SUMMARY REPORT 137 BIRCH ROAD (FORMERLY 278 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

JUNE 2021

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Prepared by:



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

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



Summary Report 137 Birch Road (Formerly 278 Birch Road) Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort June 2021

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List of Acronyms

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



1.0 INTRODUCTION

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

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

This report summarizes the results the environmental investigation activities associated with the storage of home heating oil and the potential release of petroleum constituents at the referenced property. Based on the results of the investigation, a No Further Action (NFA) determination has been made by the South Carolina Department of Health and Environmental Control (SCDHEC) for 137 Birch Road (Formerly 278 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, 2016) and the *Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service,* (SCDHEC, 2018), are as follows:

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

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



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

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

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 137 Birch Road (Formerly 278 Birch Road). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 278 Birch Road* (MCAS Beaufort, 2009) and *SCDHEC UST Assessment Report – 278 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 *Initial Groundwater Investigation Report – May and June 2015* (Resolution Consultants, 2015). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C. The *SCDHEC UST Assessment Report – 278 Birch Road* (MCAS Beaufort, 2009) has referred to the property as 278 Beech Road in error. The report pertains to the property 137 Birch Road (Formerly 278 Birch Road).



2.1 UST Removal and Soil Sampling

In July 2007 and November 2011, two 280 gallon heating oil USTs were removed at 137 Birch Road (Formerly 278 Birch Road). Tank 1 was removed on July 9, 2007 from the front landscaped bed area, adjacent to the driveway. Tank 2 was removed on November 8, 2011 from underneath the edge of the front concrete side walk and the front grassed area. 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 5'4" (Tank 1) and 4'3" (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 3'7" 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 of the excavation for the removal of 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 is presented in Table 1. A copy of the laboratory analytical data report is included in the UST Assessment Report presented in Appendix B. The laboratory analytical data report includes the soil results for the additional PAHs that were analyzed, but do not have associated RBSLs.

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST 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 137 Birch Road (Formerly 278 Birch Road) during the removal of Tank 1 were less than the SCDHEC RBSLs, which indicated the subsurface was not impacted by COPCs associated with the former UST at concentrations that presented a potential risk to human health and the environment. The soil results collected from 137 Birch Road (Formerly 278 Birch Road) during the removal of Tank 2 were greater than the SCDHEC RBSLs, which indicated



further investigation was required. In a letter dated May 15, 2014, SCDHEC requested an IGWA for 137 Birch Road (Formerly 278 Birch Road) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

2.3 Groundwater Sampling

On May 21, 2015, a temporary monitoring well was installed at 137 Birch Road (Formerly 278 Birch Road), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST (Tank 2). The former UST location is indicated on Figures 2 and 3 of the 2012 UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – May and June 2015* (Resolution Consultants, 2015).

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

2.4 Groundwater Analytical Results

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

The groundwater results collected from 137 Birch Road (Formerly 278 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 UST at concentrations that present a potential risk to human health and the environment.

3.0 **PROPERTY STATUS**

Based on the analytical results for soil (Tank 1) and groundwater (Tank 2), SCDHEC made the determination that NFA was required for 137 Birch Road (Formerly 278 Birch Road). This NFA



determination was obtained in letters dated August 14, 2008 (Tank 1) and February 22, 2016 (Tank 2). SCDHEC's NFA letters are provided in Appendix D.

4.0 **REFERENCES**

- Marine Corps Air Station Beaufort, 2009. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report 278 Birch Road, Laurel Bay Military Housing Area*, June 2009.
- Marine Corps Air Station Beaufort, 2012. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 278 Birch Road, Laurel Bay Military Housing Area*, February 2012.
- Resolution Consultants, 2015. *Initial Groundwater Investigation Report May and June 2015 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, October 2015.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2013. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 2.0*, April 2013.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2015. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 3.0*, May 2015.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2016. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 3.1*, February 2016.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2017. *R.61-92, Part 280, Underground Storage Tank Control Regulations,* March 2017.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2018. *Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service*, March 2018.



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



Table 1 Laboratory Analytical Results - Soil 137 Birch Road (Formerly 278 Birch Road) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

		Results Samples Collected 07/09/07 and 11/08/11				
Constituent	SCDHEC RBSLs ⁽¹⁾	278 Beech Bottom 01 07/09/07	278 Beech Side 02 07/09/07	278 Birch (11/08/11)		
Volatile Organic Compounds Analyzed	l by EPA Method 8260B (mg/kg)					
Benzene	0.003	ND	ND	ND		
Ethylbenzene	1.15	ND	ND	0.0108		
Naphthalene	0.036	0.000193	ND	0.0555		
Toluene	0.627	0.000472	ND	ND		
Xylenes, Total	13.01	ND	ND	0.00605		
Semivolatile Organic Compounds Ana	lyzed by EPA Method 8270D (mg/kg)					
Benzo(a)anthracene	0.66	ND	ND	ND		
Benzo(b)fluoranthene	0.66	ND	ND	ND		
Benzo(k)fluoranthene	0.66	ND	ND	ND		
Chrysene	0.66	ND	ND	ND		
Dibenz(a,h)anthracene	0.66	ND	ND	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 2Laboratory Analytical Results - Groundwater137 Birch Road (Formerly 278 Birch Road)Laurel Bay Military Housing AreaMarine Corps Air Station BeaufortBeaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Site-Specific Groundwater VISLs (µg/L) ⁽²⁾	Results Sample Collected 05/21/15
Volatile Organic Compounds Analyzed	by EPA Method 8260B (µg	/L)	
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	ND
Naphthalene	25	29.33	4.7
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	ND
Semivolatile Organic Compounds Ana	lyzed by EPA Method 8270) (µg/L)	
Benzo(a)anthracene	10	NA	ND
Benzo(b)fluoranthene	10	NA	ND
Benzo(k)fluoranthene	10	NA	ND
Chrysene	10	NA	ND
Dibenz(a,h)anthracene	10	NA	ND

Notes:

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

⁽²⁾ Site-specific groundwater VISLs were calculated using the EPA JE Model Spreadsheets (Version 3.1, February 2004) and conservative modeling inputs representative of a small single-story house with an 8 foot ceiling. Site-specific groundwater VISLs were developed based on a target risk level of 1x10⁻⁶, a target hazard quotient of 1 (per target organ), and a default residential exposure scenario, assuming exposure for 24 hours/day, 350 days/year, for 26 years. Modeling was performed for a range of depths to groundwater for application as appropriate in different areas of the Laurel Bay Military Housing Area. The most conservative levels are presented for comparison. Refer to Appendix H of the Uniform Federal Policy Sampling Analysis and Sampling Plan for Vapor Media, Revision 4 (Resolution Consultants, April 2017) for additional information.

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - Not Applicable

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

RBSL - Risk-Based Screening Level

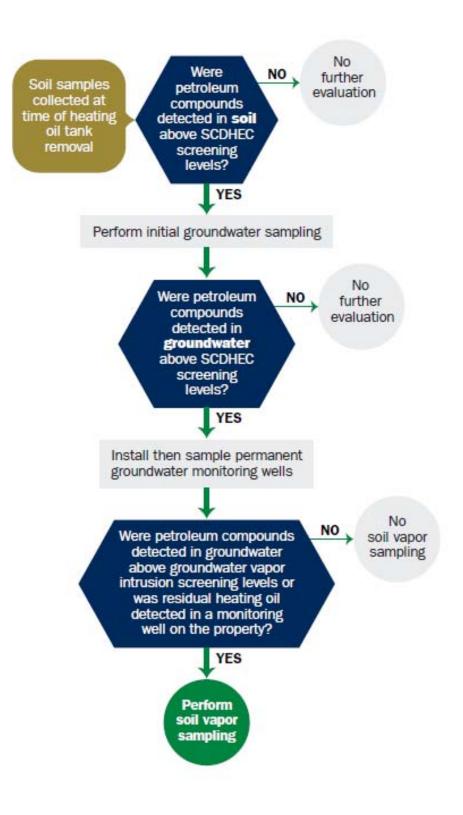
SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

Appendix A Multi-Media Selection Process for LBMH





Appendix A - Multi-Media Selection Process for LBMH

Appendix B UST Assessment Reports



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

Date Received State Use Only

Submit	Completed Form To:
	UST Program
	SCDHEC
	2600 Bull Street
	Columbia, South Carolina 29201
	Telephone (803) 896-6240

and the second s	RSHIP OF UST (S)	
Benufort M	, Individual, Public Agency, Other)	y. Housing
	rel BAY BevD.	
Mailing Address		
BEAU FORT		29906
City 843	State 379-3305	Zip Code 5 Kyle BROADFOOT
Area Code	Telephone Number	Contact Person

II. SITE IDENTIFICATION AND LOCATION

Permit I.D. # Actu	S LEND LEASE (CONSTRUCTION	
acility Name or Company	TS BEECH	-	
Street Address or State Ro	ad (as applicable)		
Beaufort,	SC 29906	Beaufort	
lity	ZIP	County	

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Attachment 2 III. INSURANCE INFORMATION

	Insurance Statement
und, written	etroleum release reported to DHEC on ν/A at Permit ID # may qualify to receive state y for appropriate site rehabilitation activities. Before participation is allowed in the State Clean-up confirmation of the existence or non-existence of an environmental insurance policy is required. This be completed.
Is ther UST r	e now, or has there ever been an insurance policy or other financial mechanism that covers this elease? 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:
	My policy provider is: The policy deductible is: The policy limit is:
If you l	have this type of insurance, please include a copy of the policy with this report.
	And
3	I do/do not (circle one) wish to participate in the Superb Program.
IV.	CERTIFICATION (To be signed by the UST owner/operator)
ertify that I	CERTIFICATION (To be signed by the UST owner/operator.) have personally examined and am familiar with the information submitted in this and all nents; and that based on my inquiry of those individuals responsible for obtaining this 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)

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	V. UST INFORMATION	Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
A. B.	Product(ex. Gas, Kerosene) Capacity(ex. 1k, 2k)	# Z <u>DIESER</u> 280G 350G					
C.	Age						
D.	Construction Material(ex. Steel, FRP)	steel					
E.	Month/Year of Last Use						
F.	Depth (ft.) To Base of Tank	64"					
G.	Spill Prevention Equipment Y/N	N					
H.	Overfill Prevention Equipment Y/N	N			+		
I.	Method of Closure Removed Filled	Remove	1				
J.	Date Tanks Removed/Filled	7.9.07					
K.	Visible Corrosion or Pitting Y/N	N					
L.	Visible Holes Y/N	Y					

M. Method of disposal for any USTs removed from the ground (attach disposal manifests)

Recycling - SCRAP Steel

N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)

TREATMENT FACILITY BROAD hupport Solidification + Sul P ANDFILL

O. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST FOUR SMALL HULES FOUND ON THE BOTTOM OF THE TANK

VI. PIPING INFORMATION

		Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
A.	Construction Material (ex. Steel, FRP)	Stee.					
B.	Distance from UST to Dispenser	NIA					
C.	Number of Dispensers	-0-					
D.	Type of System Pressure or Suction	Electric					
E.	Was Piping Removed from the Ground? Y/N	Pump					
F.	Visible Corrosion or Pitting Y/N	4					
G.	Visible Holes Y/N	N					
H	Age	N					

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

Fill pipe + Vent Pipe were Rusted.

VII. BRIEF SITE DESCRIPTION AND HISTORY

Home Heating Oil TANK - RESIDENTIAL

VIII. SITE CONDITIONS

	Yes	No	Unk
A. Were any petroleum-stained or contaminated soils found in the US excavation, soil borings, trenches, or monitoring wells? If yes, indicate depth and location on the site map.	r	×	
 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)?	2	×	
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:		×	
 E. Was a petroleum sheen or free product detected on any excavation or boring waters? If yes, indicate location and thickness. 		*	

IX. SAMPLE INFORMATION

Α.

SCDHEC Lab Certification Number DW: 84009002

B. Sample # OVA# Sample Type Soil Type Depth* Location Date/Time of Collected (Sand/Clay) (Soil/Water) Collection by ECHEVARRIA 7-9-07 5 AMANING ND 1 64" BOTTOM SAND 5 43" RIMANUNY ND 2 SIDE CLAY 1140 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

* = Depth Below the Surrounding Land Surface

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.

