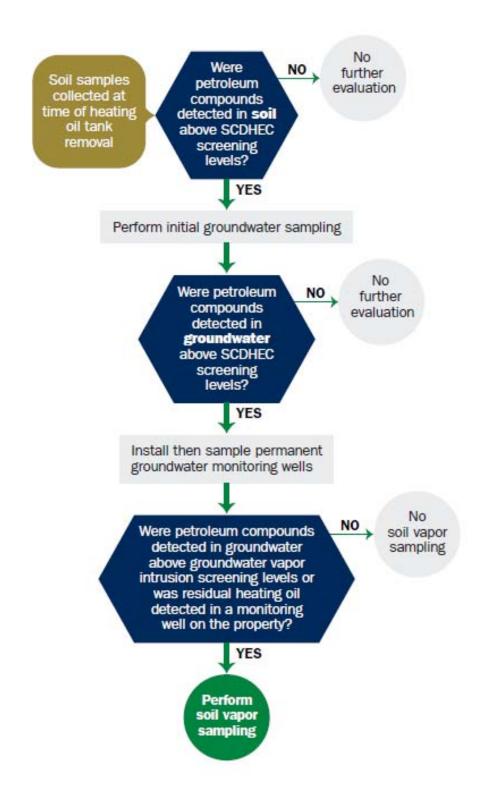
VISL - Vapor Intrusion Screening Level

<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).

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

# Appendix A Multi-Media Selection Process for LBMH





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

# Appendix B UST Assessment Reports



# Attachment 1 South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank (UST) Assessment Report

Date Received	AT A THE			7
	State 1	se Only		

Submit Completed Form To:

UST Program

SCDHEC

2600 Bull Street

Columbia, South Carolina 29201

Telephone (803) 896-6240

Beaufort Military Complex Family Housing
Owner Name (Corporation, Individual, Public Agency, Other)

1510 Laurel Bay Blyb.

Mailing Address

Beaufort SC 29906

City State Zip Code

843

Area Code Telephone Number Contact Person

II. SITE IDENTIFICATION AND LOCATION

N/A

Permit I.D. # Ac tus LEND Lease Construction

Facility Name or Company Site Identifier

276 BIRCH

Street Address or State Road (as applicable)

Beaufort, SC 29906

Beaufort

City

ZIP

County

### III. INSURANCE INFORMATION

Insurance Statement
The petroleum release reported to DHEC on
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.
And
I do/do not (circle one) wish to participate in the Superb Program.
IV. CERTIFICATION (To be signed by the UST owner/operator.)
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

TORVIATION	Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
×.	#2					
Product(ex. Gas, Kerosene)	DIESE					
Capacity (ex. 1k, 2k) (APAPOX)	350g.					
Age						
Construction Material(ex. Steel, FRP)	Steel					
Month/Year of Last Use						
Depth (ft.) To Base of Tank	66"					
Spill Prevention Equipment Y/N	N					
Overfill Prevention Equipment Y/N	N					
Method of Closure Removed Filled	Remove	1				
Date Tanks Removed/Filled	7-17-07					
Visible Corrosion or Pitting Y/N	N					
Visible Holes Y/N	N					
Method of disposal for any USTs removed from the	he ground (	attach di	sposal m	anifests)		
Recycling - Scrap Sta	eel					
Method of disposal for any liquid petroleum, sludgisposal manifests)  TREATMENT FACILITY						
So Cidification A	rul (	5u6	tite	&D	LA	nd fr
3500						

# VI. PIF GINFORMATION

					Tank 5	
Construction Material(ex. Steel, FRP)	Steel					
Distance from UST to Dispenser	NIA					
Number of Dispensers	-0-	-				-
Type of System Pressure or Suction	Electric					_
Was Piping Removed from the Ground? Y/N	Pump					
Visible Corrosion or Pitting Y/N	4					
Visible Holes Y/N	2					
Age						
	N				-	
If any corrosion, pitting, or holes were observed,  Mild Corrosion was						
If any corrosion, pitting, or holes were observed,  Mild Collegion WAS						
	or	fil				
Mild Corrosion WAS	D HISTO	fie.	PPI	se a	+ Ve	
Mild Corrosion WAS	D HISTO	fie.	PPI	se a	+ Ve	
Mild Corrosion WAS	D HISTO	fie.	PPI	se a	+ Ve	

# VIII. SITE CO. ITIONS

	Yes	No	Unk
A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells?  If yes, indicate depth and location on the site map.		Х	*
B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells?  If yes, indicate location on site map and describe the odor (strong, mild, etc.)		*	
C. Was water present in the UST excavation, soil borings, or trenches?  If yes, how far below land surface (indicate location and depth)?		*	
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:		*	
Was a petroleum sheen or free product detected on any excavation or boring waters?  If yes, indicate location and thickness.		*	

A.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
1	Воттом	5	SAND	66"	7-17-07 1300	ECHEVAREJA AMPANOGIS	ND
2	SIDE	5	SAND	56"	1310	A. Maringy A. Maring	ND
3			4.22				
4							
5							
6							
7							
8							
9			,4				
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

<sup>\* =</sup> Depth Below the Surrounding Land Surface

### SAMPLING METHOL LOGY

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.

EPA Method 8260 B Volatile ORGANIC Compound
- Preservative: 24 Sodium Bisulfate lea
EPA METHOD 8270 Poly AROMATIC HYDROCARBONS
- No Preservative
ONE (1) SIDEWALL And ONE (1) Bottom
DNE (1) SiDEWALL And ONE (1) Bottom  SAmple were secured from tank excavation
Samples were stored and shipped in AN INSURATED COOLER WI ICE.
INSUlated cooled w/ ICE.

## XI. RECE ORS

		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?		.,
	If yes, indicate type of receptor, distance, and direction on site map.		X
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		1
	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?		
	If yes, indicate type of structure, distance, and direction on site map.		1
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?		
	If yes, indicate the type of utility, distance, and direction on the site map.		V
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?		1
	If yes, indicate the area of contaminated soil on the site map.		

### SUMMARY OF ANALYSIS RESULTS

NIA

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

CoC	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8
Benzene								
Toluene								
Ethylbenzene	18							
Xylenes								
Naphthalene								
Benzo(a)anthracene								
Benzo(b)flouranthene								
Benzo(k)flouranthene								
Chrysene								
Dibenz(a,h)anthracene								
TPH (EPA 3550)	T				T		1	

CoC	SB-9	SB-10	SB-11	SB-12	SB-13	SB-14	SB-15	SB-16
Benzene								
Toluene								
Ethylbenzene								
Xylenes								
Naphthalene								
Benzo(a)anthracene								
Benzo(b)flouranthene								
Benzo(k)flouranthene								
Chrysene								
Dibenz(a,h)anthracene								
TPH (EPA 3550)	1	T						

SUMMARY OF ANALYSIS RESULTS (cont'd)

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

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

### 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

4310 East Anderson Road Orlando, FL 32812 \* 800-851-2560 \* Fax 407-856-0886

Client: EPG, INC.

Work Order:

OQG0504

Sampled: 07/16/07-07/20/07

PO BOX 1096

Project:

LAUREL BAY

Received: 07/25/07

MT PLEASANT, SC 29465 Attn:

Project Number: EP2362

JOHN MAHONEY

### LABORATORY REPORT

### Sample ID: 1019 FOXGLOVE SIDE 02 - Lab Number: OQG0504-06 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
Polynucl	ear Aromatic Hydrocarbon	s by EPA Met	hod 827	0 - Cont.							
0-12-0	1-Methylnaphthalene	99.2	U	ug/kg dry	99.2	198	1	07/30/07 23:27	REM	EPA 8270C	7G27018
18-01-9	Chrysene	23.6	U	ug/kg dry	23.6	198	1	07/30/07 23:27	REM	EPA 8270C	7G27018
3-70-3	Dibenz (a,h) anthracene	25.9	U	ug/kg dry	25.9	198	1	07/30/07 23:27	REM	EPA 8270C	7G27018
06-44-0	Fluoranthene	28.4	U	ug/kg dry	28.4	198	1	07/30/07 23:27	REM	EPA 8270C	7G27018
6-73-7	Fluorene	77.3	U	ug/kg dry	77.3	198	1	07/30/07 23:27	REM	EPA 8270C	7G27018
93-39-5	Indeno (1,2,3-cd) pyrene	25.6	U	ug/kg dry	25.6	198	1	07/30/07 23:27	REM	EPA 8270C	7G27018
1-57-6	2-Methylnaphthalene	84.3	U	ug/kg dry	84.3	198	1	07/30/07 23:27	REM	EPA 8270C	7G27018
1-20-3	Naphthalene	79.4	U	ug/kg dry	79.4	198	1	07/30/07 23:27	REM	EPA 8270C	7G27018
5-01-8	Phenanthrene	46.6	U	ug/kg dry	46.6	198	1	07/30/07 23:27	REM	EPA 8270C	7G27018
29-00-0	Pyrene	40.1	U	ug/kg dry	40.1	198	1	07/30/07 23:27	REM	EPA 8270C	7G27018
urrogate: 2	2-Fluorobiphenyl (24-121%)	68 %									
urrogate: /	Nitrobenzene-d5 (19-111%)	67 %									
urrogate:	Terphenyl-d14 (44-171%)	119 %									

### LABORATORY REPORT

### Sample ID: 276 BIRCH BOTTOM 01 - Lab Number: OQG0504-07 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
eneral (	Chemistry Parameters										
A	% Solids	81.8	Q	%.	0.100	0.100	1	07/25/07 16:55	RRP	EPA 160.3	7G25041
olatile (	Organic Compounds by EPA	Method 826	0В								
-43-2	Benzene	0.107	U	ug/kg dry	0.107	0.292	1	07/25/07 23:52	JWT	EPA 8260B	7G26028
10-41-4	Ethylbenzene	0.140	1	ug/kg dry	0.123	0.292	1	07/25/07 23:52	JWT	EPA 8260B	7G26028
-20-3	Naphthalene	1.55		ug/kg dry	0.161	0.292	1	07/25/07 23:52	JWT	EPA 8260B	7G26028
18-88-3	Toluene	0.252	U	ug/kg dry	0.252	0.292	1	07/25/07 23:52	JWT	EPA 8260B	7G26028
30-20-7	Xylenes, total	0.152	U	ug/kg dry	0.152	0.292	1	07/25/07 23:52	JWT	EPA 8260B	7G26028
rrogate: l	,2-Dichloroethane-d4 (73-137%)	125 %									
rrogate: 4	l-Bromofluorobenzene (59-118%)	93 %									
rrogate: L	Dibromofluoromethane (55-145%)	108 %									
rrogate: 7	Toluene-d8 (80-117%)	100 %									
olynucle	ear Aromatic Hydrocarbons b	y EPA Meth	hod 827	0							
-32-9	Acenaphthene	90.4	U	ug/kg dry	90.4	204	1	07/30/07 23:49	REM	EPA 8270C	7G27018
8-96-8	Acenaphthylene	119	U	ug/kg dry	119	204	1	07/30/07 23:49	REM	EPA 8270C	7G27018
0-12-7	Anthracene	201	1	ug/kg dry	65.1	204	1	07/30/07 23:49	REM	EPA 8270C	7G27018
-55-3	Benzo (a) anthracene	849		ug/kg dry	22.1	204	1	07/30/07 23:49	REM	EPA 8270C	7G27018
5-99-2	Benzo (b) fluoranthene	690		ug/kg dry	21.5	204	1	07/30/07 23:49	REM	EPA 8270C	7G27018
7-08-9	Benzo (k) fluoranthene	330		ug/kg dry	21.5	204	1	07/30/07 23:49	REM	EPA 8270C	7G27018
1-24-2	Benzo (g,h,i) perylene	121	1	ug/kg dry	21.2	204	1	07/30/07 23:49	REM	EPA 8270C	7G27018
-32-8	Benzo (a) pyrene	407		ug/kg dry	25.1	204	1	07/30/07 23:49	REM	EPA 8270C	7G27018
-12-0	I-Methylpaphthalene	102	U	ug/kg dry	102	204	1	07/30/07 23:49	REM	EPA 8270C	7G27018
3-01-9	Chrysene	761		ug/kg dry	24.4	204	1	07/30/07 23:49	REM	EPA 8270C	7G27018
-70-3	Dibenz (a,h) anthracene	26.8	U	ug/kg dry	26.8	204	1	07/30/07 23:49	REM	EPA 8270C	7G27018
5-44-0	Fluoranthene	1640	(95)	ug/kg dry	29.4	204	1	07/30/07 23:49	REM	EPA 8270C	7G27018

Enid Ortiz For Shali Brown

Project Manager



THE LEADER IN ENVIRONMENTAL TESTING

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Project:

OQG0504

LAUREL BAY

EP2362

Sampled: 07/16/07-07/20/07

Received: 07/25/07

JOHN MAHONEY

### LABORATORY REPORT

### Sample ID: 276 BIRCH BOTTOM 01 - Lab Number: OQG0504-07 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
olynucl	ear Aromatic Hydrocarbon	s by EPA Meth	hod 827	70 - Cont.							
6-73-7	Fluorene	79.9	U	ug/kg dry	79.9	204	1	07/30/07 23:49	REM	EPA 8270C	7G27018
93-39-5	Indeno (1,2,3-cd) pyrene	143	1	ug/kg dry	26.4	204	1	07/30/07 23:49	REM	EPA 8270C	7G27018
1-57-6	2-Methylnaphthalene	87.0	U	ug/kg dry	87.0	204	1	07/30/07 23:49	REM	EPA 8270C	7G27018
1-20-3	Naphthalene	82.0	U	ug/kg dry	82.0	204	1	07/30/07 23:49	REM	EPA 8270C	7G27018
5-01-8	Phenanthrene	93.3	1	ug/kg dry	48.1	204	1	07/30/07 23:49	REM	EPA 8270C	7G27018
29-00-0	Pyrene	1640		ug/kg dry	41.5	204	1	07/30/07 23:49	REM	EPA 8270C	7G27018
urrogate:	2-Fluorobiphenyl (24-121%)	69 %		S 50 150							
urrogate: l	Nitrobenzene-d5 (19-111%)	71 %									
urrogate:	Terphenyl-d14 (44-171%)	127 %									

### LABORATORY REPORT

### Sample ID: 276 BIRCH SIDE 02 - Lab Number: OQG0504-08 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
	Chemistry Parameters				0.101				***		
A	% Solids	77.2	Q	%.	0.100	0.100	1	07/25/07 16:55	RRP	EPA 160.3	7G25041
	Organic Compounds by EPA		OB	100000000000000000000000000000000000000							
1-43-2	Benzene	0.396		ug/kg dry	0.104	0.283	1	07/26/07 00:10	JWT	EPA 8260B	7G26028
30-41-4	Ethylbenzene	0.419		ug/kg dry	0.120	0.283	1	07/26/07 00:10	JWT	EPA 8260B	7G26028
1-20-3	Naphthalene	10.2		ug/kg dry	0.156	0.283	1	07/26/07 00:10	JWT	EPA 8260B	7G26028
08-88-3	Toluene	0.244	U	ug/kg dry	0.244	0.283	1	07/26/07 00:10	JWI	EPA 8260B	7G26028
330-20-7	Xylenes, total	0.147	U	ug/kg dry	0.147	0.283	1	07/26/07 00:10	JWT	EPA 8260B	7G26028
urrogate: 1	,2-Dichloroethane-d4 (73-137%)	115 %									
urrogate: 4	l-Bromofluorobenzene (59-118%)	48 %	11								
ırrogate: E	Dibromofluoromethane (55-145%)	107 %									
errogate: 7	Toluene-d8 (80-117%)	88 %									
	ear Aromatic Hydrocarbons b		hod 827	0							
1-32-9	Acenaphthene	235		ug/kg dry	95.8	216	1	07/31/07 00:12	REM	EPA 8270C	7G27018
18-96-8	Acenaphthylene	126	U	ug/kg dry	126	216	1	07/31/07 00:12	REM	EPA 8270C	7G27018
10-12-7	Anthracene	2180		ug/kg dry	68.9	216	1	07/31/07 00:12	REM	EPA 8270C	7G27018
-55-3	Benzo (a) anthracene	11000		ug/kg dry	117	1080	5	07/31/07 10:40	REM	EPA 8270C	7G27018
15-99-2	Benzo (b) fluoranthene	7080		ug/kg dry	22.8	216	1	07/31/07 00:12	REM	EPA 8270C	7G27018
17-08-9	Benzo (k) fluoranthene	2950		ug/kg dry	22.8	216	1	07/31/07 00:12	REM	EPA 8270C	7G27018
11-24-2	Benzo (g,h,i) perylene	1180		ug/kg dry	22.4	216	1	07/31/07 00:12	REM	EPA 8270C	7G27018
-32-8	Benzo (a) pyrene	4000		ug/kg dry	26.6	216	1	07/31/07 00:12	REM	EPA 8270C	7G27018
-12-0	1-Methylnaphthalene	122	I	ug/kg dry	109	216	1	07/31/07 00:12	REM	EPA 8270C	7G27018
8-01-9	Chrysene	7230		ug/kg dry	25.9	216	1	07/31/07 00:12	REM	EPA 8270C	7G27018
70-3	Dibenz (a,h) anthracene	118	1	ug/kg dry	28.4	216	1	07/31/07 00:12	REM	EPA 8270C	7G27018
6-44-0	Fluoranthene	21800		ug/kg dry	155	1080	5	07/31/07 10:40	REM	EPA 8270C	7G27018
-73-7	Fluorene	84.6	U	ug/kg dry	84.6	216	1	07/31/07 00:12	REM	EPA 8270C	7G27018
3-39-5	Indeno (1,2,3-cd) pyrene	1210	3	ug/kg dry	28.0	216	1	07/31/07 00:12	REM	EPA 8270C	7G27018
-57-6	2-Methylnaphthalene	101	ĭ	ug/kg dry	92.2	216	1	07/31/07 00:12	REM	EPA 8270C	7G27018