Method 8260 B Volatile ORGANic Compounds Reservative: 200 Sodium Bisulfate leA Poly AromAtic Hydra CARBONS EPA METHON 8270 PRESERVATIVE NO 5 ONe IDEWAL. And ONE Bottom 54 Were Secured from TANK evervation 0 AND Shipped 10 stoned AN ed IN Su PAT Coo Pp w ICE

X.

XI. RECEPTORS

		Yes	No
Α.	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?		
	If yes, indicate type of well, distance, and direction on site map.		1
С.	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
).	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.		~
3.	Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete?		/
_	If yes, indicate the area of contaminated soil on the site map.		

SUMMARY OF ANALYSIS RESULTS N/A

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							1	55-6
Toluene		-				1	-	
Ethylbenzene	+	1.1				1		-
Xylenes								
Naphthalene								
Benzo(a)anthracene			1					
Benzo(b)flouranthene						T		
Benzo(k)flouranthene						1		
Chrysene								
Dibenz(a,h)anthracene								
PH (EPA 3550)								-

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

SUMMARY OF ANALYSIS RESULTS (cont'd)

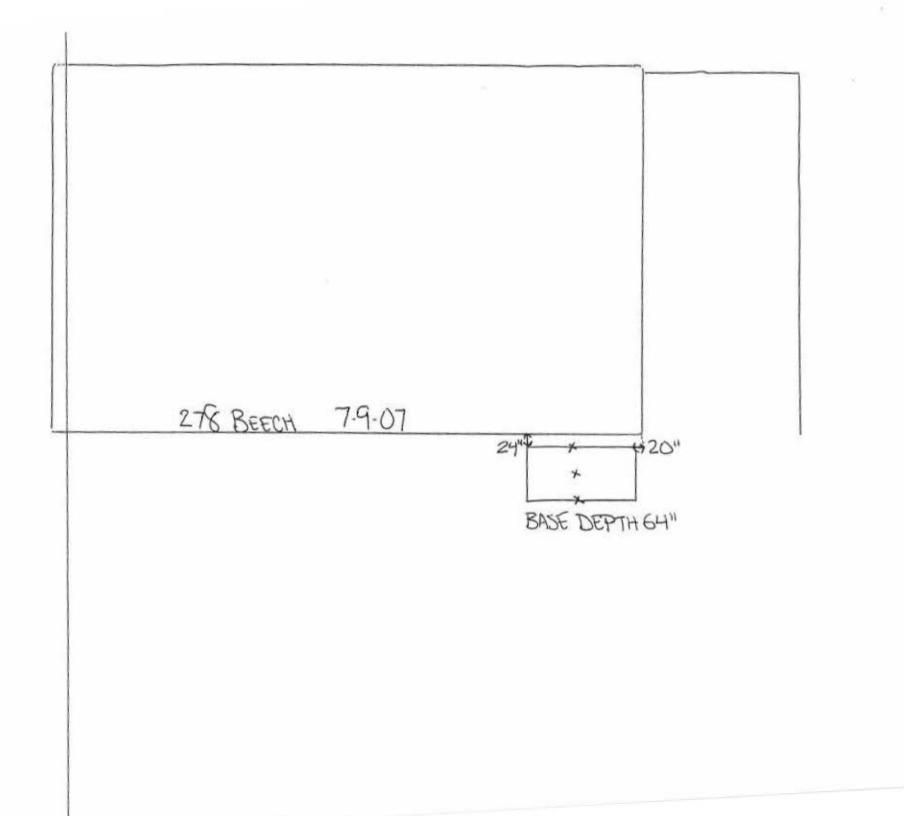
NIA

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	187			
Total BTEX	N/A				
MTBE	40				
Naphthalene	25				
Benzo(a)anthracene	10				
Benzo(b)flouranthene	10				
Benzo(k)flouranthene	10				e
Chrysene	10	Y.			
Dibenz(a,h)anthracen e	10				
EDB	.05				
1,2-DCA	.05		10		
Lead	Site specific				



0		C
	278	A_B TANK I BASE 64''
A-SOIL .	BEECH STREET XCAVATION TEST SIDE SAMPLE @ 43'' TEST BOTTOM SAMPLE @ 64	N
CUSTOMER : BEAUFORT MILITARY COMPLEX FAMILY HOUSE SITE ADDRESS : 278 BEECH STREET	EPG INC.	EPG INC. P.O. BOX 1096 MOUNT PLEASANT, SC 29465-1096



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)

-



ANALYTICAL TESTING CORPORATION

4310 East Anderson Road Orlando, FL 32812 * 900-851-2560 * Fax 407-856-0886

Client	EPG, INC.
	PO BOX 1096
	MT PLEASANT, SC 29465
Attn:	JOHN MAHONEY

Work Order:
Project:
Project Number:

OQG0325 LAUREL BAY EP2362 Sampled: 07/09/07-07/11/07 Received: 07/17/07

LABORATORY REPORT

Sample ID: 278 BEECH BOTTOM 01 - Lab Number: OQG0325-01 - Matrix: Solid/Soll

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
General (Chemistry Parameters	***********	*******	**********	******	*******	******	******	******		********
NA	% Solids	81.4	Q	56.	0.100	0.100	1	07/18/07 16:50	RRP	EPA 160.3	7G18042
Volatile (Organic Compounds by EPA Mo	ethod 8260B									
71-43-2	Benzone	0.0786	U	ug/kg dry	0.0786	0.215	1	07/17/07 19:02	JWT	EPA 8260B	7G17048
100-41-4	Ethylbrazene	0.0908	U	ug/kg dry	8090,0	0.215	1	07/17/07 19:02	JWT	EPA 8260B	7G17048
91-20-3	Naphthalene	0.193	1	ug/kg dry	0.119	0.215	1	07/17/07 19:02	JWT	EPA \$260B	7G17048
108-88-3	Toluene	0.472		ug/kg diy	0.185	0.215	1	07/17/07 19:02	JWT	EPA 8260B	7G17048
1330-20-7	Xylenes, total	0.112	υ	ug/kg dry	0.112	0.215	1	07/17/07 19:02	JWT	EPA 8260B	7G17048
Surrogate: 1,	2-Dichloroethane-d4 (73-137%)	113 96									
Surrogate: 4-	Bromofluorobenzene (39-118%)	94 96									
Surrogate: D	libromafluoromethane (35–145%)	109 96									
Surrogate: To	oluene-d8 (80-117%)	100 %									
Polynucle	ar Aromatic Hydrocarbons by	EPA Method 82	70								
23-32-9	Acesaphthese	90.9	υ	ug/kg dry	90.9	205	1	07/24/07 12:38	ЛS	EPA 8270C	7G19004
208-96-8	Asessaphthylese	120	U	ug/kg dry	120	205	1	07/24/07 12:38	ЛS	EPA \$270C	7G19004
120-12-7	Anthracene	65.4	U	ug/kg dry	65.4	205	1	07/24/07 12:38	JLS	EPA 8270C	7G19004
\$6-55-3	Benzo (a) antiracene	22.2	U	ug/kg dry	22.2	205	1	07/24/07 12:38	ЛLS	EPA 8270C	7G19004
205-99-2	Benzo (b) fluoranthene	21.6	u	ug/kg dry	21.6	205	1	07/24/07 12:38	Л.S	EPA 8270C	7G19004
207-08-9	Benzo (k) fisoranthene	21.6	U	ug/kg dry	21.6	205	1	07/24/07 12:38	Л.S	EPA 8270C	7G19004
191-24-2	Benzo (g,h,i) perylene	21.3	U	ug/kg dry	21.3	205	1	07/24/07 12:38	JLS	EPA \$270C	7G19004
50-32-8	Benzo (a) pyrene	25.2	υ	ug/kg dry	25.2	205	1	07/24/07 12:38	JLS.	EPA 8270C	7G19004
90-12-0	1-Methylmaphthalene	103	U	ug/kg dry	103	205	1	07/24/07 12:38	JLS	EPA 8270C	7G19004
218-01-9	Chrysene	24.5	U	ug/kg dry	24.5	205	1	07/24/07 12:38	JLS	EPA 8270C	7G19004
53-70-3	Dibenz (a,h) anthracene	26.9	U	ug/kg dry	26.9	205	1	07/24/07 12:38	ILS	EPA 8270C	7G19004
206-44-0	Fluoranthene	29.5	U	ug/kg dry	29.5	205	1	07/24/07 12:38	JLS	EPA 8270C	7019004
86-73-7	Fluorene	80.3	υ	ug/kg dry	80.3	205	1	07/24/07 12:38	JLS	EPA 8270C	7G19004
93-39-5	Indeno (1,2,3-od) pyrene	26.6	υ	ug/kg dry	26.6	205	1	07/24/07 12:38	JLS	EPA 8270C	7G19004
1-57-6	2-Methylmaphthalene	87.5	U	ug/kg dry	87.5	205	1	07/24/07 12:38	JLS	EPA 8270C	7G19004
1-20-3	Naphthalene	82.4	υ	ug/kg dry	82.4	205	1	07/24/07 12:38	ILS	EPA \$270C	7G19004
5-01-8	Phenanthrone	48.4	U	ug/kg dry	48.4	205	1	07/24/07 12:38	JLS	EPA 8270C	7G19004
29-00-0	Pyrene	41.7	υ	ug/kg dry	41.7	205	1	07/24/07 12:38	ЛS	EPA 8270C	7G19004
urrogate: 2-	Fluorobiphengl (24-12196)	66 96		2387.73B							
100 S 200 B 20	itrobenzene-d5 (19-11196)	63 96				108					
prosets To	rphenyi-d14 (44-17194)	102 95									

LABORATORY REPORT

Sample ID: 278 BEECH SIDE 02 - Lab Number: OQG0325-02 - Matrix: Solid/Soll

:AS∦	Analyte	Result	Q	Units	MDL.	PQL	D립 Factor	Analyzed Date/Time	By	Method	Betch
eneral C	Chemistry Parameters % Solids	90.3	Q	96.	0.100	0.100	-1	07/18/07 16:50	RRP	EPA 160.3	7G18042
latile O	rganic Compounds by EPA N	fethod 8260B									
43-2	Веллева	0.0633	U	ug/kg dry	0.0633	0.173	1	07/17/07 19:18	JWT	EPA \$260B	7G17048
-41-4	Ethylbenzese	0.0731	U	ug/kg dry	0.0731	0.173	1	07/17/07 19:18	IWT	EPA \$260B	7G17048

TestAmerica - Orlando, FL Shali Brown Project Manager



4310 East Anderson Road Orlando, FL 32812 * 800-851-2560 * Fax 407-856-0986

Client:	EPG, INC.
	PO BOX 1096
	MT PLEASANT, SC 29465
Attn:	JOHN MAHONEY

Work Order:
Project:
Project Number:

OQG0325 LAUREL BAY EP2362 Sampled: 07/09/07-07/11/07 Received: 07/17/07

LABORATORY REPORT
Sample ID: 278 BEECH SIDE 02 - Lab Number: OQG0325-02 - Matrix: Solid/Soil

CAS #	Azalyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
Volatile C	rganic Compounds by EPA M	ethod 8260B - Co	ont.	*********			******		*******	**********	
91-20-3	Naphthalene	0.0955	U	uging dry	0.0955	0.173	L	07/17/07 19:18	JWT	EPA 8260B	7G17048
108-88-3	Tolucat	0,149	U	ug/kg dry	0.149	0.173	1	07/17/07 19:18	JWT	EPA 8260B	7G17048
1330-20-7	Xylenes, total	0.0898	U	ug/kg dry	0.0898	0.173	1	07/17/07 19:18	JWT	EPA 8260B	7G17048
Surrogate: 1,	2-Dichloroethane-dil (73-137%)	112 96									
Surrogate: 4	Bromafluarabenzene (39-11896)	97 %									
Surrogate: D	ibromofluoromethane (35-143%)	109 96									
Surrogate: To	oluene-48 (80-117%)	101 56									
Polynucle	ar Aromatic Hydrocarbons by	EPA Method 82	70								
83-32-9	Acenaphthene	81.9	U	ug/kg dry	81.9	185	1	07/24/07 13:00	JLS.	EPA 8270C	7G19004
208-96-8	Accomptitylene	108	U	ug/kg dry	108	185	1	07/24/07 13:00	ЛS	EPA 8270C	7G19004
120-12-7	Anthracons	59.0	U	up/kg dry	59.0	185	1	07/24/07 13:00	JLS	EPA 8270C	7G19004
56-55-3	Benzo (a) anthracene	20.0	U	ngfig day	20.5	185	1	07/24/07 13:00	ЛS	EPA 8270C	7G19004
205-99-2	itenzo (b) fluoranthene	19.5	u	ug/kg dry	19.5	185	1	07/24/07 13:00	JI.S	EPA 8270C	7G19004
207-08-9	Benzo (k) fluoranthene	19.5	υ	ug/kg dry	19.5	185	1	07/24/07 13:00	JLS	EPA \$270C	7G19004
191-24-2	Benzo (g,b,i) purylene	19.2	υ	ugfig dry	19.2	185	1	07/24/07 13:00	JLS	EPA 8270C	7G19004
50-32-8	Benzo (a) pytene	22.7	u	uglig dry	22.7	185	1	07/24/07 13:00	JLS.	EPA 8270C	7019004
90-12-0	1-Mothylnaplsthalene	92.8	U	ug/kg dry	92.8	185	1	07/24/07 13:00	ЛS	EPA 8270C	7G19004
218-01-9	Chrysene	22.1	υ	ug/kg dry	22.1	185	1	07/24/07 13:00	ЛS	EPA 8270C	7G19004
53-70-3	Dibenz (a,b) anthracene	24.3	υ	ugikg dry	24,3	185	1	07/24/07 13:00	R.S.	EPA 8270C	7G19004
206-44-0	Fluoranthene	26.6	U	ug/kg dry	26.6	185	1	07/24/07 13:00	JL.S	EPA 8270C	7G19004
86-73-7	Fluorene	72.4	U	ug/kg dry	72.4	185	1	07/24/07 13:00	JLS.	EPA 8270C	7G19004
193-39-5	Indeno (1,2,3-ed) pyrene	23.9	U	ug/kg dry	23.9	185	1	07/24/07 13:00	ЛS	EPA 8270C	7G19004
91-57-6	2-Methylnaphthalene	78.8	U	ug/kg day	78.8	185	1	07/24/07 13:00	ЛS	EPA 8270C	7G19004
91-20-3	Naphthalane	74.2	U	ug/kg dry	74.2	185	1	07/24/07 13:00	ЛS	EPA \$270C	7G19004
15-01-8	Phonanthrepe	43.6	U	ug/kg dry	43.6	185	1	07/24/07 13:00	JLS	EPA 8270C	7G19004
29-00-0	Pyrane	37.6	U	ug/kg dry	37.6	185	1	07/24/07 13:00	ЛS	EPA 8270C	7G19004
urrogate: 2-	Fluorobiphemsl (24-121%)	60 96	1920						10000		
	trobenuene-d5 (19-11196)	61 %									
	rphenyl-d14 (44-171%)	99 96									

LABORATORY REPORT Sample ID: 253 BEECH BOTTOM 01 - Lab Number: OQG0325-03 - Matrix: Solid/Soil

AS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
eneral (Chemistry Parameters	*************		*********		*****	******		******	*********	**********
	% Solids	77.1	Q	%	0.100	0.100	1	07/18/07 16:50	RRP	EPA 160.3	7G18042
atile C	Organic Compounds by EPA M	fethod 8260B									
43-2	Benzepe	0.119	U	up/kg day	0.119	6.326	1	07/17/07 21:33	JWT	EPA \$260B	7G17048
-41-4	Ethylhenzene	0.144	1	ug/kg dry	0.138	0.326	1	07/17/07 21:33	JWT	EPA 8260B	7G17048
10-3	Naphthalene	0.463		ug/kg dry	0.180	0.326		07/17/07 21:33	JWT	EPA 8260B	7G17048
88.3	Tolucue	0.282	U	ug/kg dry	0.282	0.326	1	07/17/07 21:33	JWT	EPA 8260B	7G17048
)-20-7	Xylenes, total	0.170	υ	up/kg dry	0.170	0.326	1	07/17/07 21:33	JWT	EPA #260B	7G17048
peate: L	2-Dichloroethane-di (73-137%)	109 %									

TestAmerica - Orlando, FL Shali Brown Project Manager

Client Name_	EPC									ienti	#:	24	111			Project	Name:	LAN	URE	LB	0.1		1		
City/State/Zip Code:				_				-			-						oject#:		1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.				-		
Project Manager:	JOHN	MA	109	NE	¥										S	ite/Loca		_						K	
Telephone Number:	1						Fa	1¢_	-		-														-
Sampler Name: (Print Name)					122212			-		-	-					Invo	ice To:		-			PO#			
Sampler Signature:	TAP.	wa	No	-	Matrix	prom.	10001		-	CARTING	-	-		-	-	0	uote #:	Tor.	200 41	er Labrures	100Mg to	POW.		7	
59 BEECH BUTTOM DI 19 BEECH SIDE 02 19 BEECH BUTTOM 03 29 BEECH SIDE 04	79.07 79.07 79.07 7.10.07 7.10.07 7.10.07 7.10.07	1140	Cacacac	Field Filtered	SL - Studge DW - Dinhing Weter GW - Crountbeater S - SolfSolid WW - Westeweiter Specify Other				H304	Mathand	222222	(Strangel)	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	A X X X X X DILLER	177 JUL									CC Delive None Level Level Other: REMARKS	2 ac) 3 4
9 (NPRESS BOTTOMOI	711-07	130	G	-	<u> </u>	-	4	-+	-	1	_	_	+	7	-	-	-		-		-		-		
HOCHESS SIDE 02		T/16 Date: T/16			1010 730	1		court an		e l	212 Con	K	× La)	Date	16/17	Times	100	Cust	DRATO Init Lab Rec Lal ody Sei es Sup oZ3	Temp: b Temp als: Y plied by	: N Y Test	5.		

rec)d 2116/12

Attachment 1

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

Date	Receiv	ved	Ali		* . *			ŝŝ.
i en tra		-	-)	. <i>4</i> .4),		*		1 1 1
			St	ate Use	Only		 The second se	ala .

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

I. OWNERSHIP OF UST (S)

MCAS Beaufort, Commandin		AO (Craig Ehde)
Owner Name (Corporation, Individu	al, 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 Milit Facility Name or Compar		с
· · ·	Laurel Bay Military Housing Area	
Beaufort, City	Beaufort County	—
L		

Attachment 2

III. INSURANCE INFORMATION

Insurance Statement

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

Is there now, or has there ever been an insurance policy or other financial mechanism that covers this UST release? YES____ NO____ (check one)

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

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

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

IV. REQUEST FOR SUPERB FUNDING

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

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

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

Name (Type or print.)

Signature

To be completed by Notary Public:

Sworn before me this ______ day of _____, 20____

(Name)

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

VI. UST INFORMATION

		278Birch
A.	Product(ex. Gas, Kerosene)	Heating oil
B.	Capacity(ex. 1k, 2k)	280 gal
C.	Age	Late 1950s
D.	Construction Material(ex. Steel, FRP)	Steel
Е·	Month/Year of Last Use	Mid 80s
F.	Depth (ft.) To Base of Tank	4 ' 3 "
G.	Spill Prevention Equipment Y/N	No
H·	Overfill Prevention Equipment Y/N	No
I.	Method of Closure Removed/Filled	Removed
J _.	Date Tanks Removed/Filled	11/8/2011
K.	Visible Corrosion or Pitting Y/N	Yes
L.	Visible Holes Y/N	Yes

M. Method of disposal for any USTs removed from the ground (attach disposal manifests) UST 278Birch was removed from the ground and disposed at a

Subtitle "D" landfill. See Attachment "A".

N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests) UST 278Birch was previously filled with sand by others.

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

VII. PIPING INFORMATION

		278Birch
		Steel
A.	Construction Material(ex. Steel, FRP)	& Copper
B.	Distance from UST to Dispenser	N/A
C.	Number of Dispensers	N/A
D.	Type of System Pressure or Suction	Suction
E.	Was Piping Removed from the Ground? Y/N	No
F.	Visible Corrosion or Pitting Y/N	Yes
G.	Visible Holes Y/N	No
H.	Age	Late 1950s
I.		lescribe the location and extent for each piping run.
	Steel vent piping was corroded as	nd pitted. The copper supply and

return piping was sound.

VIII. BRIEF SITE DESCRIPTION AND HISTORY

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

IX. SITE CONDITIONS	
---------------------	--

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

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
278 Birch	Excav at fill end	Soil	Sandy-clay	4'3"	11/8/11 1445 hrs	P. Shaw	
DITCH							
8							
9							
10							
11							
12		~					
13							
14							
15							
16							
17							
18							
19							
20							

* = Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

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

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

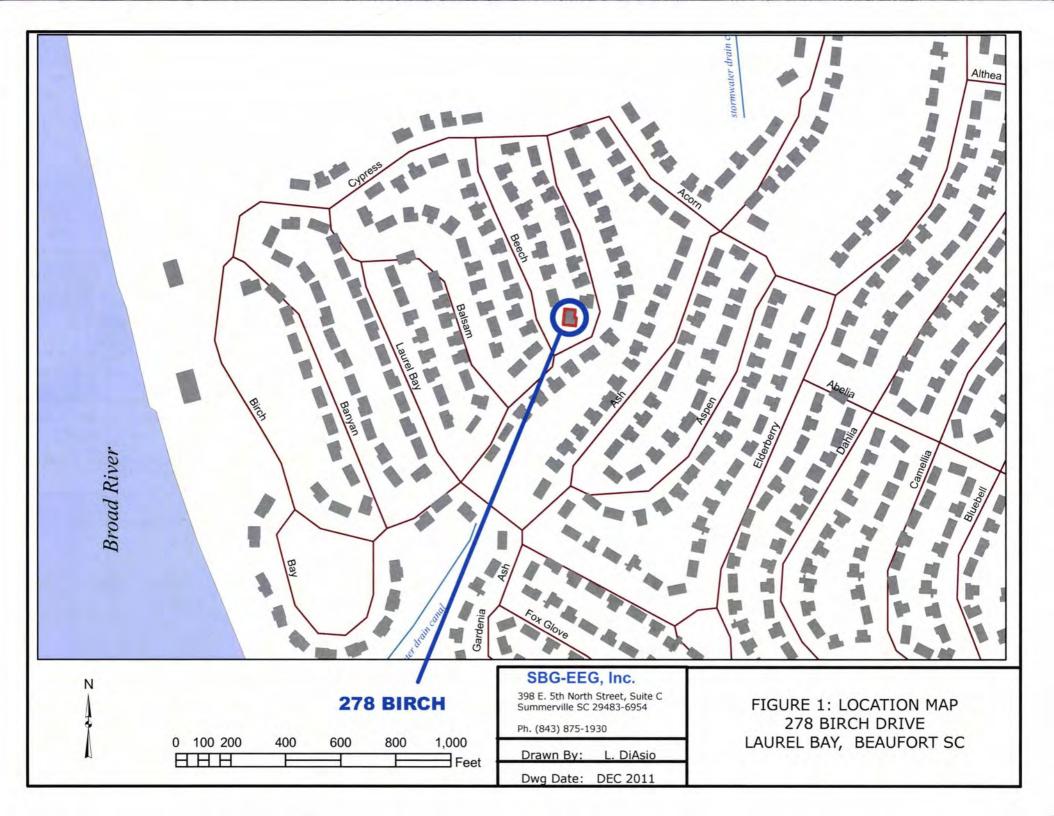
XII. RECEPTORS

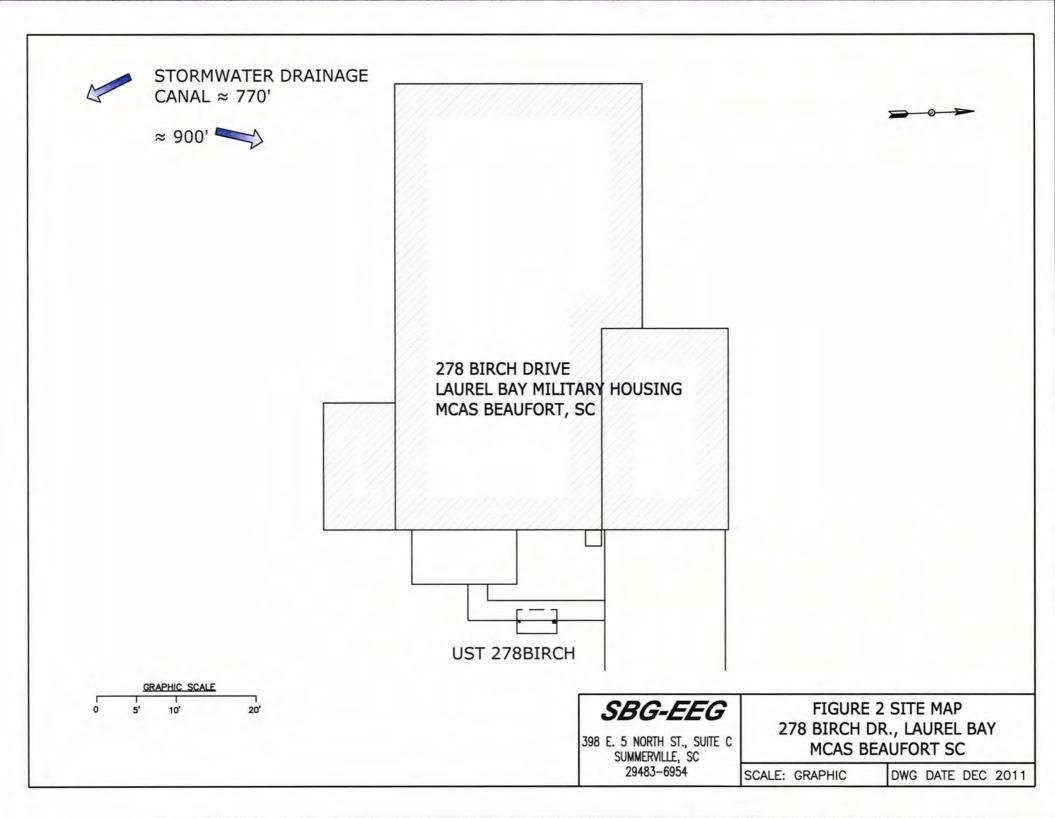
		Yes	No	
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?	*X		
	*Approx 770' & 900' to stormwater d If yes, indicate type of receptor, distance, and direction on site map.	raina	ge ca	hals
В.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		х	
	If yes, indicate type of well, distance, and direction on site map.			
C.	Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?		Х	
	If yes, indicate type of structure, distance, and direction on site map.			
D.	Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the	*X		
	contamination? *Sewer, water, elec	tric:	ty,	
	cable & fiber optic If yes, indicate the type of utility, distance, and direction on the site map.	C		
E.	Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete?		Х	
	If yes, indicate the area of contaminated soil on the site map.			

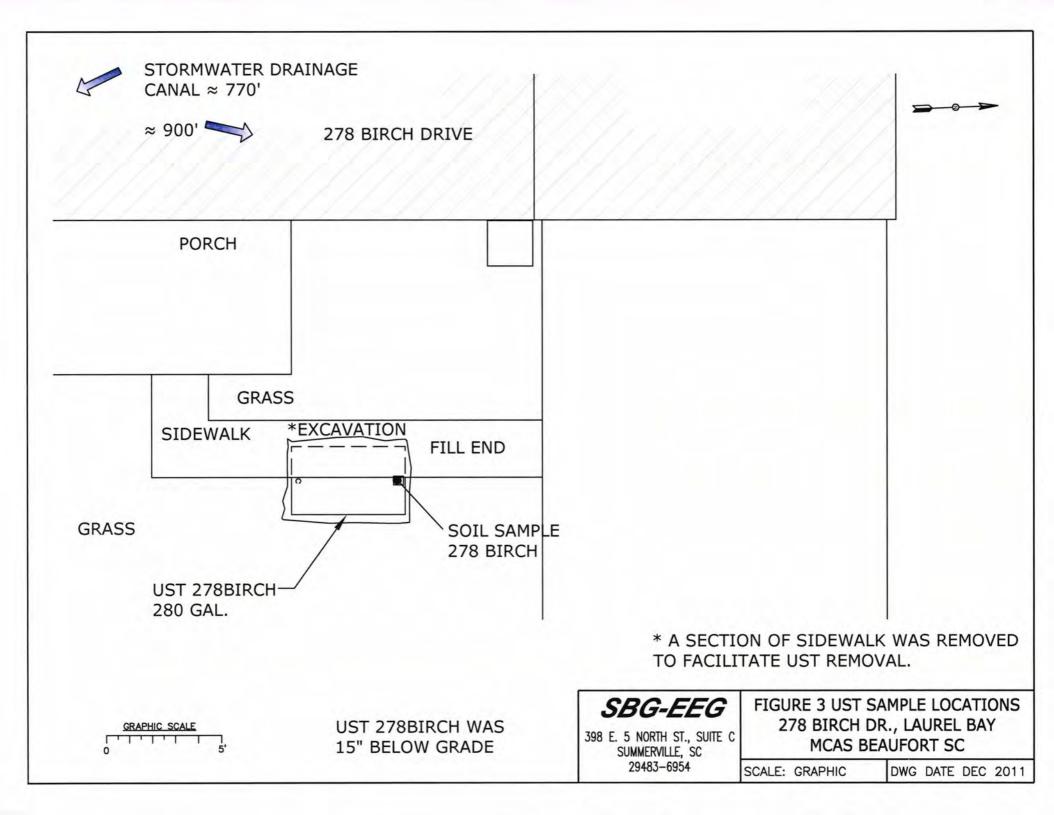
XIII. SITE MAP

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

(Attach Site Map Here)









Picture 1: Location of UST 278Birch.



Picture 2: UST 278Birch 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>	<u>г т т</u>	· · · · · · · · · · · · · · · · · · ·	1	<u> </u>
CoC UST	278Birch				
Benzene	ND				
Toluene	ND				
Ethylbenzene	0.0108 mg/kg				
Xylenes	0.00605 mg/k	g			
Naphthalene	0.0555 mg/kg				
Benzo (a) anthracene	ND				
Benzo (b) fluoranthene	ND				
Benzo (k) fluoranthene	ND				
Chrysene	ND				
Dibenz (a, h) anthracene	ND				
ТРН (ЕРА 3550)					
		· · · · · · · · · · · · · · · · · · ·			
CoC					
Benzene					
Toluene					
Ethylbenzene					
Xylenes					
Naphthalene					
Benzo (a) anthracene					
Benzo (b) fluoranthene					
Benzo (k) fluoranthene					
Chrysene					
Dibenz (a, h) anthracene					
ТРН (ЕРА 3550)					

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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	<u> </u>			
Toluene	1,000				
Ethylbenzene	700				
Xylenes	10,000				
Total BTEX	N/A	<u> </u>			
МТВЕ	40		_		
Naphthalene	25				
Benzo (a) anthracene	10				
Benzo (b) flouranthene	10				
Benzo (k) flouranthene	10				
Chrysene	10				
Dibenz (a, h) anthracene	10				
EDB	.05				
1,2-DCA	5				
Lead	Site specific				

XV. ANALYTICAL RESULTS

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

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





THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: NUK1866

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

10 Has

Authorized for release by: 11/29/2011 12:50:44 PM

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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.

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Sample Summary

Client: EEG - Small Business Group, Inc. (2449) Project/Site: [none] TestAmerica Job ID: NUK1866

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
NUK1866-01	278 Birch	Soil	11/08/11 14:45	11/12/11 08:30
NUK1866-02	267 Birch	Soil	11/09/11 14:00	11/12/11 08:30
NUK1866-03	1066 Gardenia	Soil	11/10/11 15:30	11/12/11 08:30

Definitions/Glossary

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

Qualifiers

GCI	MS	Vol	atil	29
00				00

Qualifier	Qualifier Description	
M1	The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).	
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.	
GCMS Sem	nivolatiles	

Qualifier	Qualifier Description	
1	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.	

Glossary

bbreviation	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	
NF	Contains no Free Liquid	
L, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample	
DL	Estimated Detection Limit	
PA	United States Environmental Protection Agency	
DL	Method Detection Limit	
L	Minimum Level (Dioxin)	
D	Not detected at the reporting limit (or MDL or EDL if shown)	
QL	Practical Quantitation Limit	
L	Reporting Limit	
PD	Relative Percent Difference, a measure of the relative difference between two points	
EF	Toxicity Equivalent Factor (Dioxin)	
EQ	Toxicity Equivalent Quotient (Dioxin)	

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

Client Sample ID: 278 Birch

Date Collected: 11/08/11 14:45

% Dry Solids

Date Received: 11/12/11 08:30

Lab Sample ID: NUK1866-01 Matrix: Soil Percent Solids: 79.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00204	0.00112	mg/kg dry	\$	11/08/11 14:45	11/15/11 16:03	1.00
Ethylbenzene	0.0108		0.00204	0.00112	mg/kg dry	ø	11/08/11 14:45	11/15/11 16:03	1.00
Naphthalene	0.0555		0.00511	0.00256	mg/kg dry	ø	11/08/11 14:45	11/15/11 16:03	1.00
Toluene	ND		0.00204	0.00112	mg/kg dry	¢	11/08/11 14:45	11/15/11 16:03	1.00
Xylenes, total	0.00605		0.00511	0.00256	mg/kg dry	¢	11/08/11 14:45	11/15/11 16:03	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	107		70 - 130				11/08/11 14:45	11/15/11 16:03	1.00
Dibromofluoromethane	102		70 - 130				11/08/11 14:45	11/15/11 16:03	1.00
Toluene-d8	102		70 - 130				11/08/11 14:45	11/15/11 16:03	1.00
4-Bromofluorobenzene	116		70 - 130				11/08/11 14:45	11/15/11 16:03	1.00

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

79.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0817	0.0415	mg/kg dry	0	11/16/11 09:03	11/16/11 19:24	1.00
Acenaphthylene	ND		0.0817	0.0415	mg/kg dry	ø	11/16/11 09:03	11/16/11 19:24	1.00
Anthracene	ND		0.0817	0.0415	mg/kg dry	\$	11/16/11 09:03	11/16/11 19:24	1.00
Benzo (a) anthracene	ND		0.0817	0.0415	mg/kg dry	ø	11/16/11 09:03	11/16/11 19:24	1.00
Benzo (a) pyrene	ND		0.0817	0.0415	mg/kg dry	ø	11/16/11 09:03	11/16/11 19:24	1.00
Benzo (b) fluoranthene	ND		0.0817	0.0415	mg/kg dry	¢	11/16/11 09:03	11/16/11 19:24	1.00
Benzo (g,h,i) perylene	ND		0.0817	0.0415	mg/kg dry	ø	11/16/11 09:03	11/16/11 19:24	1.00
Benzo (k) fluoranthene	ND		0.0817	0.0415	mg/kg dry	Ð	11/16/11 09:03	11/16/11 19:24	1.00
Chrysene	ND		0.0817	0.0415	mg/kg dry	ø	11/16/11 09:03	11/16/11 19:24	1.00
Dibenz (a,h) anthracene	ND		0.0817	0.0415	mg/kg dry	0	11/16/11 09:03	11/16/11 19:24	1.00
Fluoranthene	ND		0.0817	0.0415	mg/kg dry	ø	11/16/11 09:03	11/16/11 19:24	1.00
Fluorene	0.0907		0.0817	0.0415	mg/kg dry	ø	11/16/11 09:03	11/16/11 19:24	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0817	0.0415	mg/kg dry	¢	11/16/11 09:03	11/16/11 19:24	1.00
Naphthalene	0.135		0.0817	0.0415	mg/kg dry	ø	11/16/11 09:03	11/16/11 19:24	1.00
Phenanthrene	0.176		0.0817	0.0415	mg/kg dry	^D	11/16/11 09:03	11/16/11 19:24	1.00
Pyrene	ND		0.0817	0.0415	mg/kg dry	\$	11/16/11 09:03	11/16/11 19:24	1.00
1-Methylnaphthalene	0.391		0.0817	0.0415	mg/kg dry	ø	11/16/11 09:03	11/16/11 19:24	1.00
2-Methylnaphthalene	0.664		0.0817	0.0415	mg/kg dry	¢	11/16/11 09:03	11/16/11 19:24	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	85		18 - 120				11/16/11 09:03	11/16/11 19:24	1.00
2-Fluorobiphenyl	64		14 - 120				11/16/11 09:03	11/16/11 19:24	1.00
Nitrobenzene-d5	60		17 - 120				11/16/11 09:03	11/16/11 19:24	1.00
Method: SW-846 - General Ch	emistry Paramete	rs							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