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JOHN MAHONEY

MT PLEASANT, SC 29465

Work Order:

OQG0504

Project: Project Number:

LAUREL BAY

EP2362

Sampled: 07/16/07-07/20/07

Received: 07/25/07

LABORATORY REPORT

Sample ID: 276 BIRCH SIDE 02 - Lab Number: OQG0504-08 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
Polynucl	ear Aromatic Hydrocarbon	s by EPA Met	hod 827	0 - Cont.					100.00		
1.20-3	Naphthalene	86.8	U	ug/kg dry	86.8	216	**	07/21/07 00 12	-	2220002000000	
5-01-8	Phenanthrene	668		1000				07/31/07 00:12		EPA 8270C	7G27018
29-00-0	Pyrene			ug/kg dry	51.0	216	1	07/31/07 00:12	REM	EPA 8270C	7G27018
	E11.575	17400		ug/kg dry	220	1080	5	07/31/07 10:40	REM	EPA 8270C	
	2-Fluorobiphenyl (24-121%)	68 %					52.0	01151101 10,40	AVE IVE	EFA 62/0C	7G27018
urrogate: N	Vitrobenzene-d5 (19-111%)	66 %									
urrogate: T	Terphenyl-d14 (44-171%)	120 %									

LABORATORY REPORT

Sample ID: 1011 FOXGLOVE BOTTOM 01 - Lab Number: OQG0504-09 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Facto	Analyzed Date/Time	Ву	Method	Batch
Jenera	Chemistry Parameters										
Α	% Solids	93.5		%.	0.100	0.100	1	00.000.000		o - Camada Maria Maria Maria Maria	
<sup>7</sup> olatile	Organic Compounds by EPA	Method 82	60B		0.100	0.100	194	07/25/07 16:55	RRP	EPA 160.3	7G25041
1-43-2	Benzene	0.0928	U	ug/kg dry	0.0928	0.254	1	07/76/07 00:26	******		
30-41-4	Ethylbenzene	0.107	U	ug/kg dry	0.107	0.254	1	07/26/07 00:26			
1-20-3	Naphthalene	0.477		ug/kg dry	0.140	0.254	100	07/26/07 00:26		EPA 8260B	
18-88-3	Toluene	0.219	U	ug/kg dry	0.219	0.254	I	07/26/07 00:26		EPA 8260B	7G26028
130-20-7	Xylenes, total	0.132	U	ug/kg dry	0.132		1	07/26/07 00:26		EPA 8260B	7G26028
ırrogate:	1,2-Dichloroethane-d4 (73-137%)	124 %		og kg dry	0.132	0.254	1	07/26/07 00:26	JWT	EPA 8260B	7G26028
irrogate:	4-Bromofluorobenzene (59-118%)	101 %									
urrogate:	Dibromofluoromethane (55-145%)	107%									
arrogate:	Toluene-d8 (80-117%)	101%									
olynucl 32-9	ear Aromatic Hydrocarbons				5-202/GeV						
8-96-8	Acenaphthylene	105	U	ug/kg dry	79.2	179	1	07/31/07 00:34	REM	EPA 8270C	7G27018
0-12-7	Anthracene	57.0	U	ug/kg dry	105	179	1	07/31/07 00:34	REM	EPA 8270C	7G27018
-55-3	Benzo (a) anthracene		U	ug/kg dry	57.0	179	1	07/31/07 00:34	REM	EPA 8270C	7G27018
5-99-2	Benzo (b) fluoranthene	19.3	U	ug/kg dry	19.3	179	1	07/31/07 00:34	REM	EPA 8270C	7G27018
7-08-9	Benzo (k) fluoranthene	18.8	U	ug/kg dry	18.8	179	1	07/31/07 00:34	REM	EPA 8270C	7G27018
1-24-2	Benzo (g.h,i) perylene	18.8	U	ug/kg dry	18.8	179	1	07/31/07 00:34	REM	EPA 8270C	7G27018
-32-8	Benzo (a) pyrene	18.5	U	ug/kg dry	18.5	179	1	07/31/07 00:34	REM	EPA 8270C	7G27018
-12-0	I-Methylnaphthalene	22.0	U	ug/kg dry	22.0	179	1	07/31/07 00:34	REM	EPA 8270C	7G27018
8-01-9	Chrysene	89.7	U	ug/kg dry	89.7	179	1	07/31/07 00:34	REM	EPA 8270C	7G27018
70-3	Dibenz (a,h) anthracene	21.4	U	ug/kg dry	21.4	179	1	07/31/07 00:34	REM	EPA 8270C	7G27018
5-44-0	Fluoranthene	23.5	U	ug/kg dry	23.5	179		07/31/07 00:34	REM	EPA 8270C	7G27018 7G27018
73-7	Fluorene	25.7	U	ug/kg dry	25.7	179		07/31/07 00:34	REM	EPA 8270C	7G27018
1-39-5	54445555	69.9	U	ug/kg dry	69.9	179		07/31/07 00:34	REM	EPA 8270C	7G27018
57-6	Indeno (1,2,3-cd) pyrene	23.1	U	ug/kg dry	23.1	179		07/31/07 00:34	REM	EPA 8270C	
20-3	2-Methylnaphthalene	76.2	u	ug/kg dry	76.2	179		07/31/07 00:34	REM	EPA 8270C	7G27018
22 T	Naphthalene	71.8	U	ug/kg dry	71.8	179		07/31/07 00:34	REM		7G27018
01-8	Phenanthrene	42.1	U	ug/kg dry	42.1	179			REM	EPA 8270C	7G27018
-00-0	Ругепе	36.3	U	ug/kg dry	36.3	179			REM	EPA 8270C	7G27018
rogate: 2-	Fluorobiphenyl (24-121%)	55 %			1400000	33356	20 00	77.51.07 00:34	KEN	EPA 8270C	7G27018

TestAmerica - Orlando, FL Enid Ortiz For Shali Brown Project Manager

1 CSUAMERICA
ANALYTICAL YESTING CORPORATION
CHIERT Name

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

Compliance Monitoring

ANALYTICAL TESTING CORPOR		1								we conto	-	211	111					-				-			-
Client Name	CF	7	-	-		_	_	-	C	lient	#:	4-	111					1 .		G.	-				
Address:		-	_	-		_	_		-	_	_	_		-		Project N	ame:	LA	OKE	<u> </u>	7133	-			-
City/State/Zip Code:			-	-			_	_	_	_			_						2			-			
Project Manager:	DITIE	2 W	44	DV	EY		_						-	-	S	Site/Locatio	n ID:						State:		iner.
Telephone Number:	<b>\</b>	-	-	-		-	F	exc _	_					-		Rapor	t To:								-
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Standard Rush (surcharges may apply)  Date Needed:  Fax Results: Y N	Date Sampled	me Sampled	irab, C ≈ Composite	Held Fittered	St Studge DW - Orthiting Water GW - Groundwater S - SoldSolid WW - Westewater Specify Other					not	Constitut	(Amando)		THE THE CO	H 22.70									CC Deliverables None None Level 2 (Batch QC) Level 3 Level 4 Other:	
SAMPLE ID	Oate	E S	3 = Grab	pe	SL - 8	NO,	Ç	HOM	4,50g	fetha	9 2	1	B	1 0	7	1. 1			/	/	1	1	1	REMARKS	
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256 BEFCH SIDE 027	16-0	1030	C					1	1	-	_	7	X	×	-	1		-			1				00
1025 FOIGLOVE BOTTOMON 7	16-07	1420	C			Г			1	11	2 2	-	7	*							-			+ + +	6
1025 FORGLONE SIDE 62 7			C						T	1	2 1		*	7											09
1019 FONGLOVE BUTTOMON 7	17-07	800	G			Г			T	1/2	2/2	2	×	×											نه
1019 FORFILOVE SIDE 02/7	17:07	810	C		Land				T	11	2 7	2 .	*	*											06
276 Birch Botton of 17	17-07	1300	3					T	T	H	2 7	1	*	*											
276 BIRCH SIDE 02 17.	17-07	1310	C						I	1 2	2 2		*	×		TT									0
1011 FERGLOVE DETTER 6 1 7-	19-07	9:40	G							1/2	2 2	-1)	(	X	Victory)										09
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Relinguished By:		Date:		Time	D:	Rec	oviec	d By		U	1/		-		Date:	T	me:		Metho	od of S	hipmer	n: Fec	EX	POTA-UNI	en

To assist us in using the proper analytical methods, LUOUAHHEFICE is this work being conducted for regulatory purposes? Compliance Monitoring Client Name SPG Client #: 2411 Project Name: LALIREI Project# EP 2362 City/State/Zip Code: Project Manager: John MAHENEY State: Site/Location ID: Fax Report To: Telephone Number: Sampler Name: (Print Name) Joseph Horry Invoice To: Sampler Signature: OBSCOR HOWY Quote #: Analyze For: Matrix Preservation & # of Containers C Deliverables Standard None Rush (surcharges may apply) X Level 2 (Batch QC) Date Needed: Level 3 Level 4 Fax Results: Y N Other: SAMPLE ID REMARKS 1007 FoxGLOVE BETTOIN OI 17-18-67 1050 G 9100 / FOXGLOVE SIDE 02 7-18-07 1050 C 15 252 Beach Barray 97-18-07 1340 G 125 RUTTOM OIL 16 61100 RIS DIDE OZ 1108 1215 SIDE 02 7.2001940 20 cial instructions: LABORATORY COMMENTS: Init Lab Temp: Rec Lab Temp:

Received By:

Received By:

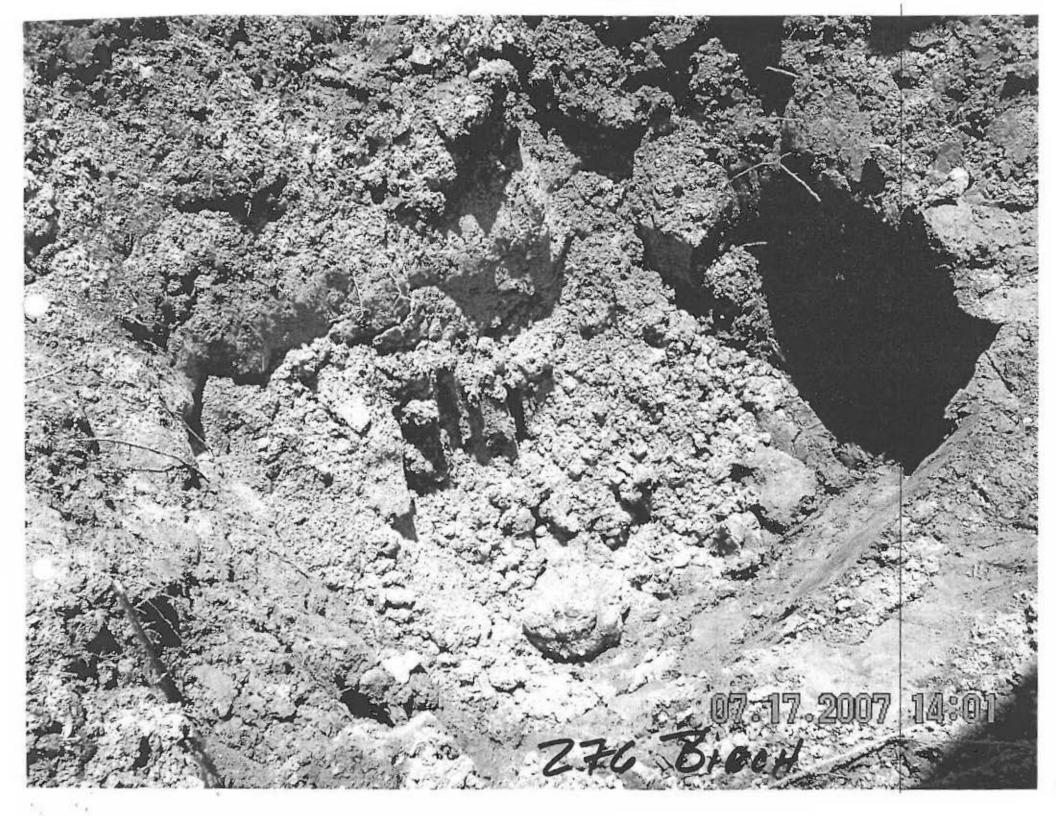
Time:

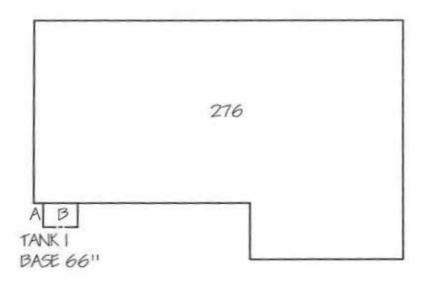
Relinquished By:

Custody Seels: Y N N/A Bottles Supplied by Test America;

8623 259 1 1600 Method of Shipment: Fell X40

To assist us in using the proper analytical methods, ANALYTICAL TESTING CORPORATION is this work being conducted for regulatory purposes? Compliance Monitoring Client #: 2411 Client Name - 15 Project Name: LAUREL BAY Project#: EP 2362 City/State/Zip Code: OHN MAHONEY Site/Location ID: State: Project Manager: Report To: Telephone Number: HIRT ECHEVARRIA Invoice To: Sampler Name: (Print Name) M'Mroin Sampler Signature: Quote #: Analyze For: Matrix Preservation & # of Container QC Deliverables TAT ✓ Standard None Rush (surcharges may apply) Level 2 (Batch QC) Date Needed: Level 3 Level 4 Fax Results: Y Other: SAMPLE ID REMARKS 1035 Ris Borrono 17-20-071200 20 · 1035 RIS SIDE OF 17-2001/210 cial instructions: LABORATORY COMMENTS: Init Lab Temp: Rec Lab Temp: Custody Seals: N N/A Bottles Supplied by Test America: Received By: 8623 2591 140C Method of Shipment: FULX Relinquished By: Received By: Date: Time:





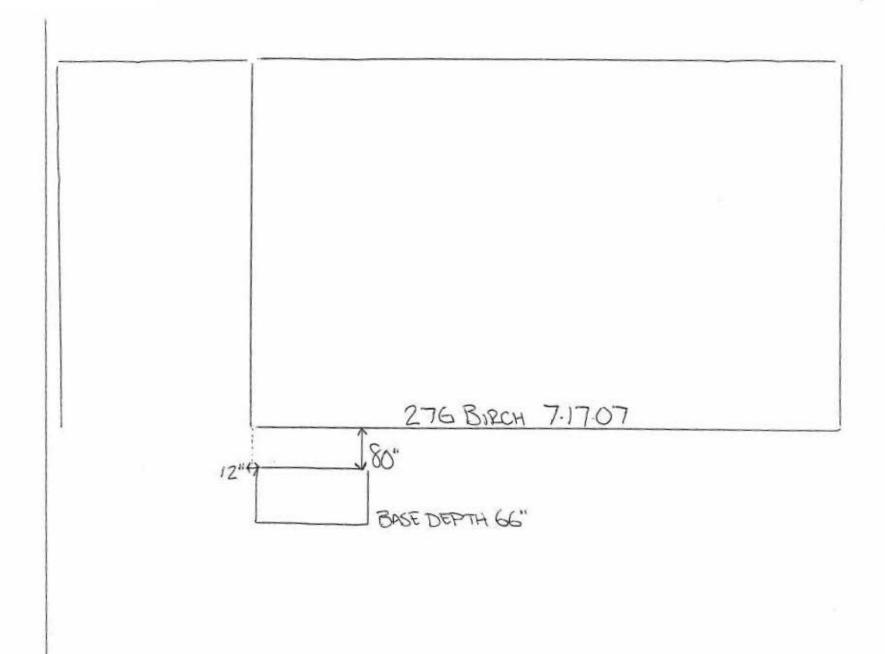
BIRCH DRIVE

TANK I EXCAVATION

A-SOIL TEST SIDE SAMPLE @ 56" B-SOIL TEST BOTTOM SAMPLE @ 66"



	Politics .	
CUSTOMER:	1/16'=1'-0"	EPG INC.
BEAUFORT MILITARY COMPLEX FAMILY HOUSING	SUPPLIER;	P.O. BOX 1096
SITE ADDRESS:	EPG INC.	MOUNT PLEASANT, SC 29465-1096
276 BIRCH DRIVE	9/22/2007	MOUNT PLEASANT, 30 29403-1090



#### Attachment 1

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



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

I. OWNERSHIP OF UST (S)

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

# II. SITE IDENTIFICATION AND LOCATION

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

Attachment 2

# III. INSURANCE INFORMATION

Insurance Statement
The petroleum release reported to DHEC on at Permit ID Number may qualify to receive state monies to pay for appropriate site rehabilitation activities. Before participation is allowed in the State Clean-up fund, written confirmation of the existence or non-existence of an environmental insurance policy is required. This section must be completed.
Is there now, or has there ever been an insurance policy or other financial mechanism that covers this UST release? YES NO (check one)
If you answered YES to the above question, please complete the following information:
My policy provider is: The policy deductible is: The policy limit is:
If you have this type of insurance, please include a copy of the policy with this report.
IV. REQUEST FOR SUPERB FUNDING
I DO / DO NOT wish to participate in the SUPERB Program. (Circle one.)
V. CERTIFICATION (To be signed by the UST owner)
I certify that I have personally examined and am familiar with the information submitted in this and all attached documents; and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.
Name (Type or print.)
· · · · · · · · · · · · · · · · · · ·
Signature
Signature  To be completed by Notary Public:
To be completed by Notary Public:

	VI. UST INFORMATION	276Birch
	Product(ex. Gas, Kerosene)	Heating oil
	Capacity(ex. 1k, 2k)	280 gal
	Age	Late 1950s
,	Construction Material(ex. Steel, FRP)	Steel
]	Month/Year of Last Use	Mid 80s
]	Depth (ft.) To Base of Tank	4 '
•	Spill Prevention Equipment Y/N	No
	Overfill Prevention Equipment Y/N	No
]	Method of Closure Removed/Filled	Removed
]	Date Tanks Removed/Filled	10/18/2011
,	Visible Corrosion or Pitting Y/N	Yes
,	Visible Holes Y/N	Yes
]	Method of disposal for any USTs removed from the UST 276Birch was removed from the "D" landfill. See Attachment "A.	e ground and disposed at a Subtiti
	Method of disposal for any liquid petroleum, sludge disposal manifests)	

# VII. PIPING INFORMATION

	276Birch
	Steel
Construction Material(ex. Steel, FRP)	& Copper
Distance from UST to Dispenser	N/A
Number of Dispensers	N/A
Type of System Pressure or Suction	Suction
Was Piping Removed from the Ground? Y/N	No
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 piping
The steel vent piping was corrod	ded and pitted. The copper
supply and return piping was sou	ınd.
VIII. BRIEF SITE DESCR The USTs at the residences are contained to the con	·
and formerly contained fuel oil	*
installed in the late 1950s and	last used in the mid 1980s.

# IX. SITE CONDITIONS

	Yes	No	Unk
A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells?  If yes, indicate depth and location on the site map.		Х	
<ul><li>B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells?</li><li>If yes, indicate location on site map and describe the odor (strong, mild, etc.)</li></ul>		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 84009

B.

Sample #		Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
276 Birch	Excav at fill end	Soil	Sandy	4 '	10/18/11 1145 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 t
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.

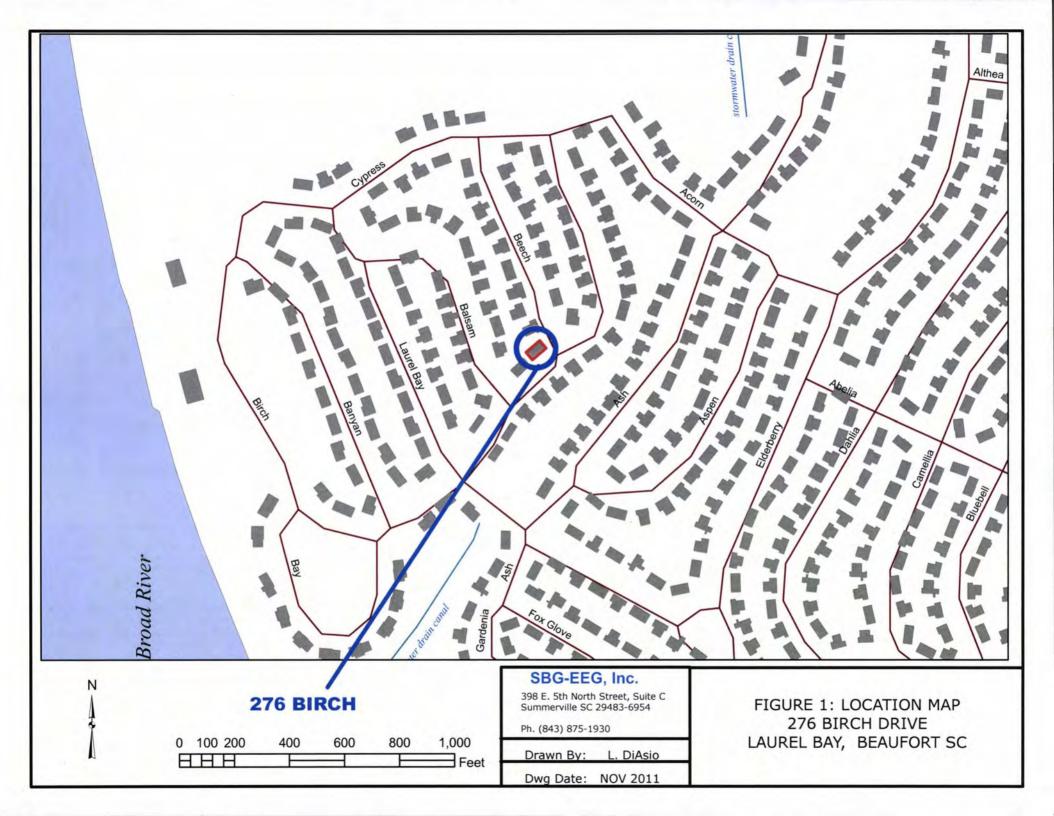
# XII. RECEPTORS

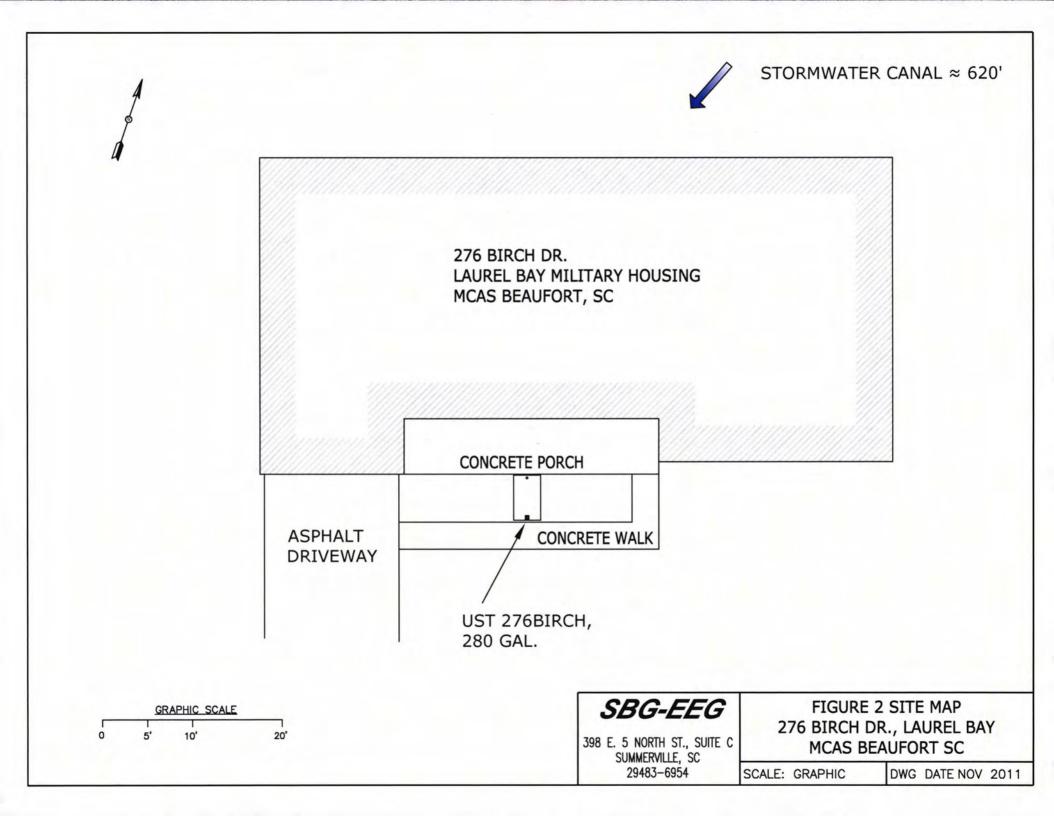
		Yes	No	_
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?	*X		
	*Approx 620' to stormwater drain If yes, indicate type of receptor, distance, and direction on site map.	age (	canal	
B.	Are there any public, private, or irrigation water supply wells within 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	*X		
	system that could potentially come in contact with the contamination? *Sewer, water	, cab	le,	
	electricity &			L
	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	
i	If yes, indicate the area of contaminated soil on the site map.			

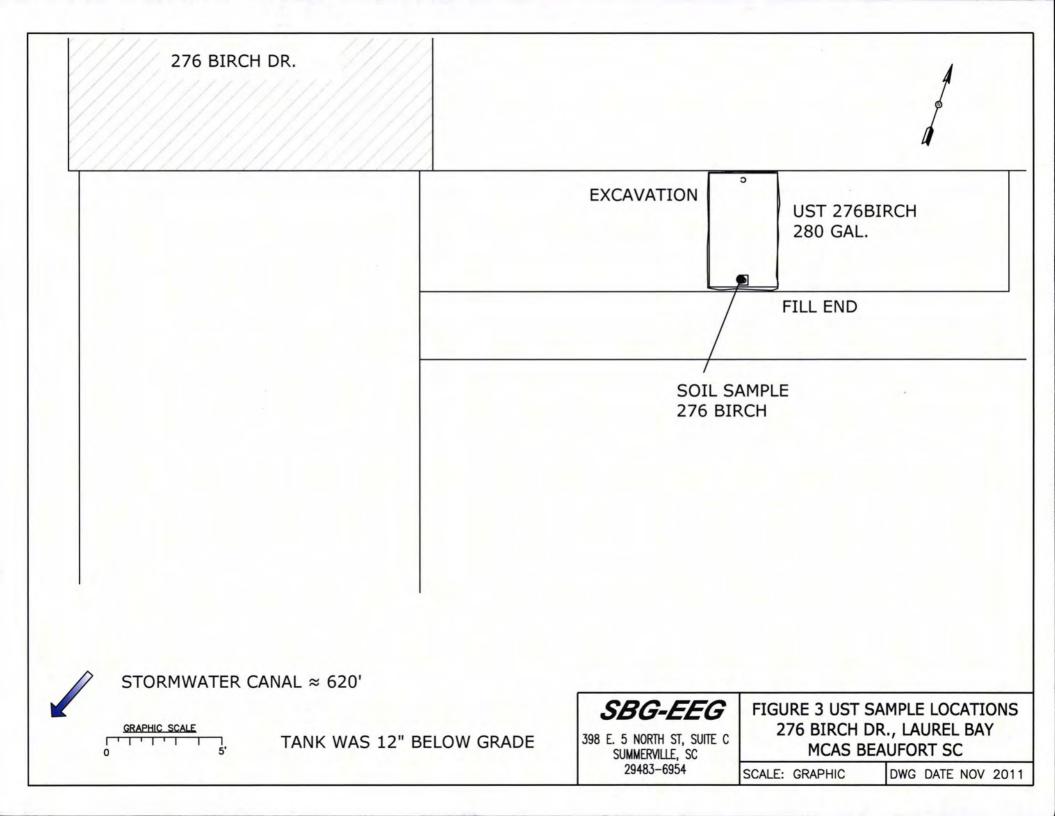
## XIII. SITE MAP

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 276Birch.



Picture 2: UST 276Birch excavation.

## 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.

		 <u> </u>		1	1	
CoC UST	276 Birch					
Benzene	0.0130 mg/kg					
Toluene	ND					
Ethylbenzene	0.996 mg/kg					•
Xylenes	1.10 mg/kg					
Naphthalene	9.52 mg/kg					
Benzo (a) anthracene	ND		-			
Benzo (b) fluoranthene	ND					
Benzo (k) fluoranthene	ND					
Chrysene	ND					
Dibenz (a, h) anthracene	ND					
TPH (EPA 3550)						
СоС						
Benzene						
Toluene						
Ethylbenzene						
Xylenes						
Naphthalene						
Benzo (a) anthracene						
Benzo (b) fluoranthene						
Benzo (k) fluoranthene						
Chrysene						
Dibenz (a, h) anthracene						
TPH (EPA 3550)			_			

SUMMARY OF ANALYSIS RESULTS (cont'd)
Enter the ground water analytical data for each sample for all CoC in the table below. If free product is present, indicate the measured thickness to the nearest 0.01 feet.

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

#### XV. ANALYTICAL RESULTS

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

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



# **TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Nashville 2960 Foster Creighton Road Nashville, TN 37204 Tel: 800-765-0980

TestAmerica Job ID: NUJ3005

Client Project/Site: [none]

Client Project Description: Laurel Bay Housing Project

For:

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

Attn: Tom McElwee

# Roxanne L. Connor

Authorized for release by:
11/4/2011 2:18:19 PM
Roxanne Connor
Program Manager - Conventional Accounts
roxanne.connor@testamericainc.com

Designee for

Ken A. Hayes Senior Project Manager ken.hayes@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: EEG - Small Business Group, Inc. (2449) Project/Site: [none]

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Sample Results	9
C Association	16
ronicle	18
ethod Summary	19
rtification Summary	20
ain of Custody	2

# **Sample Summary**

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

Project/Site: [none]

TestAmerica Job ID: NUJ3005

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
NUJ3005-01	276 Birch	Soil	10/18/11 11:45	10/22/11 08:15
NUJ3005-02	221 Cypress	Soil	10/19/11 12:00	10/22/11 08:15
NUJ3005-03	277 Birch	Soil	10/20/11 11:45	10/22/11 08:15

# Definitions/Glossary

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

Project/Site: [none]

TestAmerica Job ID: NUJ3005

#### Qualifiers

#### **GCMS Volatiles**

Qualifier	Qualifier Description	
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.	
RL1	Reporting limit raised due to sample matrix effects.	