1.00

11/17/11 10:55 11/18/11 10:53

0.500

0.500 %

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

Dil Fac

1.00

1.00

1.00

1.00

1.00

Dil Fac

1.00

1.00

1.00

1.00

Client Sample ID: 267 Birch

Date Collected: 11/09/11 14:00

Date Received: 11/12/11 08:30

Lab Sample ID: NUK1866-02 Matrix: Soil Percent Solids: 94.4

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B Analyte **Result** Qualifier RL MDL Unit D Prepared Analyzed ND 菝 Benzene 0.00214 0.00118 mg/kg dry 11/09/11 14:00 11/15/11 16:34 ND -08 Ethylbenzene 0.00214 0.00118 mg/kg dry 11/09/11 14:00 11/15/11 16:34 Naphthalene ND 0.00534 0.00267 mg/kg dry 袋 11/09/11 14:00 11/15/11 16:34 0.00118 mg/kg dry Toluene ND 0.00214 12 11/09/11 14:00 11/15/11 16:34 Xylenes, total ND 0.00534 0.00267 mg/kg dry -11/09/11 14:00 11/15/11 16:34 Limits Surrogate %Recovery Qualifier Prepared Analyzed 1,2-Dichloroethane-d4 110 70 - 130 11/09/11 14:00 11/15/11 16:34 Dibromofluoromethane 104 70 - 130 11/09/11 14:00 11/15/11 16:34 70 - 130 Toluene-d8 100 11/09/11 14:00 11/15/11 16:34 4-Bromofluorobenzene 111 70 - 130 11/09/11 14:00 11/15/11 16:34

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0703	0.0357	mg/kg dry	õ	11/16/11 09:03	11/16/11 19:44	1.00
Acenaphthylene	ND		0.0703	0.0357	mg/kg dry	\$2	11/16/11 09:03	11/16/11 19:44	1.00
Anthracene	ND		0.0703	0.0357	mg/kg dry	ö	11/16/11 09:03	11/16/11 19:44	1.00
Benzo (a) anthracene	ND		0.0703	0.0357	mg/kg dry	ø	11/16/11 09:03	11/16/11 19:44	1.00
Benzo (a) pyrene	ND		0.0703	0.0357	mg/kg dry	0	11/16/11 09:03	11/16/11 19:44	1.00
Benzo (b) fluoranthene	ND		0.0703	0.0357	mg/kg dry	¢	11/16/11 09:03	11/16/11 19:44	1.00
Benzo (g,h,i) perylene	ND		0.0703	0.0357	mg/kg dry	¢	11/16/11 09:03	11/16/11 19:44	1.00
Benzo (k) fluoranthene	ND		0.0703	0.0357	mg/kg dry	0	11/16/11 09:03	11/16/11 19:44	1.00
Chrysene	ND		0.0703	0.0357	mg/kg dry	ø	11/16/11 09:03	11/16/11 19:44	1.00
Dibenz (a,h) anthracene	ND		0.0703	0.0357	mg/kg dry	0	11/16/11 09:03	11/16/11 19:44	1.00
Fluoranthene	ND		0.0703	0.0357	mg/kg dry	ø	11/16/11 09:03	11/16/11 19:44	1.00
Fluorene	ND		0.0703	0.0357	mg/kg dry	0	11/16/11 09:03	11/16/11 19:44	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0703	0.0357	mg/kg dry	122	11/16/11 09:03	11/16/11 19:44	1.00
Naphthalene	ND		0.0703	0.0357	mg/kg dry	¢.	11/16/11 09:03	11/16/11 19:44	1.00
Phenanthrene	ND		0.0703	0.0357	mg/kg dry	0	11/16/11 09:03	11/16/11 19:44	1.00
Pyrene	ND		0.0703	0.0357	mg/kg dry	0	11/16/11 09:03	11/16/11 19:44	1.00
1-Methylnaphthalene	ND		0.0703	0.0357	mg/kg dry	Q.	11/16/11 09:03	11/16/11 19:44	1.00
2-Methylnaphthalene	ND		0.0703	0.0357	mg/kg dry	¢	11/16/11 09:03	11/16/11 19:44	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	88		18 - 120				11/16/11 09:03	11/16/11 19:44	1.00
2-Fluorobiphenyl	66		14 - 120				11/16/11 09:03	11/16/11 19:44	1.00
Nitrobenzene-d5	58		17 - 120				11/16/11 09:03	11/16/11 19:44	1.00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	94.4		0.500	0.500	%		11/17/11 10:55	11/18/11 10:53	1.00

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

Client Sample ID: 1066 Gardenia

Date Collected: 11/10/11 15:30 Date Received: 11/12/11 08:30

Lab Sample ID: NUK1866-03 Matrix: Soil Percent Solids: 86.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00198	0.00109	mg/kg dry	₩ 2	11/10/11 15:30	11/23/11 13:22	1.00
Ethylbenzene	0.00404		0.00198	0.00109	mg/kg dry	10	11/10/11 15:30	11/23/11 13:22	1.00
Naphthalene	0.0276		0.00494	0.00247	mg/kg dry	\$2	11/10/11 15:30	11/23/11 13:22	1.00
Toluene	ND		0.00198	0.00109	mg/kg dry	Q.	11/10/11 15:30	11/23/11 13:22	1.00
Xylenes, total	0.0658		0.00494	0.00247	mg/kg dry	Q	11/10/11 15:30	11/23/11 13:22	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	107		70 - 130				11/10/11 15:30	11/23/11 13:22	1.00
Dibromofluoromethane	107		70 - 130				11/10/11 15:30	11/23/11 13:22	1.00
Toluene-d8	114		70 - 130				11/10/11 15:30	11/23/11 13:22	1.00
4-Bromofluorobenzene	132	ZX	70 - 130				11/10/11 15:30	11/23/11 13:22	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0775	0.0393	mg/kg dry	Q.	11/16/11 09:03	11/16/11 20:03	1.00
Acenaphthylene	ND		0.0775	0.0393	mg/kg dry	\$	11/16/11 09:03	11/16/11 20:03	1.00
Anthracene	0.164		0.0775	0.0393	mg/kg dry	\$	11/16/11 09:03	11/16/11 20:03	1.00
Benzo (a) anthracene	0.180		0.0775	0.0393	mg/kg dry	\$	11/16/11 09:03	11/16/11 20:03	1.00
Benzo (a) pyrene	0.0516	J	0.0775	0.0393	mg/kg dry	ø	11/16/11 09:03	11/16/11 20:03	1,00
Benzo (b) fluoranthene	0.0686	J	0.0775	0.0393	mg/kg dry	Ø	11/16/11 09:03	11/16/11 20:03	1.00
Benzo (g,h,i) perylene	ND		0.0775	0.0393	mg/kg dry	¢	11/16/11 09:03	11/16/11 20:03	1.00
Benzo (k) fluoranthene	0.0470	J	0.0775	0.0393	mg/kg dry	Q	11/16/11 09:03	11/16/11 20:03	1.00
Chrysene	0.128		0.0775	0.0393	mg/kg dry	¢.	11/16/11 09:03	11/16/11 20:03	1.00
Dibenz (a,h) anthracene	ND		0.0775	0.0393	mg/kg dry	Ø	11/16/11 09:03	11/16/11 20:03	1.00
Fluoranthene	1.07		0.0775	0.0393	mg/kg dry	¢	11/16/11 09:03	11/16/11 20:03	1.00
Fluorene	0.167		0.0775	0.0393	mg/kg dry	\$	11/16/11 09:03	11/16/11 20:03	1.00
Indeno (1,2,3-cd) pyrene	0.0624	J	0.0775	0.0393	mg/kg dry	¢	11/16/11 09:03	11/16/11 20:03	1.00
Naphthalene	0.0624	J	0.0775	0.0393	mg/kg dry	ø	11/16/11 09:03	11/16/11 20:03	1.00
Phenanthrene	1.36		0.0775	0.0393	mg/kg dry	¢	11/16/11 09:03	11/16/11 20:03	1.00
Pyrene	0.677		0.0775	0.0393	mg/kg dry	¢	11/16/11 09:03	11/16/11 20:03	1.00
1-Methylnaphthalene	0.170		0.0775	0.0393	mg/kg dry	\$2	11/16/11 09:03	11/16/11 20:03	1.00
2-Methylnaphthalene	0.302		0.0775	0.0393	mg/kg dry	¢	11/16/11 09:03	11/16/11 20:03	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	81		18 - 120				11/16/11 09:03	11/16/11 20:03	1.00
2-Fluorobiphenyl	68		14 - 120				11/16/11 09:03	11/16/11 20:03	1.00
Nitrobenzene-d5	63		17 - 120				11/16/11 09:03	11/16/11 20:03	1.00

Analyte	and the second second second	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	86.2		0.500	0.500	%		11/17/11 10:55	11/18/11 10:53	1.00

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

Blank Blank

108

Lab Sample	ID: 11K3683-BLK1
Matrix: Soil	

Client Sample ID: Method Blank Prep Type: Total Prep Batch: 11K3683_P

11/15/11 12:31

Client Sample ID: Method Blank

1.00

Prep Type: Total Prep Batch: 11K3683_P

11/15/11 09:59

Analysis Batch: U02	20175
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	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		11/15/11 09:59	11/15/11 12:31	1.00
Ethylbenzene	ND		0.00200	0.00110	mg/kg wet		11/15/11 09:59	11/15/11 12:31	1.00
Naphthalene	ND		0.00500	0.00250	mg/kg wet		11/15/11 09:59	11/15/11 12:31	1.00
Toluene	ND		0.00200	0.00110	mg/kg wet		11/15/11 09:59	11/15/11 12:31	1.00
Xylenes, total	ND		0.00500	0.00250	mg/kg wet		11/15/11 09:59	11/15/11 12:31	1.00
	Blank	Blank							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	99		70 - 130				11/15/11 09:59	11/15/11 12:31	1.00
Dibromofluoromethane	102		70 - 130				11/15/11 09:59	11/15/11 12:31	1.00
Toluene-d8	105		70 - 130				11/15/11 09:59	11/15/11 12:31	1.00

70-130

Lab Sample ID: 11K3683-BLK2 Matrix: Soil Analysis Batch: U020175

4-Bromofluorobenzene

	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0550	mg/kg wet		11/15/11 09:59	11/15/11 13:02	50.0
Ethylbenzene	ND		0.100	0.0550	mg/kg wet		11/15/11 09:59	11/15/11 13:02	50.0
Naphthalene	ND		0.250	0.125	mg/kg wet		11/15/11 09:59	11/15/11 13:02	50.0
Toluene	ND		0.100	0.0550	mg/kg wet		11/15/11 09:59	11/15/11 13:02	50.0
Xylenes, total	ND		0.250	0.125	mg/kg wet		11/15/11 09:59	11/15/11 13:02	50.0

	Blank	Blank				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	101	7	70 - 130	11/15/11 09:59	11/15/11 13:02	50.0
Dibromofluoromethane	105		70 - 130	11/15/11 09:59	11/15/11 13:02	50.0
Toluene-d8	104		70 - 130	11/15/11 09:59	11/15/11 13:02	50.0
4-Bromofluorobenzene	107		70 - 130	11/15/11 09:59	11/15/11 13:02	50.0

Lab Sample ID: 11K3683-BS1 Matrix: Soil

Analysis Batch: U020175

CONTRACTOR DATE TANK ALL	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	50.0	55.8	-	ug/kg		112	75 - 127	
Ethylbenzene	50.0	55.3		ug/kg		111	80 - 134	
Naphthalene	50.0	50.0		ug/kg		100	69 - 150	
Toluene	50.0	56.7		ug/kg		113	80 - 132	
Xylenes, total	150	166		ug/kg		111	80 - 137	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	109		70 - 130
Dibromofluoromethane	107		70 - 130
Toluene-d8	104		70 - 130
4-Bromofluorobenzene	107		70 - 130

Client Sample ID: Lab Control Sample

Prep Type: Total Prep Batch: 11K3683_P

Client Sample ID: Matrix Spike

Prep Type: Total

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

Lab Sample ID: 11K3683-BSD1 Matrix: Soil	Client	t Samp	le ID: L	ab Control	Sampl	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
Analysis Batch: U020175							Prep Batch		
	Spike	LCS Dup	LCS Dup				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	50.0	53.6		ug/kg		107	75 - 127	4	50
Ethylbenzene	50.0	53.4		ug/kg		107	80 - 134	4	50
Naphthalene	50.0	48.2		ug/kg		96	69 - 150	4	50
Toluene	50.0	54.0		ug/kg		108	80 - 132	5	50
Xylenes, total	150	160		ug/kg		106	80 - 137	4	50

Surrogate	LCS Dup %Recovery	LCS Dup Qualifier	Limits
1,2-Dichloroethane-d4	108	_	70 - 130
Dibromofluoromethane	105		70 - 130
Toluene-d8	103		70 - 130
4-Bromofluorobenzene	105		70 - 130

Lab Sample ID: 11K3683-MS1 Matrix: Soil Analysis Batch: U020175

Analysis Batch: U020175	Sample	Sample	Spike	Matrix Spike	Matrix Spi	ke		1	Prep Batch: 11K3683_P %Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	ND		2.47	3.43		mg/kg wet		139	31 - 143
Ethylbenzene	2.41		2.47	6.50	M1	mg/kg wet		166	23 - 161
Naphthalene	2.60		2.47	6.22		mg/kg wet		147	10 - 176
Toluene	ND		2.47	3.65		mg/kg wet		148	30 - 155
Xylenes, total	16.3		7.40	28.9	M1	mg/kg wet		170	25 - 162

	Matrix Spike	Matrix Spike	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	102		70-130
Dibromofluoromethane	102		70 - 130
Toluene-d8	104		70 - 130
4-Bromofluorobenzene	108		70 - 130

Sample Sample

Lab Sample ID: 11K3683-MSD1 Matrix: Soil Analysis Batch: U020175

						Pre	ер Туре:	Total
						Prep Batc	h: 11K3	683_P
Spike	Matrix Spike Dup	Matrix Spi	ke Duş			%Rec.		RPD
Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit

Client Sample ID: Matrix Spike Duplicate

Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		2.47	3.05	1	mg/kg wet	_	124	31 - 143	12	50
Ethylbenzene	2.41		2.47	5.87		mg/kg wet		140	23 - 161	10	50
Naphthalene	2.60		2.47	5.55		mg/kg wet		120	10 - 176	11	50
Toluene	ND		2.47	3.28		mg/kg wet		133	30 - 155	11	50
Xylenes, total	16.3		7.40	27.1		mg/kg wet		146	25 - 162	6	50

	Matrix Spike Dup	Matrix Spike Dup			
Surrogate	%Recovery	Qualifier	Limits		
1,2-Dichloroethane-d4	105		70 - 130		
Dibromofluoromethane	103		70 - 130		
Toluene-d8	105		70 - 130		
4-Bromofluorobenzene	112		70 - 130		

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

110

Lab Sample ID: 11K5924-BLK1 Matrix: Soil

Client Sample ID: Method Blank Prep Type: Total Prep Batch: 11K5924 P

Analysis Batch: U020677

							Tep Daten. Th	10024_1
Blank	Blank							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		0.00200	0.00110	mg/kg wet		11/23/11 09:51	11/23/11 12:22	1.00
ND		0.00200	0.00110	mg/kg wet		11/23/11 09:51	11/23/11 12:22	1.00
ND		0.00500	0.00250	mg/kg wet		11/23/11 09:51	11/23/11 12:22	1.00
ND		0.00200	0.00110	mg/kg wet		11/23/11 09:51	11/23/11 12:22	1.00
ND		0.00500	0.00250	mg/kg wet		11/23/11 09:51	11/23/11 12:22	1.00
Blank	Blank							
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
95		70 - 130				11/23/11 09:51	11/23/11 12:22	1.00
105		70 - 130				11/23/11 09:51	11/23/11 12:22	1.00
110		70 - 130				11/23/11 09:51	11/23/11 12:22	1.00
	Result ND ND ND ND ND Blank %Recovery 95 105	ND ND ND Blank Blank %Recovery Qualifier 95 105	Result Qualifier RL ND 0.00200 ND 0.00200 ND 0.00500 ND 0.00200 ND 0.00200 ND 0.00200 ND 0.00200 ND 0.00500 Blank Blank %Recovery Qualifier Limits 95 70 - 130 105 70 - 130	Result Qualifier RL MDL ND 0.00200 0.00110 ND 0.00200 0.00110 ND 0.00500 0.00250 ND 0.00200 0.00110 ND 0.00200 0.00110 ND 0.00200 0.00110 ND 0.00500 0.00250 ND 0.00500 0.00250 Blank Blank Unitis 95 70 - 130 70 - 130	Result Qualifier RL MDL Unit ND 0.00200 0.00110 mg/kg wet ND 0.00200 0.00110 mg/kg wet ND 0.00500 0.00250 mg/kg wet ND 0.00200 0.00110 mg/kg wet ND 0.00200 0.00110 mg/kg wet ND 0.00200 0.00110 mg/kg wet ND 0.00500 0.00250 mg/kg wet ND 0.00500 0.00250 mg/kg wet Blank Blank Qualifier Limits 95 70 - 130 70 - 130	Result Qualifier RL MDL Unit D ND 0.00200 0.00110 mg/kg wet mg/kg wet	Blank Blank Result Qualifier RL MDL Unit D Prepared ND 0.00200 0.00110 mg/kg wet 11/23/11 09:51 11/23/11 09:51 ND 0.00200 0.00110 mg/kg wet 11/23/11 09:51 ND 0.00500 0.00250 mg/kg wet 11/23/11 09:51 ND 0.00200 0.00110 mg/kg wet 11/23/11 09:51 ND 0.00500 0.00250 mg/kg wet 11/23/11 09:51 ND 95 70 - 130 Y Prepared 11/23/11 09:51 11/23/11 09:51 11/23/11 09:51 105 70	Blank Blank Result Qualifier RL MDL Unit D Prepared Analyzed ND 0.00200 0.00110 mg/kg wet 11/23/11 09:51 11/23/11 12:22 ND 0.00200 0.00110 mg/kg wet 11/23/11 09:51 11/23/11 12:22 ND 0.00500 0.00250 mg/kg wet 11/23/11 09:51 11/23/11 12:22 ND 0.00200 0.00110 mg/kg wet 11/23/11 09:51 11/23/11 12:22 ND 0.00200 0.00110 mg/kg wet 11/23/11 09:51 11/23/11 12:22 ND 0.00500 0.00250 mg/kg wet 11/23/11 09:51 11/23/11 12:22 ND 0.00500 0.00250 mg/kg wet 11/23/11 09:51 11/23/11 12:22 ND 0.00500 0.00250 mg/kg wet 11/23/11 09:51 11/23/11 12:22 ND 0.00500 0.00250 mg/kg wet 11/23/11 09:51 11/23/11 12:22 ND 95 70 - 130 11/23/11 09:51 11/23/11 12:22 <t< td=""></t<>

Lab Sample ID: 11K5924-BS1 Matrix: Soil Analysis Batch: 11020677

4-Bromofluorobenzene

Client Sample ID: Lab Control Sample Prep Type: Total Prep Batch: 11K5924 P

11/23/11 09:51 11/23/11 12:22

1.00

Analysis Batch: 0020677							Prep Batch: 11K5924_P
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	50.0	56.0		ug/kg		112	75 - 127
Ethylbenzene	50.0	49.3		ug/kg		99	80 - 134
Naphthalene	50.0	53.7		ug/kg		107	69 - 150
Toluene	50.0	48.6		ug/kg		97	80 - 132
Xylenes, total	150	148		ug/kg		98	80 - 137

70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	107		70 - 130
Dibromofluoromethane	105		70 - 130
Toluene-d8	86		70 - 130
4-Bromofluorobenzene	108		70 - 130

Lab Sample ID: 11K5924-BSD1 Matrix: Soil

Analysis Batch: U020677

	Spike	LCS Dup	LCS Dup				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	50.0	54.5	-	ug/kg		109	75 - 127	3	50
Ethylbenzene	50.0	54.9		ug/kg		110	80 - 134	11	50
Naphthalene	50.0	52.4		ug/kg		105	69 - 150	3	50
Toluene	50.0	55.9		ug/kg		112	80 - 132	14	50
Xylenes, total	150	166		ug/kg		110	80 - 137	12	50

	LCS Dup	LCS Dup	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	106		70 - 130
Dibromofluoromethane	105		70 - 130
Toluene-d8	102		70 - 130
4-Bromofluorobenzene	109		70 - 130

Prep Type: Total Prep Batch: 11K5924_P

Client Sample ID: Lab Control Sample Dup

TestAmerica Nashville 11/29/2011

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

Lab Sample ID: 11K3483-BLK1	
Matrix: Soil	

Client Sample ID: Method Blank Prep Type: Total Prep Batch: 11K3483 P

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 11K3483_P

Analysis Batch: 11K3483								Prep Batch: 11k	(3483_P
	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Acenaphthylene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Anthracene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Benzo (a) anthracene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Benzo (a) pyrene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Benzo (b) fluoranthene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Benzo (g,h,i) perylene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Benzo (k) fluoranthene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Chrysene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Dibenz (a,h) anthracene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Fluoranthene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Fluorene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Naphthalene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Phenanthrene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
Pyrene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
1-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00
2-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		11/16/11 09:03	11/16/11 17:27	1.00

	Blank	Blank				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	105		18 - 120	11/16/11 09:03	11/16/11 17:27	1.00
2-Fluorobiphenyl	78		14 - 120	11/16/11 09:03	11/16/11 17:27	1.00
Nitrobenzene-d5	70		17 - 120	11/16/11 09:03	11/16/11 17:27	1.00

Lab Sample ID: 11K3483-BS1 Matrix: Soil

Analysis Batch: 11K3483

	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthene	1.67	1.35		mg/kg wet		81	36 - 120
Acenaphthylene	1.67	1.22		mg/kg wet		73	38 - 120
Anthracene	1.67	1.39		mg/kg wet		84	46 - 124
Benzo (a) anthracene	1.67	1.49		mg/kg wet		89	45 - 120
Benzo (a) pyrene	1.67	1.54		mg/kg wet		93	45 - 120
Benzo (b) fluoranthene	1.67	1.59		mg/kg wet		95	42 - 120
Benzo (g,h,i) perylene	1.67	1.30		mg/kg wet		78	38 - 120
Benzo (k) fluoranthene	1.67	1.31		mg/kg wet		79	42 - 120
Chrysene	1.67	1.41		mg/kg wet		85	43 - 120
Dibenz (a,h) anthracene	1.67	1.24		mg/kg wet		74	32 - 128
Fluoranthene	1.67	1.50		mg/kg wet		90	46 - 120
Fluorene	1.67	1.56		mg/kg wet		94	42 - 120
Indeno (1,2,3-cd) pyrene	1.67	1.23		mg/kg wet		74	41 - 121
Naphthalene	1.67	1.32		mg/kg wet		79	32 - 120
Phenanthrene	1.67	1.39		mg/kg wet		83	45 _ 120
Pyrene	1.67	1.51		mg/kg wet		90	43 - 120
1-Methylnaphthalene	1.67	0.987		mg/kg wet		59	32 - 120
2-Methylnaphthalene	1.67	1.27		mg/kg wet		76	28 - 120

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

Lab Sample ID: 11K3483-BS1 Matrix: Soil Analysis Batch: 11K3483

Client Sample ID: Lab Control Sample Prep Type: Total Prep Batch: 11K3483_P

Client Sample ID: Matrix Spike

Prep Type: Total

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Terphenyl-d14	92		18 - 120
2-Fluorobiphenyl	69		14 - 120
Nitrobenzene-d5	57		17 - 120