#### **GCMS Semivolatiles**

Qualifier	Qualifier Description	
MHA	Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike	
	(LCS).	
R2	The RPD exceeded the acceptance limit.	
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.	

#### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
₩	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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

Project/Site: [none]

Lab Sample ID: NUJ3005-01

Matrix: Soil

Percent Solids: 82.8

TestAmerica Job ID: NUJ3005

#### Client Sample ID: 276 Birch Date Collected: 10/18/11 11:45

Date Received: 10/12/11 08:15

Analyte	<ul> <li>Volatile Organic Comp Result</li> </ul>	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fa
Benzene	0.0130		0.00197	0.00108	mg/kg dry	₹	10/18/11 11:45	10/29/11 22:09	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4	108		70 - 130				10/18/11 11:45	10/29/11 22:09	1.00
Dibromofluoromethane	101		70 - 130				10/18/11 11:45	10/29/11 22:09	1.0
Toluene-d8	618	ZX	70 - 130				10/18/11 11:45	10/29/11 22:09	1.00
4-Bromofluorobenzene	644	ZX	70 - 130				10/18/11 11:45	10/29/11 22:09	1.00
Method: SW846 8260B	- Volatile Organic Comp	ounds by E	PA Method 826	0B - RE	i				
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Ethylbenzene	0.996		0.103	0.0567	mg/kg dry	0	10/18/11 11:45	10/31/11 15:58	50.
Naphthalene	9.52		0.258	0.129	mg/kg dry	0	10/18/11 11:45	10/31/11 15:58	50.
Toluene	ND	RL1	0.103	0.0567	mg/kg dry	*	10/18/11 11:45	10/31/11 15:58	50.
Xylenes, total	1.10		0.258	0.129	mg/kg dry	O	10/18/11 11:45	10/31/11 15:58	50.
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4	106		70 - 130				10/18/11 11:45	10/31/11 15:58	50.
Dibromofluoromethane	98		70 - 130				10/18/11 11:45	10/31/11 15:58	50.
Toluene-d8	100		70 - 130				10/18/11 11:45	10/31/11 15:58	50.
4-Bromofluorobenzene	101		70 - 130				10/18/11 11:45	10/31/11 15:58	50.
	- Polyaromatic Hydroca	The second second						2.6.5	
Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fa
Acenaphthene	0.234		0.0803	0.0407	mg/kg dry	Ø.	10/28/11 07:15	10/28/11 22:12	1.00
Acenaphthylene	0.125		0.0803	0.0407	mg/kg dry	*	10/28/11 07:15	10/28/11 22:12	1.0
Anthracene	0.110		0.0803	0.0407	mg/kg dry	**	10/28/11 07:15	10/28/11 22:12	1.0
Benzo (a) anthracene	ND		0.0803	0.0407	mg/kg dry	D	10/28/11 07:15	10/28/11 22:12	1.0
Benzo (a) pyrene	ND		0.0803	0.0407	mg/kg dry	0	10/28/11 07:15	10/28/11 22:12	1.0
Benzo (b) fluoranthene	ND		0.0803	0.0407	mg/kg dry	Ø.	10/28/11 07:15	10/28/11 22:12	1.0
Benzo (g,h,i) perylene	ND		0.0803	0.0407	mg/kg dry	Ø.	10/28/11 07:15	10/28/11 22:12	1.0
Benzo (k) fluoranthene	ND		0.0803	0.0407	mg/kg dry	Ø	10/28/11 07:15	10/28/11 22:12	1.0
Chrysene	ND		0.0803	0.0407	mg/kg dry	\$	10/28/11 07:15	10/28/11 22:12	1.0
Dibenz (a,h) anthracene	ND		0.0803	0.0407	mg/kg dry	0	10/28/11 07:15	10/28/11 22:12	1.0
Fluoranthene	0.0419	J	0.0803	0.0407	mg/kg dry	*	10/28/11 07:15	10/28/11 22:12	1.0
Fluorene	0.510		0.0803		mg/kg dry	45	10/28/11 07:15	10/28/11 22:12	1.0
ndeno (1,2,3-cd) pyrene	ND		0.0803	0.0407	mg/kg dry	*	10/28/11 07:15	10/28/11 22:12	1.0
	1.96		0.0803	0.0407	mg/kg dry	*	10/28/11 07:15	10/28/11 22:12	1.0
Naphthalene			0.0803	0.0407		-03	10/28/11 07:15	10/28/11 22:12	1.0
	1.04			0.0407	mg/kg dry	**	10/28/11 07:15	10/28/11 22:12	1.0
Phenanthrene	1.04 0.0874		0.0803			*	10/28/11 07:15	10/20/11 22:12	1.0
Phenanthrene Pyrene			0.0803		mg/kg dry	24	10/26/11 07.15	10/28/11 22:12	
Phenanthrene Pyrene I-Methylnaphthalene Surrogate	0.0874 2.96 %Recovery	Qualifier	0.0803		mg/kg dry		Prepared	Analyzed	
Phenanthrene Pyrene 1-Methylnaphthalene Surrogate Terphenyl-d14	0.0874 2.96 %Recovery 85	Qualifier	0.0803  Limits  18 - 120		mg/kg dry		Prepared 10/28/11 07:15	Analyzed 10/28/11 22:12	Dil Fa
Phenanthrene Pyrene 1-Methylnaphthalene Surrogate Terphenyl-d14 2-Fluorobiphenyl	0.0874 2.96 %Recovery 85 72	Qualifier	0.0803  Limits  18 - 120  14 - 120		mg/kg dry	*	Prepared 10/28/11 07:15 10/28/11 07:15	Analyzed 10/28/11 22:12 10/28/11 22:12	1.0
Phenanthrene Pyrene 1-Methylnaphthalene Surrogate Terphenyl-d14 2-Fluorobiphenyl	0.0874 2.96 %Recovery 85	Qualifier	0.0803  Limits  18 - 120		mg/kg dry	*	Prepared 10/28/11 07:15	Analyzed 10/28/11 22:12	1.0
Naphthalene Phenanthrene Pyrene 1-Methylnaphthalene Surrogate Terphenyl-d14 2-Fluorobiphenyl Nitrobenzene-d5 Method: SW846 8270D Analyte	0.0874 2.96 %Recovery 85 72 70 - Polyaromatic Hydroca		0.0803  Limits  18 - 120  14 - 120  17 - 120	0.0407	mg/kg dry Unit	D	Prepared 10/28/11 07:15 10/28/11 07:15	Analyzed 10/28/11 22:12 10/28/11 22:12	

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

Project/Site: [none]

TestAmerica Job ID: NUJ3005

Lab Sample ID: NUJ3005-01 Client Sample ID: 276 Birch

Date Collected: 10/18/11 11:45 Matrix: Soil

Percent Solids: 82.8

Date Received: 10/22/11 08:15

Method: SW-846 - General Chen	nistry Paramete	ers							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	82.8		0.500	0.500	%		10/30/11 18:30	10/31/11 13:10	1.00

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

Method: SW-846 - General Chemistry Parameters

Analyte

% Dry Solids

Project/Site: [none]

TestAmerica Job ID: NUJ3005

Lab Sample ID: NUJ3005-02

Matrix: Soil Percent Solids: 95.1

# Client Sample ID: 221 Cypress

Date Collected: 10/19/11 12:00 Date Received: 10/22/11 08:15

Method: SW846 8260B - Vola Analyte	A STATE OF THE STA	ounds by E Qualifier	PA Method 82 RL		l Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND		0.00212	0.00116	mg/kg dry	亞	10/19/11 12:00	10/31/11 13:56	1.0
Ethylbenzene	ND		0.00212	0.00116	mg/kg dry	章	10/19/11 12:00	10/31/11 13:56	1.0
Toluene	ND		0.00212	0.00116	mg/kg dry	*	10/19/11 12:00	10/31/11 13:56	1.0
Xylenes, total	ND		0.00529	0.00265	mg/kg dry	ø	10/19/11 12:00	10/31/11 13:56	1.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4	111		70 - 130				10/19/11 12:00	10/31/11 13:56	1.0
Dibromofluoromethane	107		70 - 130				10/19/11 12:00	10/31/11 13:56	1.0
Toluene-d8	104		70 - 130				10/19/11 12:00	10/31/11 13:56	1.0
4-Bromofluorobenzene	154	ZX	70 - 130				10/19/11 12:00	10/31/11 13:56	1.0
Method: SW846 8260B - Vola	atile Organic Comp	ounds by E	PA Method 82	60B - RE2	2				
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Naphthalene	ND	RL1	0.276	0.138	mg/kg dry	- 0	10/19/11 12:00	10/31/11 14:25	50.
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4	105		70 - 130				10/19/11 12:00	10/31/11 14:25	50.
Dibromofluoromethane	95		70 - 130				10/19/11 12:00	10/31/11 14:25	50.
Toluene-d8	98		70 - 130				10/19/11 12:00	10/31/11 14:25	50.
4-Bromofluorobenzene	106		70 - 130				10/19/11 12:00	10/31/11 14:25	50.
Method: SW846 8270D - Poly	yaromatic Hydroca	rbons by El	PA 8270D						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Acenaphthene	ND		0.0692	0.0351	mg/kg dry	Ø.	10/28/11 07:15	10/28/11 22:33	1.0
Acenaphthylene	ND		0.0692	0.0351	mg/kg dry	400	10/28/11 07:15	10/28/11 22:33	1.0
Anthracene	ND		0.0692	0.0351	mg/kg dry	0	10/28/11 07:15	10/28/11 22:33	1.0
Benzo (a) anthracene	ND		0.0692	0.0351	mg/kg dry	\$	10/28/11 07:15	10/28/11 22:33	1.0
Benzo (a) pyrene	ND		0.0692	0.0351	mg/kg dry	0	10/28/11 07:15	10/28/11 22:33	1.0
Benzo (b) fluoranthene	ND		0.0692	0.0351	mg/kg dry	⇔	10/28/11 07:15	10/28/11 22:33	1.0
Benzo (g,h,i) perylene	0.0578	J	0.0692	0.0351	mg/kg dry	0	10/28/11 07:15	10/28/11 22:33	1.0
Benzo (k) fluoranthene	ND		0.0692	0.0351	mg/kg dry	章	10/28/11 07:15	10/28/11 22:33	1.0
Chrysene	0.0454	J	0.0692	0.0351	mg/kg dry	**	10/28/11 07:15	10/28/11 22:33	1.0
Dibenz (a,h) anthracene	ND		0.0692	0.0351	mg/kg dry	40	10/28/11 07:15	10/28/11 22:33	1.0
Fluoranthene				22222	malka dar	No.	10/28/11 07:15	10/28/11 22:33	1.0
	ND		0.0692	0.0351	mg/kg dry	0	10/20/11 01.10	10/20/11 22.00	1.0
Fluorene	ND ND		0.0692 0.0692		mg/kg dry	0	10/28/11 07:15	10/28/11 22:33	
Fluorene		J		0.0351	T. T. T. C. T.				1.0
	ND	J	0.0692	0.0351 0.0351	mg/kg dry	o	10/28/11 07:15	10/28/11 22:33	1.0
Fluorene Indeno (1,2,3-cd) pyrene	ND 0.0475	J	0.0692 0.0692	0.0351 0.0351 0.0351	mg/kg dry mg/kg dry	0	10/28/11 07:15 10/28/11 07:15	10/28/11 22:33 10/28/11 22:33	1.0 1.0 1.0
Fluorene Indeno (1,2,3-cd) pyrene Naphthalene	ND 0.0475 ND	J	0.0692 0.0692 0.0692	0.0351 0.0351 0.0351 0.0351	mg/kg dry mg/kg dry mg/kg dry	0	10/28/11 07:15 10/28/11 07:15 10/28/11 07:15	10/28/11 22:33 10/28/11 22:33 10/28/11 22:33	1.0 1.0 1.0
Fluorene Indeno (1,2,3-cd) pyrene Naphthalene Phenanthrene Pyrene	ND 0.0475 ND ND	J	0.0692 0.0692 0.0692 0.0692	0.0351 0.0351 0.0351 0.0351 0.0351	mg/kg dry mg/kg dry mg/kg dry mg/kg dry	0 0	10/28/11 07:15 10/28/11 07:15 10/28/11 07:15 10/28/11 07:15	10/28/11 22:33 10/28/11 22:33 10/28/11 22:33 10/28/11 22:33	1.0 1.0 1.0 1.0
Fluorene Indeno (1,2,3-cd) pyrene Naphthalene Phenanthrene	ND 0.0475 ND ND	J	0.0692 0.0692 0.0692 0.0692 0.0692	0.0351 0.0351 0.0351 0.0351 0.0351	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	0 0	10/28/11 07:15 10/28/11 07:15 10/28/11 07:15 10/28/11 07:15 10/28/11 07:15	10/28/11 22:33 10/28/11 22:33 10/28/11 22:33 10/28/11 22:33 10/28/11 22:33	1.0 1.0 1.0 1.0 1.0
Fluorene Indeno (1,2,3-cd) pyrene Naphthalene Phenanthrene Pyrene 1-Methylnaphthalene	ND 0.0475 ND ND ND		0.0692 0.0692 0.0692 0.0692 0.0692 0.0692	0.0351 0.0351 0.0351 0.0351 0.0351	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	0 0 0	10/28/11 07:15 10/28/11 07:15 10/28/11 07:15 10/28/11 07:15 10/28/11 07:15 10/28/11 07:15	10/28/11 22:33 10/28/11 22:33 10/28/11 22:33 10/28/11 22:33 10/28/11 22:33 10/28/11 22:33	1.0 1.0 1.0 1.0 1.0 1.0
Fluorene Indeno (1,2,3-cd) pyrene Naphthalene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene	ND 0.0475 ND ND ND ND		0.0692 0.0692 0.0692 0.0692 0.0692 0.0692	0.0351 0.0351 0.0351 0.0351 0.0351	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	0 0 0	10/28/11 07:15 10/28/11 07:15 10/28/11 07:15 10/28/11 07:15 10/28/11 07:15 10/28/11 07:15 10/28/11 07:15	10/28/11 22:33 10/28/11 22:33 10/28/11 22:33 10/28/11 22:33 10/28/11 22:33 10/28/11 22:33	1.0 1.0 1.0 1.0 1.0 1.0
Fluorene Indeno (1,2,3-cd) pyrene Naphthalene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene Surrogate	ND 0.0475 ND ND ND ND ND ND ND ND		0.0692 0.0692 0.0692 0.0692 0.0692 0.0692 Limits	0.0351 0.0351 0.0351 0.0351 0.0351	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	0 0 0	10/28/11 07:15 10/28/11 07:15 10/28/11 07:15 10/28/11 07:15 10/28/11 07:15 10/28/11 07:15 10/28/11 07:15	10/28/11 22:33 10/28/11 22:33 10/28/11 22:33 10/28/11 22:33 10/28/11 22:33 10/28/11 22:33 10/28/11 22:33	1.0 1.0 1.0 1.0 1.0 1.0 1.0

Dil Fac

Analyzed

10/31/11 13:10

RL

0.500

MDL Unit

0.500 %

D

Prepared

10/30/11 18:30

Result Qualifier

95.1

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

Project/Site: [none]

% Dry Solids

TestAmerica Job ID: NUJ3005

Client Sample ID: 277 Birch

Date Collected: 10/20/11 11:45 Date Received: 10/22/11 08:15 Lab Sample ID: NUJ3005-03