Lab Sample ID: 11K3483-MS1 Matrix: Soil

Prep Batch: 11K3483 P Analysis Batch: 11K3483 Sample Sample Spike Matrix Spike Matrix Spike %Rec. Added Limits Qualifier **Result Qualifier** Unit D %Rec Analyte Result ÷. Acenaphthene ND 1.70 1.25 mg/kg dry 73 19.120 ND 1.12 φ 25 - 120 1.70 66 Acenaphthylene mg/kg dry ö Anthracene ND 1.70 1.30 mg/kg dry 76 28 - 125 ND 1.37 ò 80 23 . 120 Benzo (a) anthracene 1.70 mg/kg dry 袋 Benzo (a) pyrene ND 1.70 1.35 mg/kg dry 79 15 - 128 ¢. ND 1.70 1 20 70 12 - 133 Benzo (b) fluoranthene mg/kg dry Ö ND 1.70 1.14 mg/kg dry 67 22 - 120 Benzo (g,h,i) pervlene ND 1.70 ø 78 28 - 120 1.33 Benzo (k) fluoranthene mg/kg dry ÷ 20 - 120 Chrysene ND 1.70 1.30 mg/kg dry 76 Q. 12 - 128 Dibenz (a,h) anthracene ND 1.70 1.12 mg/kg dry 66 30 78 10.143 Fluoranthene ND 1.70 1.33 mg/kg dry ζį. 20 - 120 Fluorene ND 1.70 1.37 mg/kg dry 81 ÷. 22 - 121 Indeno (1,2,3-cd) pyrene ND 1.70 1.12 mg/kg dry 66 ¢ 72 10 - 120 ND 1.70 1.22 mg/kg dry Naphthalene 衣 75 ND 1.28 21 . 122 Phenanthrene 1.70 mg/kg dry ND 1.70 1.41 mg/kg dry ÷. 83 20 - 123 Pyrene 10 - 120 1.70 ¢. ND 0.926 54 1-Methylnaphthalene mg/kg dry ND 1.70 Ċ. 68 13 - 120 2-Methylnaphthalene 1.15 mg/kg dry

	Matrix Spike	Matrix Spike	
Surrogate	%Recovery	Qualifier	Limits
Terphenyl-d14	84		18 - 120
2-Fluorobiphenyl	61		14 - 120
Nitrobenzene-d5	52		17 - 120

Lab Sample ID: 11K3483-MSD1 Matrix: Soil Analysis Batch: 11K3483

Client Sample ID: Matrix Spike Duplicate Prep Type: Total Prep Batch: 11K3483 P

rinary ore Batom rinteres											
and the second second	Sample	Sample	Spike	Aatrix Spike Dup	Matrix Spi	ke Duş			%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthene	ND		1.70	1.23		mg/kg dry	ō	72	19 - 120	2	50
Acenaphthylene	ND		1.70	1.11		mg/kg dry	ø	65	25 - 120	1	50
Anthracene	ND		1.70	1.33		mg/kg dry	\$	78	28 - 125	2	49
Benzo (a) anthracene	ND		1.70	1.45		mg/kg dry	¢	85	23 - 120	6	.50
Benzo (a) pyrene	ND		1.70	1.43		mg/kg dry	¢	84	15 - 128	6	50
Benzo (b) fluoranthene	ND		1.70	1.34		mg/kg dry	¢	79	12 - 133	12	50
Benzo (g,h,i) perylene	ND		1.70	1.11		mg/kg dry	¢	65	22 - 120	3	50
Benzo (k) fluoranthene	ND		1.70	1.25		mg/kg dry	ø	74	28 - 120	6	45
Chrysene	ND		1.70	1.30		mg/kg dry	¢	76	20 - 120	0.1	49
Dibenz (a,h) anthracene	ND		1.70	1.15		mg/kg dry	¢	68	12 - 128	3	50
Fluoranthene	ND		1.70	1.31		mg/kg dry	Ø	77	10 - 143	2	50

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

Lab Sample ID: 11K3483-MS Matrix: Soil	SD1					Clien	t Sar	nple ID:	Matrix Sp Pre	ike Dup p Type:	
Analysis Batch: 11K3483									Prep Batch		
	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spil	ke Duş			%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Fluorene	ND		1.70	1.37		mg/kg dry	Q	80	20 - 120	0.4	50
Indeno (1,2,3-cd) pyrene	ND		1.70	1.13		mg/kg dry	¢	66	22 - 121	0.6	50
Naphthalene	ND		1.70	1.23		mg/kg dry	¢	72	10 - 120	0.5	50
Phenanthrene	ND		1.70	1.32		mg/kg dry	\$	78	21 - 122	3	50
Pyrene	ND		1.70	1.41		mg/kg dry	\$	83	20 - 123	0.5	50
1-Methylnaphthalene	ND		1.70	0.938		mg/kg dry	¢	55	10 - 120	1	50
2-Methylnaphthalene	ND		1.70	1.15		mg/kg dry	¢	68	13 - 120	0.5	50
	Matrix Spike Dup	Matrix Spike	Dup								
Surrogate	%Recovery	Qualifier	Limits								
Terphenyl-d14	85		18 - 120								
2-Fluorobiphenyl	62		14 - 120								

Method: SW-846 - General Chemistry Parameters

Nitrobenzene-d5

53

Lab Sample ID: 11K4341-DUP1							Client Sample ID: Dup	
latrix: Soil					Prep Type	lotal		
Analysis Batch: 11K4341							Prep Batch: 11K4	341_P
and the second se	Sample	Sample	Duplicate	Duplicate				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
% Dry Solids	80.7		81.0		%		0.3	20

17 - 120

QC Association Summary

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

GCMS Volatiles

Analysis Batch: U020175

Method Blank Method Blank	Total	Soil	SW846 8260B	11K3683 P
Method Blank				TIN3003_F
	Total	Soil	SW846 8260B	11K3683_P
Lab Control Sample	Total	Soil	SW846 8260B	11K3683_P
Lab Control Sample Dup	Total	Soil	SW846 8260B	11K3683_P
Matrix Spike	Total	Soil	SW846 8260B	11K3683_P
Matrix Spike Duplicate	Total	Soil	SW846 8260B	11K3683_P
278 Birch	Total	Soil	SW846 8260B	11K3683_P
267 Birch	Total	Soil	SW846 8260B	11K3683_P
	Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate 278 Birch	Lab Control Sample DupTotalMatrix SpikeTotalMatrix Spike DuplicateTotal278 BirchTotal	Lab Control Sample DupTotalSoilMatrix SpikeTotalSoilMatrix Spike DuplicateTotalSoil278 BirchTotalSoil	Lab Control Sample DupTotalSoilSW846 8260BMatrix SpikeTotalSoilSW846 8260BMatrix Spike DuplicateTotalSoilSW846 8260B278 BirchTotalSoilSW846 8260B

Analysis Batch: U020677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K5924-BLK1	Method Blank	Total	Soil	SW846 8260B	11K5924_P
11K5924-BS1	Lab Control Sample	Total	Soil	SW846 8260B	11K5924_P
11K5924-BSD1	Lab Control Sample Dup	Total	Soil	SW846 8260B	11K5924_P
NUK1866-03 - RE1	1066 Gardenia	Total	Soil	SW846 8260B	11K5924_P

Prep Batch: 11K3683_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K3683-BLK1	Method Blank	Total	Soil	EPA 5035	
11K3683-BLK2	Method Blank	Total	Soil	EPA 5035	
11K3683-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11K3683-BSD1	Lab Control Sample Dup	Total	Soil	EPA 5035	
11K3683-MS1	Matrix Spike	Total	Soil	EPA 5035	
11K3683-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 5035	
NUK1866-01	278 Birch	Total	Soil	EPA 5035	
NUK1866-02	267 Birch	Total	Soil	EPA 5035	

Prep Batch: 11K5924_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K5924-BLK1	Method Blank	Total	Soil	EPA 5035	
11K5924-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11K5924-BSD1	Lab Control Sample Dup	Total	Soil	EPA 5035	
NUK1866-03 - RE1	1066 Gardenia	Total	Soil	EPA 5035	

GCMS Semivolatiles

Analysis Batch: 11K3483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K3483-BLK1	Method Blank	Total	Soil	SW846 8270D	11K3483_P
11K3483-BS1	Lab Control Sample	Total	Soil	SW846 8270D	11K3483_P
11K3483-MS1	Matrix Spike	Total	Soil	SW846 8270D	11K3483_P
11K3483-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8270D	11K3483_P
NUK1866-01	278 Birch	Total	Soil	SW846 8270D	11K3483_P
NUK1866-02	267 Birch	Total	Soil	SW846 8270D	11K3483_P
NUK1866-03	1066 Gardenia	Total	Soil	SW846 8270D	11K3483_P

Prep Batch: 11K3483_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K3483-BLK1	Method Blank	Total	Soil	EPA 3550B	
11K3483-BS1	Lab Control Sample	Total	Soil	EPA 3550B	
11K3483-MS1	Matrix Spike	Total	Soil	EPA 3550B	
11K3483-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 3550B	

QC Association Summary

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

GCMS Semivolatiles (Continued)

Prep Batch: 11K3483_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
NUK1866-01	278 Birch	Total	Soil	EPA 3550B	
NUK1866-02	267 Birch	Total	Soil	EPA 3550B	
NUK1866-03	1066 Gardenia	Total	Soil	EPA 3550B	

Extractions

Analysis Batch: 11K4341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K4341-DUP1	Duplicate	Total	Soil	SW-846	11K4341_P
NUK1866-01	278 Birch	Total	Soil	SW-846	11K4341_P
NUK1866-02	267 Birch	Total	Soil	SW-846	11K4341_P
NUK1866-03	1066 Gardenia	Total	Soil	SW-846	11K4341_P

Prep Batch: 11K4341_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K4341-DUP1	Duplicate	Total	Soil	% Solids	
NUK1866-01	278 Birch	Total	Soil	% Solids	
NUK1866-02	267 Birch	Total	Soil	% Solids	
NUK1866-03	1066 Gardenia	Total	Soil	% Solids	

Client Samp Date Collected Date Received:	: 11/08/11 14:4	15				La		D: NUK1866- Matrix: S ercent Solids: 75	oil
Ргер Туре	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab	
Total	Prep	EPA 5035		0.813	11K3683_P	11/08/11 14:45	TSP	TAL NSH	
Total	Analysis	SW846 8260B		1.00	U020175	11/15/11 16:03	ккк	TAL NSH	
Total	Prep	EPA 3550B		0.970	11K3483_P	11/16/11 09:03	JJR	TAL NSH	
Total	Analysis	SW846 8270D		1.00	11K3483	11/16/11 19:24	KJP	TAL NSH	
Total	Prep	% Solids		1.00	11K4341_P	11/17/11 10:55	RRS	TAL NSH	
Total	Analysis	SW-846		1.00	11K4341	11/18/11 10:53	RRS	TAL NSH	

Client Sample ID: 267 Birch

Date Collected: 11/09/11 14:00 Date Received: 11/12/11 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		1.01	11K3683_P	11/09/11 14:00	TSP	TAL NSH
Total	Analysis	SW846 8260B		1.00	U020175	11/15/11 16:34	ккк	TAL NSH
Total	Prep	EPA 3550B		0.990	11K3483_P	11/16/11 09:03	JJR	TAL NSH
Total	Analysis	SW846 8270D		1.00	11K3483	11/16/11 19:44	KJP	TAL NSH
Total	Prep	% Solids		1.00	11K4341_P	11/17/11 10:55	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11K4341	11/18/11 10:53	RRS	TAL NSH

Client Sample ID: 1066 Gardenia Date Collected: 11/10/11 15:30

Date Received: 11/12/11 08:30

Lab Sample ID: NUK1866-03

Lab Sample ID: NUK1866-02

Matrix: Soil Percent Solids: 86.2

Matrix: Soil

Percent Solids: 94.4

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	EPA 5035	RE1	0.852	11K5924_P	11/10/11 15:30	TSP	TAL NSH
Total	Analysis	SW846 8260B	RE1	1.00	U020677	11/23/11 13:22	ккк	TAL NSH
Total	Prep	EPA 3550B		0.996	11K3483_P	11/16/11 09:03	JJR	TAL NSH
Total	Analysis	SW846 8270D		1.00	11K3483	11/16/11 20:03	KJP	TAL NSH
Total	Prep	% Solids		1.00	11K4341_P	11/17/11 10:55	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11K4341	11/18/11 10:53	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]

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

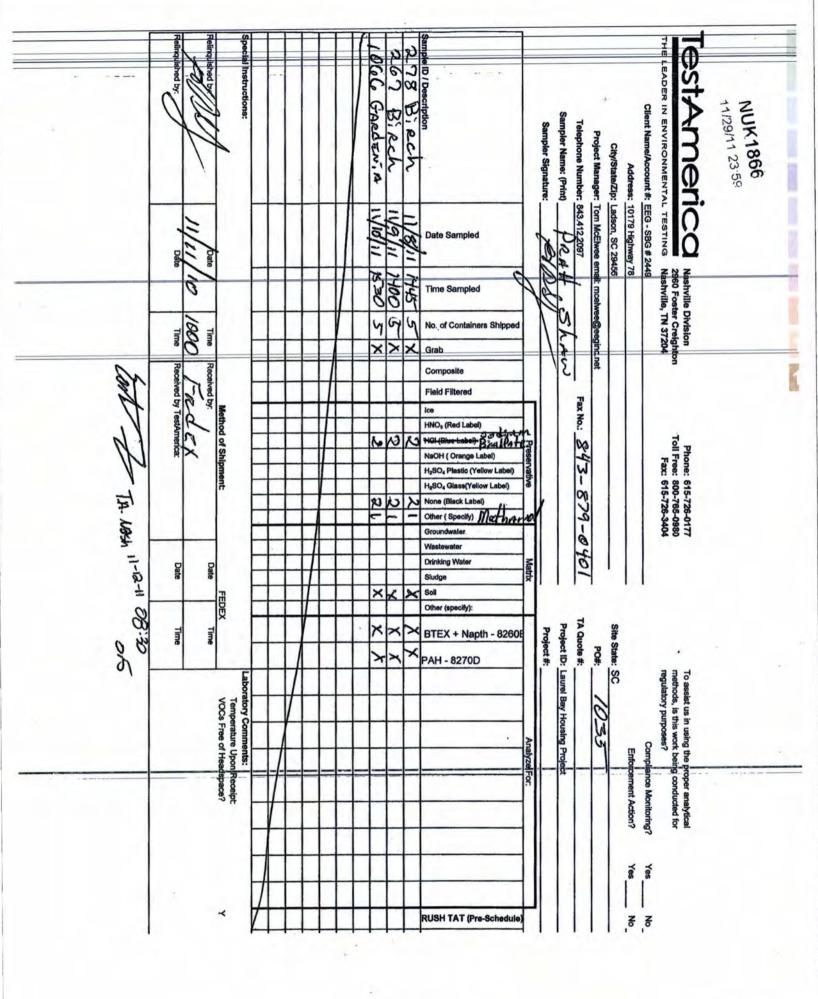
Certification Summary

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

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Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Nashville		ACIL		393
TestAmerica Nashville	A2LA	ISO/IEC 17025		0453.07
TestAmerica Nashville	A2LA	WY UST		453.07
TestAmerica Nashville	AIHA - LAP	IHLAP		100790
TestAmerica Nashville	Alabama	State Program	4	41150
TestAmerica Nashville	Alaska	Alaska UST	10	UST-087
TestAmerica Nashville	Arizona	State Program	9	AZ0473
festAmerica Nashville	Arkansas	State Program	6	88-0737
FestAmerica 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
FestAmerica Nashville	Florida	NELAC	4	E87358
FestAmerica Nashville	Illinois	NELAC	5	200010
FestAmerica Nashville	Iowa	State Program	7	131
FestAmerica Nashville	Kansas	NELAC	7	E-10229
FestAmerica 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
FestAmerica 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
FestAmerica Nashville	Utah	NELAC	8	TAN
FestAmerica Nashville	Virginia	NELAC Secondary AB	3	460152
TestAmerica Nashville	Virginia	State Program	3	00323
FestAmerica Nashville	Washington	State Program	10	C789
TestAmerica 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	EPA ID No. Ma	anifest Doc	No.	2. Page 1	The second			
T	3. Generator's Mailing Address: C MCAS, BEAUFORT	lifferent than m	ailing):		st Number	00316	5872		
	LAUREL BAY HOUSING BEAUFORT, SC 29907 4. Generator's Phone 843-228-6461						Generator's		
F	5. Transporter 1 Company Name	6. US EPA II	D Number		2.2.2		Takin's		Nata 1
	EEG, INC.					ransporter's I orter's Phone		379-041	11
T	7. Transporter 2 Company Name	8. US EPA II	O Number		Cost R	ransporter's I	(SWEERS)		a sub li
-		10 115 504	ID Number		F. Transp	orter's Phone	ALLEN DA	1.1.1	
	9. Designated Facility Name and Site Address HICKORY HILL LANDFILL	10. US EPA	ID Number		G. State F	acility ID	1	in int	1
	2621 LOW COUNTRY ROAD RIDGELAND, SC 29936					acility Phone	843-9	987-464	13
-	11. Description of Waste Materials		-	ntainers	13. Total	14. Unit	LN	lisc. Comme	ents
3	a. HEATING OIL TANKS FILLED WITH SAND		No.	Туре	Quantity	Wt./Vol.			
V				12050	- AW	A CONTRACT	ER	A DEC	1
2	WM Profile # 102655SC b.		141-1	1		Real Street	A COMPANY	1.1.1	12/3
>			-		Sa + Say	NICES!			-
-	C. WM Profile #				A TO VIC			to take	40125-75
	WM Profile #					and in the second			quere.
	d.	The state of the	The second		in all	Vite Nam	1 Miles	Igniev	14 - 1 24 - 1
H	WM Profile #		STREAM ST	101900	CANADAR STR	HACK-PERS	APRIL TAX	1000	
	J. Additional Descriptions for Materials Listed Above	A Start Marthan	K. Dispos	al Location		Nell-La I			
			Cell				Level	12276	1
-	15 Special Handling lotte stions and Additional Informat	tion	Grid		7.110	and I	120	I A.	- 11
	15. Special Handling Instructions and Additional Information 276 Birchs	221 Cypr	RSS	142	208	Dial	1 301	110	>7.
+	Purchase Order #	EMERGENCY CO	NTACT / PH	ONE NO	~ 10	DIREL	-		200
F	16. GENERATOR'S CERTIFICATE:	Lincherrer					10,5	Carlo I	100
	I hereby certify that the above-described materials are no accurately described, classified and packaged and are in p		A CONTRACTOR OF A CONTRACTOR OFTA CONTRACTOR O				ave been fu	lly and	
F	Printed Name	Signature "On beha			pireubic regu		Month	Day	Yea
+	17. Transporter 1 Acknowledgement of Receipt of Mater	ials		220		No. Martin	113	2	17
	Printed Name	Signature	01		No. S. M.		Month	Day	Yea
-	18. Transporter 2 Acknowledgement of Receipt of Mater	iale James	Bale	lu-		<u> </u>	11	4	13
-	Printed Name	Signature		1.1.1.1	The Land	-	Month	Day	Yea
		a here where a				Section 1	-		
	19. Certificate of Final Treatment/Disposal	1.0 100	- State		Sec. 7.		UST	an air	15.17
	I certify, on behalf of the above listed treatment facility, t applicable laws, regulations, permits and licenses on the		edge, the at	oove-descri	bed waste w	as managed i	n complian	ce with a	
T	20. Facility Owner or Operator: Certification of receipt o		overed by th	nis manifest	t. 300 S		B.S.	S. alter	1
1.60	Printed Name	Signature			A-		Month	Day	Yea

.

Appendix C Laboratory Analytical Report - Groundwater



Volatile Organic Compounds by GC/MS

Description: BEALB278TW02WG20150521

Laboratory ID: QE21004-021 Matrix: Aqueous

Date Sampled:05/21/2015 1225

Date Received: 05/22/2015 Run Prep Method Analytical Method **Dilution Analysis Date Analyst** Prep Date Batch 5030B 8260B 05/27/2015 1533 EH1 75865 1 1 CAS Analytical Parameter Result Q PQL MDL Units Run Number Method 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 4.7 J 5.0 0.32 ug/L 1 8260B ND 5.0 0.16 Toluene 108-88-3 ug/L 1 Xylenes (total) 1330-20-7 8260B ND 5.0 0.19 ug/L 1 Run 1 Acceptance Surrogate Q % Recovery Limits Bromofluorobenzene 104 75-120 1.2-Dichloroethane-d4 103 70-120 Toluene-d8 111 85-120 Dibromofluoromethane 102 85-115

 PQL = Practical quantitation limit
 B = Detected in the method blank
 E = Quantitation of compound exceeded the calibration range
 H = Out of holding time
 Q = Surrogate failure

 ND = Not detected at or above the MDL
 J = Estimated result < PQL and ≥ MDL</td>
 P = The RPD between two GC columns exceeds 40%
 N = Recovery is out of criteria
 L = LCS/LCSD failure

 Where applicable, all soil sample analysis ar reported on a dry weight basis unless flagged with a "W"
 S = MS/MSD failure

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

Level 1 Report v2.1

Semivolatile Organic Compounds by GC/MS (SIM)

Client: AECOM - Resolution Consultants

Description: BEALB278TW02WG20150521

Laboratory ID: QE21004-021

Date Sampled:05/21/2015 1225

Matrix: Aqueous

Date Received: 05/22/2015

Run Prep Method 1 3520C	Analytical Method Di 8270D (SIM)		z sis Date Analys 2015 0052 RBH		Date B 015 1543 75	atch 5778		
Parameter		CAS Number	Analytical Method	Result	Q PC	QL MDL	Units	Run
Benzo(a)anthracene		56-55-3	8270D (SIM)	ND	0.	20 0.019	ug/L	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		in 1 Accept covery Lim						
2-Methylnaphthalene-d10	Ę	58 15-	139					
Fluoranthene-d10	6	67 23-	154					

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

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

Level 1 Report v2.1

Appendix D Regulatory Correspondence



DHEC

PROMOTE PROTECT PROSPER Catherine B. Templeton, Director

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)

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DHEC

PROMOLE 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 ¹	518 Laurel Bay

2600 Bull Street * Columbia, SC23201 * Phone; (803) SDS 34.52 * www.sedhee.gow

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		

BOARD: Paul C. Aughtry, III Chairman

Edwin H. Cooper, III Vice Chairman

Steven G. Kisner Secretary



BOARD: Henry C. Scott M. David Mitchell, MD

Glenn A. McCall

Coleman F. Buckhouse, MD

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

14 August 2008

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

Re: MCAS – Laurel Bay Housing – 278 Beech Site ID # 04002 UST Closure Reports received 31 January 2008 No Further Action Beaufort County

Dear Mr. Broadfoot:

The Department has reviewed the referenced closure report. Based upon the geotechnical data in the referenced report, the soil samples are below risk based screening levels.

As the Department did not specifically request this data, and the work conducted at this site received no prior review by the Department, we cannot provide any comments on the completeness of the work performed or the overall environmental conditions of the site. Based on the information and analytical data submitted, there is no evidence to indicate that a violation of the Pollution Control Act has occurred. Consequently, no investigation will be required at this time. Please note, this statement pertains only to the data submitted 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 803-898-3553 (office phone), 803-898-2893 (fax) or bishopma@dhec.sc.gov.

Sincerely,

Michael Bishop, Hydrogeologist Groundwater Quality Section Bureau of Water

B. Thomas Knight, Manager 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 (pdf)



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,

LINT

Laurel Petrus RCRA Federal Facilities Section

Attachment: Specific Property Recommendations

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

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)

070 D' L D '	1100 D L L'A D
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	24-te
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	
453 Elderberry Drive	1414 Albatross Drive	
464 Dogwood Drive	1417 Albatross Drive	
466 Dogwood Drive	1421 Albatross Drive	
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