Matrix: Soil

Percent Solids: 78.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00218	0.00120	mg/kg dry	**	10/20/11 11:45	10/29/11 23:10	1.00
Ethylbenzene	ND		0.00218	0.00120	mg/kg dry	100	10/20/11 11:45	10/29/11 23:10	1.00
Naphthalene	0.00868		0.00544	0.00272	mg/kg dry	**	10/20/11 11:45	10/29/11 23:10	1.00
Toluene	ND		0.00218	0.00120	mg/kg dry	100	10/20/11 11:45	10/29/11 23:10	1.00
Xylenes, total	ND		0.00544	0.00272	mg/kg dry	0	10/20/11 11:45	10/29/11 23:10	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	97		70 - 130				10/20/11 11:45	10/29/11 23:10	1.00
Dibromofluoromethane	96		70 - 130				10/20/11 11:45	10/29/11 23:10	1.00
Toluene-d8	99		70 - 130				10/20/11 11:45	10/29/11 23:10	1.00
4-Bromofluorobenzene	120		70 - 130				10/20/11 11:45	10/29/11 23:10	1.00
Method: SW846 8270D - Polyar	omatic Hydroca	rbons by El	PA 8270D						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0839	0.0426	mg/kg dry	\$	10/28/11 07:15	10/28/11 22:53	1.00
Acenaphthylene	ND		0.0839	0.0426	mg/kg dry	0	10/28/11 07:15	10/28/11 22:53	1.00
Anthracene	ND		0.0839	0.0426	mg/kg dry	**	10/28/11 07:15	10/28/11 22:53	1.00
Benzo (a) anthracene	ND		0.0839	0.0426	mg/kg dry	\$	10/28/11 07:15	10/28/11 22:53	1.00
Benzo (a) pyrene	ND		0.0839	0.0426	mg/kg dry	0	10/28/11 07:15	10/28/11 22:53	1.00
Benzo (b) fluoranthene	ND		0.0839	0.0426	mg/kg dry	Ø.	10/28/11 07:15	10/28/11 22:53	1.00
Benzo (g,h,i) perylene	ND		0.0839	0.0426	mg/kg dry	0	10/28/11 07:15	10/28/11 22:53	1.00
Benzo (k) fluoranthene	ND		0.0839	0.0426	mg/kg dry	O	10/28/11 07:15	10/28/11 22:53	1.00
Chrysene	ND		0.0839	0.0426	mg/kg dry	**	10/28/11 07:15	10/28/11 22:53	1.00
Dibenz (a,h) anthracene	ND		0.0839	0.0426	mg/kg dry	\$\$F	10/28/11 07:15	10/28/11 22:53	1.00
Fluoranthene	ND		0.0839	0.0426	mg/kg dry	0	10/28/11 07:15	10/28/11 22:53	1.00
Fluorene	ND		0.0839	0.0426	mg/kg dry	0	10/28/11 07:15	10/28/11 22:53	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0839	0.0426	mg/kg dry	400	10/28/11 07:15	10/28/11 22:53	1.00
Naphthalene	ND		0.0839	0.0426	mg/kg dry	O	10/28/11 07:15	10/28/11 22:53	1.00
Phenanthrene	ND		0.0839	0.0426	mg/kg dry	0	10/28/11 07:15	10/28/11 22:53	1.00
Pyrene	ND		0.0839	0.0426	mg/kg dry	**	10/28/11 07:15	10/28/11 22:53	1.00
1-Methylnaphthalene	ND		0.0839	0.0426	mg/kg dry	**	10/28/11 07:15	10/28/11 22:53	1.00
2-Methylnaphthalene	ND		0.0839	0.0426	mg/kg dry	0	10/28/11 07:15	10/28/11 22:53	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	91		18 - 120				10/28/11 07:15	10/28/11 22:53	1.00
2-Fluorobiphenyl	73		14 - 120				10/28/11 07:15	10/28/11 22:53	1.00
Nitrobenzene-d5	70		17 - 120				10/28/11 07:15	10/28/11 22:53	1.00

10/31/11 15:51 11/01/11 12:14

0.500

0.500 %

78.5

#### Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Lab Sample ID: 11J4915-BLK1

Matrix: Soil

Analysis Batch: U019185

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 11J4915\_P

	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet	-	10/29/11 12:37	10/29/11 15:08	1.00
Ethylbenzene	ND		0.00200	0.00110	mg/kg wet		10/29/11 12:37	10/29/11 15:08	1.00
Naphthalene	ND		0.00500	0.00250	mg/kg wet		10/29/11 12:37	10/29/11 15:08	1.00
Toluene	ND		0.00200	0.00110	mg/kg wet		10/29/11 12:37	10/29/11 15:08	1.00
Xylenes, total	ND		0.00500	0.00250	mg/kg wet		10/29/11 12:37	10/29/11 15:08	1.00
	Plank	Plank							

%Recovery Qualific	er Limits	Prepared	Analyzed	Dil Fac
110	70 - 130	10/29/11 12:37	10/29/11 15:08	1.00
111	70 - 130	10/29/11 12:37	10/29/11 15:08	1.00
100	70 - 130	10/29/11 12:37	10/29/11 15:08	1.00
99	70 - 130	10/29/11 12:37	10/29/11 15:08	1.00
	110 111 100	110 70 - 130 111 70 - 130 100 70 - 130	110     70 - 130     10/29/11 12:37       111     70 - 130     10/29/11 12:37       100     70 - 130     10/29/11 12:37	110     70 - 130     10/29/11 12:37     10/29/11 15:08       111     70 - 130     10/29/11 12:37     10/29/11 15:08       100     70 - 130     10/29/11 12:37     10/29/11 15:08

Lab Sample ID: 11J4915-BLK2

Matrix: Soil

Analysis Batch: U019185

Client Sample ID: Method Blank Prep Type: Total

Prep Batch: 11J4915\_P

	Dialik	DIAIIK							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0550	mg/kg wet		10/29/11 12:37	10/29/11 15:39	50.0
Ethylbenzene	ND		0.100	0.0550	mg/kg wet		10/29/11 12:37	10/29/11 15:39	50.0
Naphthalene	ND		0.250	0.125	mg/kg wet		10/29/11 12:37	10/29/11 15:39	50.0
Toluene	ND		0.100	0.0550	mg/kg wet		10/29/11 12:37	10/29/11 15:39	50.0
Xylenes, total	ND		0.250	0.125	mg/kg wet		10/29/11 12:37	10/29/11 15:39	50.0

	Blank	Blank				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	106		70 - 130	10/29/11 12:37	10/29/11 15:39	50.0
Dibromofluoromethane	110		70 - 130	10/29/11 12:37	10/29/11 15:39	50.0
Toluene-d8	98		70 - 130	10/29/11 12:37	10/29/11 15:39	50.0
4-Bromofluorobenzene	99		70 - 130	10/29/11 12:37	10/29/11 15:39	50.0

Lab Sample ID: 11J4915-BS1

Matrix: Soil

Analysis Batch: U019185

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 11J4915\_P

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	50.0	53.4		ug/kg		107	75 - 127	
Ethylbenzene	50.0	51.5		ug/kg		103	80 - 134	
Naphthalene	50.0	43.6		ug/kg		87	69 - 150	
Toluene	50.0	53.6		ug/kg		107	80 - 132	
Xylenes, total	150	161		ug/kg		108	80 - 137	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	113		70 - 130
Dibromofluoromethane	112		70 - 130
Toluene-d8	100		70 - 130
4-Bromofluorobenzene	90		70 - 130

Project/Site: [none]

TestAmerica Job ID: NUJ3005

#### Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B (Continued)

Lab Sample ID: 11J4915-BSD1

Matrix: Soil

Analysis Batch: U019185

Client Sample ID: Lab Control Sample Dup

Prep Type: Total

Prep Batch: 11J4915 P

									_
	Spike	LCS Dup	LCS Dup				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	50.0	50.3		ug/kg		101	75 - 127	6	50
Ethylbenzene	50.0	48.4		ug/kg		97	80 - 134	6	50
Naphthalene	50.0	42.9		ug/kg		86	69 - 150	2	50
Toluene	50.0	50.2		ug/kg		100	80 - 132	6	50
Xylenes, total	150	151		ug/kg		101	80 - 137	7	50

LCS Dup LCS Dup

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	112		70 - 130
Dibromofluoromethane	111		70 - 130
Toluene-d8	100		70 - 130
4-Bromofluorobenzene	92		70 - 130

Client Sample ID: Matrix Spike

Prep Type: Total Prep Batch: 11J4915\_P

Analysis Batch: U019185

Matrix: Soil

Lab Sample ID: 11J4915-MS1

Sample	Sample	Spike	Matrix Spike	Matrix Spil	ke			%Rec.	
Analyte Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene		0.0490	0.0530		mg/kg wet		108	31 - 143	
Ethylbenzene ND		0.0490	0.0513		mg/kg wet		105	23 - 161	
Naphthalene ND		0.0490	0.0305		mg/kg wet		62	10 - 176	
Toluene ND		0.0490	0.0525		mg/kg wet		107	30 - 155	
Xylenes, total ND		0.147	0.150		mg/kg wet		102	25 - 162	

Matrix Spike Matrix Spike

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	100		70 - 130
Dibromofluoromethane	100		70 - 130
Toluene-d8	98		70 - 130
4-Bromofluorobenzene	104		70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total

Analysis Batch: U019185

Matrix: Soil

Lab Sample ID: 11J4915-MSD1

Prep Batch: 11J4915\_P

	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spi	ke Dur			%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		0.0424	0.0483		mg/kg wet		114	31 - 143	9	50
Ethylbenzene	ND		0.0424	0.0457		mg/kg wet		108	23 - 161	12	50
Naphthalene	ND		0.0424	0.0279		mg/kg wet		66	10 - 176	9	50
Toluene	ND		0.0424	0.0476		mg/kg wet		112	30 - 155	10	50
Xylenes, total	ND		0.127	0.135		mg/kg wet		106	25 - 162	11	50

Matrix Spike Dup Matrix Spike Dup

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	97		70 - 130
Dibromofluoromethane	100		70 - 130
Toluene-d8	100		70 - 130
4-Bromofluorobenzene	99		70 - 130

Project/Site: [none]

TestAmerica Job ID: NUJ3005

#### Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B (Continued)

Dlank Blank

Lab Sample ID: 11J7382-BLK1

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

Matrix: Soil

Analysis Batch: U019227

Client Sample ID: Method Blank Prep Type: Total

Prep Batch: 11J7382 P

	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		10/31/11 09:53	10/31/11 12:25	1.00
Ethylbenzene	ND		0.00200	0.00110	mg/kg wet		10/31/11 09:53	10/31/11 12:25	1.00
Naphthalene	ND		0.00500	0.00250	mg/kg wet		10/31/11 09:53	10/31/11 12:25	1.00
Toluene	ND		0.00200	0.00110	mg/kg wet		10/31/11 09:53	10/31/11 12:25	1.00
Xylenes, total	ND		0.00500	0.00250	mg/kg wet		10/31/11 09:53	10/31/11 12:25	1.00
	Plank	Plank							

	Blank	Blank				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	109		70 - 130	10/31/11 09:53	10/31/11 12:25	1.00
Dibromofluoromethane	107		70 - 130	10/31/11 09:53	10/31/11 12:25	1.00
Toluene-d8	97		70 - 130	10/31/11 09:53	10/31/11 12:25	1.00
4-Bromofluorobenzene	97		70 - 130	10/31/11 09:53	10/31/11 12:25	1.00

Lab Sample ID: 11J7382-BLK2

Matrix: Soil

Analysis Batch: U019227

Client Sample ID: Method Blank Prep Type: Total

Prep Batch: 11J7382\_P

Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		0.100	0.0550	mg/kg wet		10/31/11 09:53	10/31/11 12:54	50.0
ND		0.100	0.0550	mg/kg wet		10/31/11 09:53	10/31/11 12:54	50.0
ND		0.250	0.125	mg/kg wet		10/31/11 09:53	10/31/11 12:54	50.0
ND		0.100	0.0550	mg/kg wet		10/31/11 09:53	10/31/11 12:54	50.0
ND		0.250	0.125	mg/kg wet		10/31/11 09:53	10/31/11 12:54	50.0
	ND ND ND	ND ND ND	ND         0.100           ND         0.100           ND         0.250           ND         0.100	ND         0.100         0.0550           ND         0.100         0.0550           ND         0.250         0.125           ND         0.100         0.0550	ND         0.100         0.0550 mg/kg wet           ND         0.100         0.0550 mg/kg wet           ND         0.250         0.125 mg/kg wet           ND         0.100         0.0550 mg/kg wet           ND         0.100         0.0550 mg/kg wet	ND         0.100         0.0550         mg/kg wet           ND         0.100         0.0550         mg/kg wet           ND         0.250         0.125         mg/kg wet           ND         0.100         0.0550         mg/kg wet	ND         0.100         0.0550         mg/kg wet         10/31/11 09:53           ND         0.100         0.0550         mg/kg wet         10/31/11 09:53           ND         0.250         0.125         mg/kg wet         10/31/11 09:53           ND         0.100         0.0550         mg/kg wet         10/31/11 09:53	ND         0.100         0.0550         mg/kg wet         10/31/11 09:53         10/31/11 12:54           ND         0.100         0.0550         mg/kg wet         10/31/11 09:53         10/31/11 12:54           ND         0.250         0.125         mg/kg wet         10/31/11 09:53         10/31/11 12:54           ND         0.100         0.0550         mg/kg wet         10/31/11 09:53         10/31/11 12:54

	Blank	Blank				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	111		70 - 130	10/31/11 09:53	10/31/11 12:54	50.0
Dibromofluoromethane	106		70 - 130	10/31/11 09:53	10/31/11 12:54	50.0
Toluene-d8	97		70 - 130	10/31/11 09:53	10/31/11 12:54	50.0
4-Bromofluorobenzene	98		70 - 130	10/31/11 09:53	10/31/11 12:54	50.0

Lab Sample ID: 11J7382-BS1

Matrix: Soil

Analysis Batch: U019227

4-Bromofluorobenzene

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 11J7382\_P

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	50.0	47.3		ug/kg		95	75 - 127	
Ethylbenzene	50.0	47.4		ug/kg		95	80 - 134	
Naphthalene	50.0	46.6		ug/kg		93	69 - 150	
Toluene	50.0	47.6		ug/kg		95	80 - 132	
Xylenes, total	150	144		ug/kg		96	80 - 137	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	108		70 - 130
Dibromofluoromethane	106		70 - 130
Toluene-d8	98		70 - 130

70 - 130

Project/Site: [none]

#### Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B (Continued)

Lab Sample ID: 11J7382-BSD1

Matrix: Soil

Analysis Batch: U019227

Client Sample ID: Lab Control Sample Dup

Prep Type: Total

Prep Batch: 11J7382\_P

Spike	LCS Dup	LCS Dup				%Rec.		RPD
Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
50.0	49.0		ug/kg		98	75 - 127	3	50
50.0	50.1		ug/kg		100	80 - 134	6	50
50.0	49.0		ug/kg		98	69 - 150	5	50
50.0	49.7		ug/kg		99	80 - 132	4	50
150	150		ug/kg		100	80 - 137	4	50
	50.0 50.0 50.0 50.0	Added         Result           50.0         49.0           50.0         50.1           50.0         49.0           50.0         49.0           50.0         49.7	Added         Result         Qualifier           50.0         49.0           50.0         50.1           50.0         49.0           50.0         49.7	Added         Result 49.0         Unit ug/kg           50.0         49.0         ug/kg           50.0         50.1         ug/kg           50.0         49.0         ug/kg           50.0         49.7         ug/kg	Added         Result         Qualifier         Unit         D           50.0         49.0         ug/kg           50.0         50.1         ug/kg           50.0         49.0         ug/kg           50.0         49.7         ug/kg	Added         Result 9.0         Unit ug/kg         D %Rec           50.0         49.0         ug/kg         98           50.0         50.1         ug/kg         100           50.0         49.0         ug/kg         98           50.0         49.7         ug/kg         99	Added         Result Qualifier         Unit         D %Rec         Limits           50.0         49.0         ug/kg         98         75 - 127           50.0         50.1         ug/kg         100         80 - 134           50.0         49.0         ug/kg         98         69 - 150           50.0         49.7         ug/kg         99         80 - 132	Added         Result Qualifier         Unit         D         %Rec %Rec         Limits         RPD           50.0         49.0         ug/kg         98         75 - 127         3           50.0         50.1         ug/kg         100         80 - 134         6           50.0         49.0         ug/kg         98         69 - 150         5           50.0         49.7         ug/kg         99         80 - 132         4

LCS Dup LCS Dup

Surrogate	%Recovery	Qualifier	Limits					
1,2-Dichloroethane-d4	107		70 - 130					
Dibromofluoromethane	104		70 - 130					
Toluene-d8	98		70 - 130					
4-Bromofluorobenzene	96		70 - 130					

Lab Sample ID: 11J7382-MS1

Matrix: Soil

Analysis Batch: U019227

Client Sample ID: Matrix Spike

Prep Type: Total

Prep Batch: 11J7382\_P

Sample	Sample	Spike	Matrix Spike	Matrix Spil	ke			%Rec.	
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
ND		0.0453	0.0533		mg/kg wet	-	118	31 - 143	
ND		0.0453	0.0527		mg/kg wet		116	23 - 161	
ND		0.0453	0.0224		mg/kg wet		50	10 - 176	
0.00103		0.0453	0.0548		mg/kg wet		119	30 - 155	
ND		0.136	0.158		mg/kg wet		116	25 - 162	
	Result ND ND ND ND 0.00103	ND ND 0.00103	Result         Qualifier         Added           ND         0.0453           ND         0.0453           ND         0.0453           0.00103         0.0453	Result         Qualifier         Added         Result           ND         0.0453         0.0533           ND         0.0453         0.0527           ND         0.0453         0.0224           0.00103         0.0453         0.0548	Result         Qualifier         Added         Result         Qualifier           ND         0.0453         0.0533           ND         0.0453         0.0527           ND         0.0453         0.0224           0.00103         0.0453         0.0548	Result         Qualifier         Added         Result         Qualifier         Unit           ND         0.0453         0.0533         mg/kg wet           ND         0.0453         0.0527         mg/kg wet           ND         0.0453         0.0224         mg/kg wet           0.00103         0.0453         0.0548         mg/kg wet	Result         Qualifier         Added         Result         Qualifier         Unit         D           ND         0.0453         0.0533         mg/kg wet           ND         0.0453         0.0527         mg/kg wet           ND         0.0453         0.0224         mg/kg wet           0.00103         0.0453         0.0548         mg/kg wet	Result Qualifier         Added No.0453         Result Qualifier         Unit D %Rec           ND         0.0453         0.0533         mg/kg wet 118           ND         0.0453         0.0527         mg/kg wet 116           ND         0.0453         0.0224         mg/kg wet 50           0.00103         0.0453         0.0548         mg/kg wet 119	Result Qualifier         Added Nesult Qualifier         Qualifier         Unit D %Rec Limits           ND         0.0453         0.0533         mg/kg wet         118 31 - 143           ND         0.0453         0.0527         mg/kg wet         116 23 - 161           ND         0.0453         0.0224         mg/kg wet         50 10 - 176           0.00103         0.0453         0.0548         mg/kg wet         119 30 - 155

Matrix Spike Matrix Spike

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	110		70 - 130
Dibromofluoromethane	108		70 - 130
Toluene-d8	100		70 - 130
4-Bromofluorobenzene	98		70 - 130

Lab Sample ID: 11J7382-MSD1

Matrix: Soil

Analysis Batch: U019227

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total

Prep Batch: 11J7382\_P

THE PARTY OF THE P											_
	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spi	ke Duş			%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		0.0473	0.0550		mg/kg wet		116	31 - 143	3	50
Ethylbenzene	ND		0.0473	0.0538		mg/kg wet		114	23 - 161	2	50
Naphthalene	ND		0.0473	0.0172		mg/kg wet		36	10 - 176	26	50
Toluene	0.00103		0.0473	0.0556		mg/kg wet		116	30 - 155	2	50
Xylenes, total	ND		0.142	0.160		mg/kg wet		113	25 - 162	1	50

Matrix Spike Dup Matrix Spike Dup

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	112		70 - 130
Dibromofluoromethane	108		70 - 130
Toluene-d8	99		70 - 130
4-Bromofluorobenzene	96		70 - 130

Project/Site: [none]

#### Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D

90

72

72

Lab Sample ID: 11J5568-BLK1

Matrix: Soil

Analysis Batch: 11J5568

Client Sample ID: Method Blank Prep Type: Total

Prep Batch: 11J5568\_P

	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0340	mg/kg wet		10/28/11 07:15	10/28/11 18:49	1.00
Acenaphthylene	ND		0.0670	0.0340	mg/kg wet		10/28/11 07:15	10/28/11 18:49	1.00
Anthracene	ND		0.0670	0.0340	mg/kg wet		10/28/11 07:15	10/28/11 18:49	1.00
Benzo (a) anthracene	ND		0.0670	0.0340	mg/kg wet		10/28/11 07:15	10/28/11 18:49	1.00
Benzo (a) pyrene	ND		0.0670	0.0340	mg/kg wet		10/28/11 07:15	10/28/11 18:49	1.00
Benzo (b) fluoranthene	ND		0.0670	0.0340	mg/kg wet		10/28/11 07:15	10/28/11 18:49	1.00
Benzo (g,h,i) perylene	ND		0.0670	0.0340	mg/kg wet		10/28/11 07:15	10/28/11 18:49	1.00
Benzo (k) fluoranthene	ND		0.0670	0.0340	mg/kg wet		10/28/11 07:15	10/28/11 18:49	1.00
Chrysene	ND		0.0670	0.0340	mg/kg wet		10/28/11 07:15	10/28/11 18:49	1.00
Dibenz (a,h) anthracene	ND		0.0670	0.0340	mg/kg wet		10/28/11 07:15	10/28/11 18:49	1.00
Fluoranthene	ND		0.0670	0.0340	mg/kg wet		10/28/11 07:15	10/28/11 18:49	1.00
Fluorene	ND		0.0670	0.0340	mg/kg wet		10/28/11 07:15	10/28/11 18:49	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0670	0.0340	mg/kg wet		10/28/11 07:15	10/28/11 18:49	1.00
Naphthalene	ND		0.0670	0.0340	mg/kg wet		10/28/11 07:15	10/28/11 18:49	1.00
Phenanthrene	ND		0.0670	0.0340	mg/kg wet		10/28/11 07:15	10/28/11 18:49	1.00
Pyrene	ND		0.0670	0.0340	mg/kg wet		10/28/11 07:15	10/28/11 18:49	1.00
1-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		10/28/11 07:15	10/28/11 18:49	1.00
2-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		10/28/11 07:15	10/28/11 18:49	1.00
	Blank	Blank							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

18 - 120

14 - 120

17 - 120

Lab Sample ID: 11J5568-BS1

Matrix: Soil

Terphenyl-d14

2-Fluorobiphenyl

Nitrobenzene-d5

Analysis Batch: 11J5568

Client Sample ID: Lab Control Sample

10/28/11 18:49

10/28/11 18:49

10/28/11 18:49

10/28/11 07:15

10/28/11 07:15

10/28/11 07:15

Prep Type: Total

1.00

1.00

1.00

Prep Batch: 11J5568\_P

LCS LCS Spike %Rec. Qualifier Limits Analyte Added Result Unit %Rec Acenaphthene 1.67 1.33 mg/kg wet 80 36 - 120 Acenaphthylene 1.67 1.29 mg/kg wet 77 38 - 120 1.47 46 - 124 Anthracene 1.67 88 mg/kg wet 1.44 87 45 - 120 Benzo (a) anthracene 1.67 mg/kg wet 45 - 120 93 Benzo (a) pyrene 1.67 1.56 mg/kg wet Benzo (b) fluoranthene 1.67 1.33 mg/kg wet 80 42 - 120 Benzo (g,h,i) perylene 1.67 1 46 mg/kg wet 87 38 - 120 42 - 120 Benzo (k) fluoranthene 1,67 1.57 mg/kg wet 94 Chrysene 1.67 1.48 mg/kg wet 88 43 - 120 86 32 - 128 Dibenz (a,h) anthracene 1.67 1.44 mg/kg wet 46 - 120 Fluoranthene 1.67 1.51 mg/kg wet 90 42 - 120 Fluorene 1.67 1.45 mg/kg wet 87 Indeno (1,2,3-cd) pyrene 1.67 1.43 mg/kg wet 86 41 - 121 32 - 120 1.36 82 Naphthalene 1,67 mg/kg wet 1.42 85 45 - 120 Phenanthrene 1.67 mg/kg wet 43 - 120 Pyrene 1,67 1.45 mg/kg wet 87 1.67 1.08 mg/kg wet 65 32 - 120 1-Methylnaphthalene 28 - 120 2-Methylnaphthalene 1.67 1.28 mg/kg wet 77

Project/Site: [none]

#### Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D (Continued)

Lab Sample ID: 11J5568-BS1

Matrix: Soil

Analysis Batch: 11J5568

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 11J5568\_P

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Terphenyl-d14	93		18 - 120
2-Fluorobiphenyl	74		14 - 120
Nitrobenzene-d5	67		17 - 120

Lab Sample ID: 11J5568-MS1

Matrix: Soil

Analysis Batch: 11J5568

Client Sample ID: 276 Birch

Prep Type: Total

Prep Batch: 11J5568\_P

	Sample	Sample	Spike	Matrix Spike	Matrix Spi	ke			%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Acenaphthene	0.234		1.95	1.97		mg/kg dry	33	89	19 - 120	
Acenaphthylene	0.125		1.95	1.72		mg/kg dry	*	82	25 - 120	
Anthracene	0.110		1.95	1.97		mg/kg dry	**	96	28 - 125	
Benzo (a) anthracene	ND		1.95	1.73		mg/kg dry	0	89	23 - 120	
Benzo (a) pyrene	ND		1.95	1.85		mg/kg dry	*	95	15 - 128	
Benzo (b) fluoranthene	ND		1.95	1.73		mg/kg dry	:03	89	12 - 133	
Benzo (g,h,i) perylene	ND		1.95	1.70		mg/kg dry	Ö	87	22 - 120	
Benzo (k) fluoranthene	ND		1.95	1.73		mg/kg dry	O	89	28 - 120	
Chrysene	ND		1.95	1.79		mg/kg dry	O	92	20 - 120	
Dibenz (a,h) anthracene	ND		1.95	1.69		mg/kg dry	40	86	12 - 128	
Fluoranthene	0.0419	J	1.95	1.97		mg/kg dry	**	99	10 - 143	
Fluorene	0.510		1.95	2.77		mg/kg dry	·	116	20 - 120	
Indeno (1,2,3-cd) pyrene	ND		1.95	1.67		mg/kg dry	\$	86	22 - 121	
Naphthalene	1.96		1.95	4.52	MHA	mg/kg dry	0	131	10 - 120	
Phenanthrene	1.04		1.95	4.22	MHA	mg/kg dry	*	163	21 - 122	
Pyrene	0.0874		1.95	1.80		mg/kg dry	*	88	20 - 123	
1-Methylnaphthalene	2.96		1.95	5.88	MHA	mg/kg dry	*	150	10 - 120	
2-Methylnaphthalene	4.66		1.95	8.70	МНА	mg/kg dry	Ø	207	13 - 120	
	Market Or the	**-4-1- O-11-								

Matrix Spike	Matrix Spike
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Surrogate	%Recovery	Qualifier	Limits
Terphenyl-d14	81		18 - 120
2-Fluorobiphenyl	78		14 - 120
Nitrobenzene-d5	78		17 - 120

Lab Sample ID: 11J5568-MSD1

Matrix: Soil

Analysis Batch: 11J5568

Client Sample ID: 276 Birch

Prep Type: Total

Prep Batch: 11J5568\_P

	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spi	ke Duţ			%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthene	0.234		1.98	1.58		mg/kg dry	0	68	19 - 120	22	50
Acenaphthylene	0.125		1.98	1.49		mg/kg dry	305	69	25 - 120	15	50
Anthracene	0.110		1.98	1.76		mg/kg dry	*	83	28 - 125	12	49
Benzo (a) anthracene	ND		1.98	1.61		mg/kg dry	O	81	23 - 120	7	50
Benzo (a) pyrene	ND		1.98	1.70		mg/kg dry	\$	85	15 - 128	9	50
Benzo (b) fluoranthene	ND		1.98	1.50		mg/kg dry	0	76	12 - 133	14	50
Benzo (g,h,i) perylene	ND		1.98	1.54		mg/kg dry	*	78	22 - 120	10	50
Benzo (k) fluoranthene	ND		1.98	1.67		mg/kg dry	0	84	28 - 120	4	45
Chrysene	ND		1.98	1.61		mg/kg dry	O	81	20 - 120	11	49
Dibenz (a,h) anthracene	ND		1.98	1.55		mg/kg dry	***	78	12 - 128	8	50
Fluoranthene	0.0419	J	1.98	1.68		mg/kg dry	Ö	83	10 - 143	16	50

Project/Site: [none]

TestAmerica Job ID: NUJ3005

#### Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D (Continued)

Lab Sample ID: 11J5568-MSD1 Matrix: Soil

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

Analysis Ratch: 11 ISSES

Client Sample ID: 276 Birch Prep Type: Total Pron Batch: 11 15568 D

Analysis Batch: 11J5568									Prep Batc	n: 11J5	568_P
	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spi	ke Duţ			%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Fluorene	0.510		1.98	1.90		mg/kg dry	Ø	70	20 - 120	37	50
Indeno (1,2,3-cd) pyrene	ND		1.98	1.53		mg/kg dry	O	77	22 - 121	9	50
Naphthalene	1.96		1.98	2.92		mg/kg dry	Ø	48	10 - 120	43	50
Phenanthrene	1.04		1.98	2.35	R2	mg/kg dry	*	66	21 - 122	57	50
Pyrene	0.0874		1.98	1.63		mg/kg dry	101	78	20 - 123	9	50
1-Methylnaphthalene	2.96		1.98	3.45	R2	mg/kg dry	Ø	25	10 - 120	52	50
2-Methylnaphthalene	4.66		1.98	4.95	R2	mg/kg dry	0	14	13 - 120	55	50

Matrix Spike Dup Matrix Spike Dup

Surrogate	%Recovery	Qualifier	Limits
Terphenyl-d14	80		18 - 120
2-Fluorobiphenyl	66		14 - 120
Nitrobenzene-d5	62		17 - 120

#### Method: SW-846 - General Chemistry Parameters

Lab Sample ID: 11J7159-DUP1

Matrix: Soil

Analysis Batch: 11J7159

Client Sample ID: Duplicate Prep Type: Total

Prep Batch: 11J7159 P

	Sample	Sample	Duplicate	Duplicate				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
% Dry Solids	87.8		86.7		%		1	20

Lab Sample ID: 11J7219-DUP1

Matrix: Soil

Analysis Batch: 11J7219

Client Sample ID: Duplicate Prep Type: Total

Prep Batch: 11J7219\_P

Sample Sample **Duplicate Duplicate** RPD Analyte Result Qualifier Result Qualifier Unit D RPD Limit % Dry Solids 92.2 % 0.07 20 92.2

# **QC Association Summary**

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

Project/Site: [none]

TestAmerica Job ID: NUJ3005

#### **GCMS Volatiles**

#### Analysis Batch: U019185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J4915-BLK1	Method Blank	Total	Soil	SW846 8260B	11J4915_P
11J4915-BLK2	Method Blank	Total	Soil	SW846 8260B	11J4915_P
11J4915-BS1	Lab Control Sample	Total	Soil	SW846 8260B	11J4915_P
11J4915-BSD1	Lab Control Sample Dup	Total	Soil	SW846 8260B	11J4915_P
11J4915-MS1	Matrix Spike	Total	Soil	SW846 8260B	11J4915_P
11J4915-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8260B	11J4915_P
NUJ3005-01	276 Birch	Total	Soil	SW846 8260B	11J4915_P
NUJ3005-03	277 Birch	Total	Soil	SW846 8260B	11J4915_P

#### Analysis Batch: U019227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7382-BLK1	Method Blank	Total	Soil	SW846 8260B	11J7382_P
11J7382-BLK2	Method Blank	Total	Soil	SW846 8260B	11J7382_P
11J7382-BS1	Lab Control Sample	Total	Soil	SW846 8260B	11J7382_P
11J7382-BSD1	Lab Control Sample Dup	Total	Soil	SW846 8260B	11J7382_P
11J7382-MS1	Matrix Spike	Total	Soil	SW846 8260B	11J7382_P
11J7382-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8260B	11J7382_P
NUJ3005-01 - RE1	276 Birch	Total	Soil	SW846 8260B	11J7382_P
NUJ3005-02 - RE1	221 Cypress	Total	Soil	SW846 8260B	11J7382_P
NUJ3005-02 - RE2	221 Cypress	Total	Soil	SW846 8260B	11J7382_P

#### Prep Batch: 11J4915\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J4915-BLK1	Method Blank	Total	Soil	EPA 5035	
11J4915-BLK2	Method Blank	Total	Soil	EPA 5035	
11J4915-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11J4915-BSD1	Lab Control Sample Dup	Total	Soil	EPA 5035	
11J4915-MS1	Matrix Spike	Total	Soil	EPA 5035	
11J4915-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 5035	
NUJ3005-01	276 Birch	Total	Soil	EPA 5035	
NUJ3005-03	277 Birch	Total	Soil	EPA 5035	

#### Prep Batch: 11J7382\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7382-BLK1	Method Blank	Total	Soil	EPA 5035	
11J7382-BLK2	Method Blank	Total	Soil	EPA 5035	
11J7382-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11J7382-BSD1	Lab Control Sample Dup	Total	Soil	EPA 5035	
11J7382-MS1	Matrix Spike	Total	Soil	EPA 5035	
11J7382-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 5035	
NUJ3005-01 - RE1	276 Birch	Total	Soil	EPA 5035	
NUJ3005-02 - RE1	221 Cypress	Total	Soil	EPA 5035	
NUJ3005-02 - RE2	221 Cypress	Total	Soil	EPA 5035	

#### **GCMS Semivolatiles**

#### Analysis Batch: 11J5568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J5568-BLK1	Method Blank	Total	Soil	SW846 8270D	11J5568_P
11J5568-BS1	Lab Control Sample	Total	Soil	SW846 8270D	11J5568_P
11J5568-MS1	276 Birch	Total	Soil	SW846 8270D	11J5568_P
11J5568-MSD1	276 Birch	Total	Soil	SW846 8270D	11J5568_P

# **QC Association Summary**

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

Project/Site: [none]

TestAmerica Job ID: NUJ3005

#### **GCMS Semivolatiles (Continued)**

#### Analysis Batch: 11J5568 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
NUJ3005-01	276 Birch	Total	Soil	SW846 8270D	11J5568_P
NUJ3005-01 - RE1	276 Birch	Total	Soil	SW846 8270D	11J5568_P
NUJ3005-02	221 Cypress	Total	Soil	SW846 8270D	11J5568_P
NUJ3005-03	277 Birch	Total	Soil	SW846 8270D	11J5568_P

#### Prep Batch: 11J5568\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J5568-BLK1	Method Blank	Total	Soil	EPA 3550C	
11J5568-BS1	Lab Control Sample	Total	Soil	EPA 3550C	
11J5568-MS1	276 Birch	Total	Soil	EPA 3550C	
11J5568-MSD1	276 Birch	Total	Soil	EPA 3550C	
NUJ3005-01	276 Birch	Total	Soil	EPA 3550C	
NUJ3005-01 - RE1	276 Birch	Total	Soil	EPA 3550C	
NUJ3005-02	221 Cypress	Total	Soil	EPA 3550C	
NUJ3005-03	277 Birch	Total	Soil	EPA 3550C	

#### Extractions

#### Analysis Batch: 11J7159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7159-DUP1	Duplicate	Total	Soil	SW-846	11J7159_P
NUJ3005-01	276 Birch	Total	Soil	SW-846	11J7159_P
NUJ3005-02	221 Cypress	Total	Soil	SW-846	11J7159_P

#### Analysis Batch: 11J7219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7219-DUP1	Duplicate	Total	Soil	SW-846	11J7219_P
NUJ3005-03	277 Birch	Total	Soil	SW-846	11J7219_P

#### Prep Batch: 11J7159\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7159-DUP1	Duplicate	Total	Soil	% Solids	
NUJ3005-01	276 Birch	Total	Soil	% Solids	
NUJ3005-02	221 Cypress	Total	Soil	% Solids	

#### Prep Batch: 11J7219\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7219-DUP1	Duplicate	Total	Soil	% Solids	
NUJ3005-03	277 Birch	Total	Soil	% Solids	

TestAmerica Job ID: NUJ3005

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

Project/Site: [none]

Client Sample ID: 276 Birch

Date Collected: 10/18/11 11:45 Date Received: 10/22/11 08:15 Lab Sample ID: NUJ3005-01

Matrix: Soil

Percent Solids: 82.8

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.814	11J4915_P	10/18/11 11:45	AAN	TAL NSH
Total	Analysis	SW846 8260B		1.00	U019185	10/29/11 22:09	KKK	TAL NSH
Total	Prep	EPA 5035	RE1	0.853	11J7382_P	10/18/11 11:45	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE1	50.0	U019227	10/31/11 15:58	KKK	TAL NSH
Total	Prep	EPA 3550C		0.992	11J5568_P	10/28/11 07:15	MAH	TAL NSH
Total	Analysis	SW846 8270D		1.00	11J5568	10/28/11 22:12	BES	TAL NSH
Total	Prep	EPA 3550C	RE1	0.992	11J5568_P	10/28/11 07:15	MAH	TAL NSH
Total	Analysis	SW846 8270D	RE1	2.00	11J5568	10/29/11 23:01	BES	TAL NSH
Total	Prep	% Solids		1,00	11J7159_P	10/30/11 18:30	PES	TAL NSH
Total	Analysis	SW-846		1.00	11J7159	10/31/11 13:10	RRS	TAL NSH

Client Sample ID: 221 Cypress

Date Collected: 10/19/11 12:00 Date Received: 10/22/11 08:15 Lab Sample ID: NUJ3005-02

Matrix: Soil

Percent Solids: 95.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	EPA 5035	RE1	1.01	11J7382_P	10/19/11 12:00	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE1	1.00	U019227	10/31/11 13:56	KKK	TAL NSH
Total	Prep	EPA 5035	RE2	1.05	11J7382_P	10/19/11 12:00	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE2	50.0	U019227	10/31/11 14:25	KKK	TAL NSH
Total	Prep	EPA 3550C		0.981	11J5568_P	10/28/11 07:15	MAH	TAL NSH
Total	Analysis	SW846 8270D		1.00	11J5568	10/28/11 22:33	BES	TAL NSH
Total	Prep	% Solids		1.00	11J7159_P	10/30/11 18:30	PES	TAL NSH
Total	Analysis	SW-846		1.00	11J7159	10/31/11 13:10	RRS	TAL NSH

Client Sample ID: 277 Birch

Date Collected: 10/20/11 11:45

Date Received: 10/22/11 08:15

Lab Sample ID: NUJ3005-03

Matrix: Soil

Percent Solids: 78.5

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.855	11J4915_P	10/20/11 11:45	AAN	TAL NSH
Total	Analysis	SW846 8260B		1.00	U019185	10/29/11 23:10	KKK	TAL NSH
Total	Prep	EPA 3550C		0.983	11J5568_P	10/28/11 07:15	MAH	TAL NSH
Total	Analysis	SW846 8270D		1.00	11J5568	10/28/11 22:53	BES	TAL NSH
Total	Prep	% Solids		1.00	11J7219_P	10/31/11 15:51	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11J7219	11/01/11 12:14	RRS	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Road, Nashville, TN 37204, TEL 800-765-0980

# **Method Summary**

Client: EEG - Small Business Group, Inc. (2449) Project/Site: [none]

TestAmerica Job ID: NUJ3005

Method	Method Description	Protocol	Laboratory
SW-846	General Chemistry Parameters		TAL NSH
SW846 8260B	Volatile Organic Compounds by EPA Method 8260B		TAL NSH
SW846 8270D	Polyaromatic Hydrocarbons by EPA 8270D		TAL NSH

#### **Protocol References:**

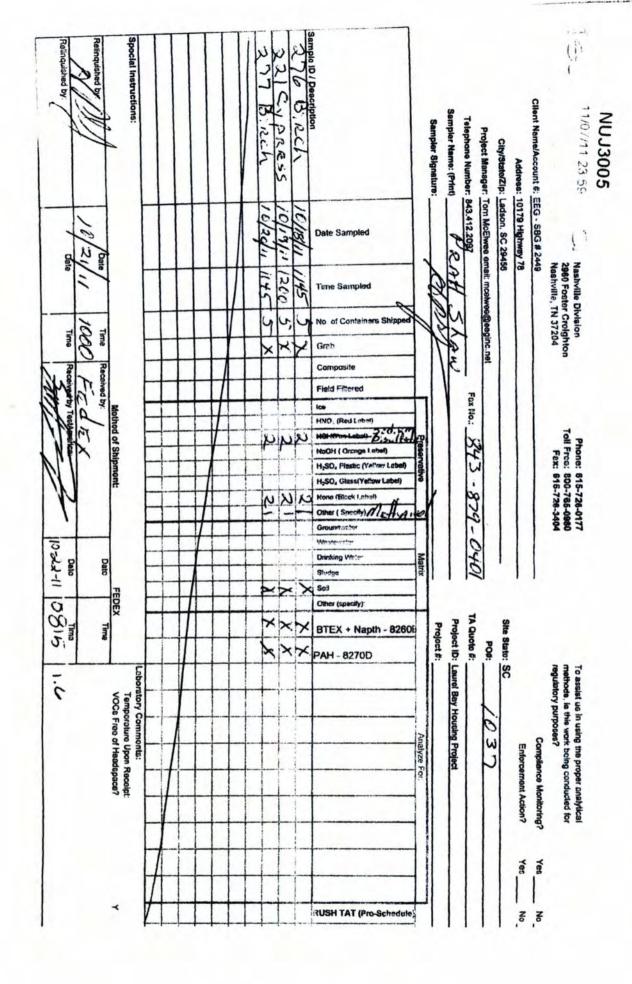
#### **Laboratory References:**

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Road, Nashville, TN 37204, TEL 800-765-0980

Client: EEG - Small Business Group, Inc. (2449) Project/Site: [none]

Laboratory	Authority	Program	EPA Region	Certification ID
estAmerica Nashville	15231	ACIL		393
estAmerica Nashville	A2LA	ISO/IEC 17025		0453.07
estAmerica Nashville	A2LA	WY UST		453.07
estAmerica Nashville	AIHA - LAP	IHLAP		100790
estAmerica Nashville	Alabama	State Program	4	41150
estAmerica Nashville	Alaska	Alaska UST	10	UST-087
estAmerica Nashville	Arizona	State Program	9	AZ0473
estAmerica Nashville	Arkansas	State Program	6	88-0737
estAmerica Nashville	CALA	CALA		3744
estAmerica Nashville	California	NELAC	9	1168CA
estAmerica Nashville	Colorado	State Program	8	N/A
estAmerica Nashville	Connecticut	State Program	1	PH-0220
estAmerica Nashville	Florida	NELAC	4	E87358
estAmerica Nashville	Illinois	NELAC	5	200010
estAmerica Nashville	Iowa	State Program	7	131
estAmerica Nashville	Kansas	NELAC	7	E-10229
estAmerica Nashville	Kentucky	Kentucky UST	4	19
estAmerica Nashville	Kentucky	State Program	4	90038
estAmerica Nashville	Louisiana	NELAC	6	30613
estAmerica Nashville	Louisiana	NELAC	6	LA100011
estAmerica Nashville	Maryland	State Program	3	316
estAmerica Nashville	Massachusetts	State Program	1	M-TN032
estAmerica Nashville	Minnesota	NELAC	5	047-999-345
estAmerica Nashville	Mississippi	State Program	4	N/A
estAmerica Nashville	Montana	MT DEQ UST	8	NA
estAmerica Nashville	New Hampshire	NELAC	1	2963
estAmerica Nashville	New Jersey	NELAC	2	TN965
estAmerica Nashville	New York	NELAC	2	11342
estAmerica Nashville	North Carolina	North Carolina DENR	4	387
estAmerica Nashville	North Dakota	State Program	8	R-146
estAmerica Nashville	Ohio	OVAP	5	CL0033
estAmerica Nashville	Oklahoma	State Program	6	9412
estAmerica Nashville	Oregon	NELAC	10	TN200001
estAmerica Nashville	Pennsylvania	NELAC	3	68-00585
estAmerica Nashville	Rhode Island	State Program	1	LAO00268
estAmerica Nashville	South Carolina	State Program	4	84009
estAmerica Nashville	South Carolina	State Program	4	84009
estAmerica Nashville	Tennessee	State Program	4	2008
estAmerica Nashville	Texas	NELAC	6	T104704077-09-TX
estAmerica Nashville	USDA	USDA		S-48469
estAmerica Nashville	Utah	NELAC	8	TAN
estAmerica Nashville	Virginia	NELAC Secondary AB	3	460152
estAmerica Nashville	Virginia	State Program	3	00323
estAmerica Nashville	Washington	State Program	10	C789
estAmerica Nashville	West Virginia	West Virginia DEP	3	219

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.



## ATTACHMENT A



## **NON-HAZARDOUS MANIFEST**

	NON HAZARDOUS MANUFEST	1. Generator's US EPA	A ID No.	Manifest Doc	No.	2. Page 1	of	161		44.1
	NON-HAZARDOUS MANIFEST					1		Trans.		
	3. Generator's Mailing Address:	Gen	erator's Site Address	(If different than m	ailing):	A. Manife	est Number	U.S. Co	and the	CHIEF SAY
	MCAS, BEAUFORT					W	MNA	00316	822	
	LAUREL BAY HOUSING						B. State (	Generator's		
	BEAUFORT, SC 29907					Mary Mar				
	4. Generator's Phone 843-22	28-6461							1000	
	5. Transporter 1 Company Name		6. US EP	A ID Number						
	EEG, INC.						ransporter's II		MED ING	
130				WHEN THE		D. Transp	orter's Phone	843-8	379-041	1
	7. Transporter 2 Company Name		8. US EP	A ID Number		E State T	ransporter's II	The same of the sa	Edition 1	
	The second of the second of					1	orter's Phone			
9	9. Designated Facility Name and Site	Address	10. US EI	PA ID Number		1. ITalispi	orter 3 mone	O.S. LEDEY		
	HICKORY HILL LANDFILL					G. State F	acility ID	The same	k plmes	
	2621 LOW COUNTRY ROAD					H. State F	acility Phone	843-9	87-464	3
	RIDGELAND, SC 29936		CONTRACTOR OF THE PARTY OF THE	BUT A SEA		STATE OF	THE REAL PROPERTY.		TRANSPIE	CONTRACT OF
9		E. F. L. C.		- State of the sta		A Trans		3 13 19	Nines.	
G	11. Description of Waste Materials			No.	Type	13. Total Quantity	14. Unit Wt./Vol.	I. M	isc. Commer	nts
E	a. HEATING OIL TANKS FILLED	WITH SAND			7.1	Alta L				
NE						1302	N. S. Y. S.	Harris .	105	1000
R	WM Profi	le# 102655SC	CV CENTRAL CARCE		1000			10000		
A	b.				4	ramaning	THE PARTY OF THE P			
0				1/4		1 9 1	Salah Baga	distant in		4-31
R	WM Profile #	CUSTO PROTE TAKED		C STATE OF	B1 - 4 F					
1	C.				CON !		Estal vein			
	WM Profile #						CANADA	CE COLUMN		
	d.					Carrie Control	THE CANCE			
						Selv. W	16.54, 19.01			
	WM Profile #			Total Land		Contract of	THE REAL PROPERTY.	AVER NO.	E Service	MISER
	J. Additional Descriptions for Materi	als Listed Above		K. Dispos	al Location			H 11 12 12		
					IATA ES	L Valida		UBL DAG		-
				Cell				Level		
	15. Special Handling Instructions and	Additional Information	Note that the same of	Ond		RIUA	sh! la	301	A <	41
	UST15 PROM	1 . 2)		RESS	7	377				
	1) 276 B	inchi 3)	277 3:	ech-2	( 5)	278	Birch	1		
	Purchase Order #	AST UNION TO	EMERGENCY	CONTACT / PHO	ONE NO.:	a Flashill w			yang i	
	16. GENERATOR'S CERTIFICATE:	THE PARTY NAMED IN		Fig. of Co.				PART	21137	
A	I hereby certify that the above-describ							ve been ful	ly and	
	accurately described, classified and pa	ckaged and are in prop			rding to ap	plicable regu	lations.			
	Printed Name	sold &	Signature "On be	nair of	100			Month	Day	Year
т	17. Transporter 1 Acknowledgement	of Receipt of Materials	A Comment		BUTTO					11
RA	Printed Name	THE REAL PROPERTY IN	Signature					Month	Day	Year
N S	James Baldwi	N	Jame	o Bala	lu.		FOR MARKET		4	12
OR	18. Transporter 2 Acknowledgement	of Receipt of Materials	TO THE SERVICE							
TE	Printed Name		Signature					Month	Day	Year
R										Charles
	19. Certificate of Final Treatment/Disp									
F A C	I certify, on behalf of the above listed			wledge, the ab	ove-descri	bed waste w	ras managed in	compliance	e with all	
11	applicable laws, regulations, permits a		THE RESERVE THE PARTY OF THE PA	s sourced built	ie manife					
T	20. Facility Owner or Operator: Certif	ication of receipt of no		s covered by th	iis manifes			Month	Day	Year
Y	David Chie	1	Signature	1 6	1.0	1		Month	Day	Tear
	White- TREATMENT, STORAGE, DISPO	SAL FACILITY COPY	Blue- GENERATO	OR #2 COPY	X	Ye	llow- GENERA	TOR #1 CO	PY	10

Pink- FACILITY USE ONLY

Gold-TRANSPORTER #1 COPY

# Appendix C Laboratory Analytical Reports - Groundwater





Pace Analytical Services, Inc. 2225 Riverside Dr. Asheville, NC 28804 (828)254-7176 Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

### **ANALYTICAL RESULTS**

Project:

**LAUREL BAY 7/30/08** 

Pace Project No.: 9224584

Sample: 225 CYPRESS A	Lab ID: 9224584002	Collected: 07/30/0	8 08:55	Received: 08	/01/08 07:55 N	latrix: Water	
Parameters	Results Unit	s Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
8270 MSSV PAH by SIM SPE	Analytical Method: EPA	8270 by SIM Preparati	ion Meth	od: EPA 3535			
Benzo(g,h,i)perylene	ND ug/L	0.20	1	08/04/08 00:00	08/13/08 07:57	191-24-2	
Benzo(k)fluoranthene	ND ug/L	0.20	1	08/04/08 00:00	08/13/08 07:57	207-08-9	
Chrysene	ND ug/L	0.10	1	08/04/08 00:00	08/13/08 07:57	218-01-9	
Dibenz(a,h)anthracene	ND ug/L	0.20	1	08/04/08 00:00	08/13/08 07:57	53-70-3	
Fluoranthene	ND ug/L	0.30	1	08/04/08 00:00	08/13/08 07:57	206-44-0	
Fluorene	ND ug/L	0.31	1	08/04/08 00:00	08/13/08 07:57	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L	0.20	1	08/04/08 00:00	08/13/08 07:57	193-39-5	
1-Methylnaphthalene	ND ug/L	2.0	1	08/04/08 00:00	08/13/08 07:57	90-12-0	
2-Methylnaphthalene	ND ug/L	2.0	1	08/04/08 00:00	08/13/08 07:57	91-57-6	
Naphthalene	ND ug/L	1.5	1		08/13/08 07:57		
Phenanthrene	0.51 ug/L	0.20	1		08/13/08 07:57		
Pyrene	ND ug/L	0.10	1		08/13/08 07:57		
Nitrobenzene-d5 (S)	50 %	50-150	1		08/13/08 07:57		
2-Fluorobiphenyl (S)	54 %	50-150	1		08/13/08 07:57		
Terphenyl-d14 (S)	63 %	50-150	1		08/13/08 07:57		
			'	00/04/00 00:00	00/13/00 07:31	1710-31-0	
8260 MSV Low Level	Analytical Method: EPA	X 8260					
Benzene	ND ug/L	1.0	1		08/05/08 15:57	71-43-2	
Ethylbenzene	ND ug/L	1.0	1		08/05/08 15:57	100-41-4	
Naphthalene	ND ug/L	2.0	1		08/05/08 15:57	91-20-3	
Toluene	ND ug/L	1.0	1		08/05/08 15:57	108-88-3	
m&p-Xylene	ND ug/L	2.0	1		08/05/08 15:57	1330-20-7	
o-Xylene	ND ug/L	1.0	1		08/05/08 15:57	95-47-6	
4-Bromofluorobenzene (S)	97 %	87-109	1		08/05/08 15:57	460-00-4	
Dibromofluoromethane (S)	95 %	85-115	1		08/05/08 15:57	1868-53-7	
1,2-Dichloroethane-d4 (S)	99 %	79-120	1		08/05/08 15:57	17060-07-0	
Toluene-d8 (S)	100 %	70-120	1		08/05/08 15:57		
Sample: 276 BIRCH A	Lab ID: 9224584003	Collected: 07/30/0	n8 10:35	Received: 08	/01/08 07:55 M	latrix: Water	
Parameters	Results Unit		DF	Prepared	Analyzed	CAS No.	Qua
				·			- Guc
8270 MSSV PAH by SIM SPE		x 8270 by SIM Preparati					
Acenaphthene	ND ug/L	2.0	1		08/13/08 08:21		
Acenaphthylene	ND ug/L	1.5	1		08/13/08 08:21		
Anthracene	ND ug/L	0.050	1		08/13/08 08:21		
Benzo(a)anthracene	ND ug/L	-0.10	1	08/04/08 00:00	08/13/08 08:21	56-55-3	
Benzo(a)pyrene	ND ug/L	0.20	1	08/04/08 00:00	08/13/08 08:21	50-32-8	
Benzo(b)fluoranthene	ND ug/L	0.30	1	08/04/08 00:00	08/13/08 08:21	205-99-2	
Benzo(g,h,i)perylene	ND ug/L	0.20	1	08/04/08 00:00	08/13/08 08:21	191-24-2	
Benzo(k)fluoranthene	ND ug/L	0.20	1	08/04/08 00:00	08/13/08 08:21	207-08-9	
Chrysene	ND ug/L	0.10	1	08/04/08 00:00	08/13/08 08:21	218-01-9	
	-						

Date: 08/14/2008 04:21 PM

Dibenz(a,h)anthracene

Fluoranthene

Fluorene

**REPORT OF LABORATORY ANALYSIS** 

0.20

0.30

0.31

1

ND ug/L

ND ug/L

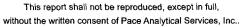
ND ug/L

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08/04/08 00:00 08/13/08 08:21 53-70-3

08/04/08 00:00 08/13/08 08:21 206-44-0

08/04/08 00:00 08/13/08 08:21 86-73-7







Pace Analytical Services, Inc. 2225 Riverside Dr. Asheville, NC 28804 (828)254-7176 Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

### **ANALYTICAL RESULTS**

Project:

**LAUREL BAY 7/30/08** 

Pace Project No.:

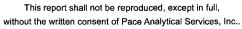
9224584

Sample: 276 BIRCH A	Lab ID: 9	224584003	Collected: 07/30/0	8 10:35	Received: 08	/01/08 07:55 I	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
3270 MSSV PAH by SIM SPE	Analytical M	lethod: EPA 8	270 by SIM Preparati	ion Meth	od: EPA 3535			
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.20	1	08/04/08 00:00	08/13/08 08:21	193-39-5	
1-Methylnaphthalene	ND	ug/L	2.0	1	08/04/08 00:00	08/13/08 08:21	90-12-0	
2-Methylnaphthalene		ug/L	2.0	1	08/04/08 00:00	08/13/08 08:21	91-57-6	
Naphthalene		ug/L	1.5	1		08/13/08 08:21		
Phenanthrene		ug/L	0.20	1		08/13/08 08:21		
Pyrene		ug/L	0.10	1		08/13/08 08:21		
Nitrobenzene-d5 (S)	50	•	50-150	1		08/13/08 08:21		
2-Fluorobiphenyl (S)	59		50-150	1		08/13/08 08:21		
Terphenyl-d14 (S)	73		50-150	1		08/13/08 08:21		
8260 MSV Low Level		lethod: EPA 8	260					
Benzene	ND	ug/L	1.0	1		08/05/08 16:21	71-43-2	
Ethylbenzene		ug/L	1.0	1		08/05/08 16:21		
Naphthalene		ug/L	2.0	1		08/05/08 16:21		
Toluene		ug/L	1.0	1		08/05/08 16:21		
m&p-Xylene		ug/L	2.0	1		08/05/08 16:21		
o-Xylene		•	1.0	1				
4-Bromofluorobenzene (S)		ug/L				08/05/08 16:21		
• •	99		87-109	1		08/05/08 16:21		
Dibromofluoromethane (S)	95		85-115	1		08/05/08 16:21		
1,2-Dichloroethane-d4 (S)	99		79-120	1		08/05/08 16:21		
Toluene-d8 (S)	100	%	70-120	1		08/05/08 16:21	2037-26-5	
Sample: 201 BALSAM A	Lab ID: 9	224584004	Collected: 07/30/0	8 11:00	Received: 08	/01/08 07:55	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
8270 MSSV PAH by SIM SPE	Analytical M	lethod: EPA 8	270 by SIM Preparati	ion Meth	od: EPA 3535			
Acenaphthene	ND	ug/L	2.0	1	08/04/08 00:00	08/13/08 08:44	83-32-9	
Acenaphthylene		ug/L	1.5	1	08/04/08 00:00	08/13/08 08:44	208-96-8	
Anthracene	0.16	_	0.050	1		08/13/08 08:44		
Benzo(a)anthracene		ug/L	0.10	1		08/13/08 08:44		
Benzo(a)pyrene		ug/L	0.20	1		08/13/08 08:44		
Benzo(b)fluoranthene		ug/L	0.30	1		08/13/08 08:44		
Benzo(g,h,i)perylene		ug/L	0.20	1		08/13/08 08:44		
Benzo(k)fluoranthene		ug/L	0.20	1		08/13/08 08:44		
Chrysene		ug/L	0.10	1		08/13/08 08:44		
Dibenz(a,h)anthracene		ug/L	0.10	1		08/13/08 08:44		
Fluoranthene		ug/L	0.30	1		08/13/08 08:44		
Fluorene		ug/L ug/L	0.31	1		08/13/08 08:44		
Indeno(1,2,3-cd)pyrene		-						
1		ug/L	0.20	1	08/04/08 00:00	08/13/08 08:44		
1-Methylnaphthalene	25.4	-	2.0	1				
2-Methylnaphthalene	28.0	-	2.0	1		08/13/08 08:44		
Naphthalene	20.5	•	1.5	1		08/13/08 08:44		
					LIVERIA DIO DOMON			
Phenanthrene Pyrene		ug/L ug/L	0.20 0.10	1 1		08/13/08 08:44 08/13/08 08:44		

Date: 08/14/2008 04:21 PM

**REPORT OF LABORATORY ANALYSIS** 

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

Client: AECOM - Resolution Consultants

Description: BEALB276TW02WG20150521

Laboratory ID: QE21004-020

Matrix: Aqueous

Date Sampled: 05/21/2015 1130 Date Received: 05/22/2015

Run Prep Method Analytical Method Dilution Analysis Date Analyst **Prep Date** Batch 5030B 05/27/2015 1509 75865

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.21	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	0.17	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	0.32	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	0.16	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	0.19	ug/L	1

Surrogate	Run 1 Q % Recovery	Acceptance y Limits
Bromofluorobenzene	106	75-120
1,2-Dichloroethane-d4	102	70-120
Toluene-d8	110	85-120
Dibromofluoromethane	104	85-115

PQL = Practical quantitation limit ND = Not detected at or above the MDL B = Detected in the method blank  $J = Estimated result < PQL and <math>\geq MDL$  E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

H = Out of holding time N = 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

Level 1 Report v2.1

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

Client: AECOM - Resolution Consultants

Laboratory ID: QE21004-020

Description: BEALB276TW02WG20150521

Matrix: Aqueous

Date Sampled: 05/21/2015 1130 Date Received: 05/22/2015

Run Prep Method Analytical Method Dilution Analysis Date Analyst Batch **Prep Date** 1 3520C 8270D (SIM) 05/28/2015 0023 RBH 05/26/2015 1543 75778

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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Methylnaphthalene-d10		60	15-139
Fluoranthene-d10		76	23-154

PQL = Practical quantitation limit ND = Not detected at or above the MDL B = Detected in the method blank J = Estimated result < PQL and ≥ MDL E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

H = Out of holding time N = 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

Level 1 Report v2.1

# Appendix D Regulatory Correspondence



BOARD: Paul C. Aughtry, III Chairman Edwin H. Cooper, III Vice Chairman Steven G. Kisner

Secretary



Henry C. Scott M. David Mitchell, MD

Glenn A. McCall

BOARD:

Coleman F. Buckhouse, MD

C. Earl Hunter, Commissioner Promoting and protecting the health of the public and the environment

3 September 2008

Beaufort Military Complex Family Housing ATTN: Kyle Broadfoot 1510 Laurel Bay Blvd. Beaufort, SC 29906

Re:

MCAS - Laurel Bay Housing - 276 Birch

Site ID # 04026

UST Closure Reports received 31 January 2008

Beaufort County

Dear Mr. Broadfoot:

The purpose of this letter is to verify a release of fuel oil at the referenced residence. According to information received by the Department, the source of the release is from past onsite use of fuel oil USTs. To date, initial activities by the facility have included tank removal and soil sampling. Based on the information contained in the closure report, a potential violation of the South Carolina Pollution Control Act has occurred in that there has been an unauthorized release of petroleum to the environment.

Additional assessment activities are required for this site. Specifically the Department requests that a groundwater sample be collected from this site. Please note, the Department approved a groundwater sampling proposal for Laurel Bay submitted by MCAS under separate cover dated 16 June 2008.

Should you have any questions, please contact me at 803-898-3553 (office phone), 803-898-2893 (fax) or bishopma@dhec.sc.gov.

Sincerely,

Michael Bishop, Hydrogeologist Groundwater Quality Section

Bureau of Water

cc:

Region 8 District EQC (via pdf)

MCAS, Commanding Officer, Attention: S-4 NREAO (William Drawdy) (via pdf)

Technical File (via pdf)



May 15, 2014

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

RE: IGWA

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

Dear Mr. Drawdy,

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

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

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

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

Sincerely,

Kent Krieg

Department of Defense Corrective Action Section

Bureau of Land and Waste Management

South Carolina Department of Health and Environmental Control

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



PROMOTE PROTECT PROSPER
Catherine B. Templeton, Director

Attachment to:

Krieg to Drawdy Subject: IGWA

Dated 5/15/2014

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

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

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

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



#### C. Earl Hunter. Commissioner

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

#### 20 November 2008

Beaufort Military Complex Family Housing ATTN: Kyle Broadfoot 1510 Laurel Bay Blvd. Beaufort, SC 29906

Re:

MCAS – Laurel Bay Housing – 276 Birch

Site ID # 04026

Groundwater Sampling Results received 6 November 2008

Beaufort County

Dear Mr. Broadfoot:

Per the Department's request, a groundwater sample was collected from the referenced site. The groundwater results were reported as non-detect. Based on the information and analytical data submitted, the Department recognizes that MCAS has adequately addressed the known environmental contamination identified on the property to date in accordance with the approved scope of work. Consequently, no further investigation is required at this time. Please note, this statement pertains only to the portion of the site addressed in the referenced report and does not apply to other areas of the site and/or any other potential regulatory violations. Further, the Department retains the right to request further investigation if deemed necessary.

Should you have any questions, please contact me at 803-896-4179 (office phone), 803-896-6245 (fax) or cookejt@dhec.sc.gov.

Sincerely,
AST Petroleum Restoration
& Site Environmental Investigations Section
Land Revitalization Division
Bureau of Land and Waste Management

SC Dept. of Health & Environmental Control

Jan T. Cooke, Hydrogeologist

B. Thomas Knight, Manager

CC:

Region 8 District EQC

MCAS, Commanding Officer, Attention: S-4 NREAO (Craig Ehde),

P.O. Box 55001, Beaufort, SC 29904-5001

Technical File



### 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	7337
453 Elderberry Drive	1414 Albatross Drive	
464 Dogwood Drive	1417 Albatross Drive	
466 Dogwood Drive	1421 Albatross Drive	22.21
467 Dogwood Drive	1422 Albatross Drive	100
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