SUMMARY REPORT 141 ASH STREET (FORMERLY 314 ASH STREET) LAUREL BAY MILITARY HOUSING AREA MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SC

> Revision: 0 Prepared for:

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

and



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

JUNE 2021

SUMMARY REPORT 141 ASH STREET (FORMERLY 314 ASH STREET) LAUREL BAY MILITARY HOUSING AREA MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SC

> Revision: 0 Prepared for:

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

and



Naval Facilities Engineering Command Atlantic

9324 Virginia Avenue Norfolk, Virginia 23511-3095

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 141 Ash Street (Formerly 314 Ash Street) Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort June 2021

Table of Contents

1.0	INTRODUCTION	. 1
1.1 1.2	BACKGROUND INFORMATION UST REMOVAL AND ASSESSMENT PROCESS	.1
2.0	SAMPLING ACTIVITIES AND RESULTS	. 3
2.1		
2.2	SOIL ANALYTICAL RESULTS	
2.3	GROUNDWATER SAMPLING	
2.4	GROUNDWATER ANALYTICAL RESULTS	.5
3.0	PROPERTY STATUS	. 5
4.0	REFERENCES	. 5

Tables

Table 1	Laboratory Analytical Results - Soil
Table 2	Laboratory Analytical Results - Groundwater

Appendices

- Appendix A Multi-Media Selection Process for LBMH
- Appendix B UST Assessment Report
- Appendix C Laboratory Analytical Report Groundwater
- Appendix D Regulatory Correspondence



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 141 Ash Street (Formerly 314 Ash Street). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

1.1 Background Information

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



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

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

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

1.2 UST Removal and Assessment Process

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

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

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



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

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

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 141 Ash Street (Formerly 314 Ash Street). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 314 Ash Street* (MCAS Beaufort, 2012). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Initial Groundwater Investigation Report – May and June 2015* (Resolution Consultants, 2015). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C.

2.1 UST Removal and Soil Sampling

On October 24, 2011, two 280 gallon heating oil USTs were removed at 141 Ash Street (Formerly 314 Ash Street). Tank 1 was removed from the front landscaped bed area adjacent to the driveway. Tank 2 was removed from underneath the edge of the front concrete walkway and front landscaped bed area adjacent to the driveway. The former UST locations are



indicated in Figures 2 and 3 of the UST Assessment Report (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 Report (Appendix B), the depths to the bases of the USTs were 6'0" (Tank 1) and 4'0" (Tank 2) bgs and a single soil sample was collected for each at that depth. 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 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 the former UST locations (Tanks 1 and 2) at 141 Ash Street (Formerly 314 Ash Street) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated May 15, 2014, SCDHEC requested an IGWA be conducted at the former UST locations (Tanks 1 and 2) at 141 Ash Street) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

2.3 Groundwater Sampling

On May 21, 2015, a temporary monitoring well was installed at 141 Ash Street (Formerly 314 Ash Street), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil USTs (i.e., in between Tanks 1



and 2 due to small spacing). The former UST locations are indicated in Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – May and June 2015* (Resolution Consultants, 2015).

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

2.4 Groundwater Analytical Results

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

The groundwater results collected from 141 Ash Street (Formerly 314 Ash Street) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated that the groundwater was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

3.0 **PROPERTY STATUS**

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 141 Ash Street (Formerly 314 Ash Street). This NFA determination was obtained in a letter dated February 22, 2016. SCDHEC's NFA letter is provided in Appendix D.

4.0 **REFERENCES**

- Marine Corps Air Station Beaufort, 2012. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 314 Ash Street, Laurel Bay Military Housing Area*, February 2012.
- Resolution Consultants, 2012. 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 141 Ash Street (Formerly 314 Ash Street) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Results Samples Collected 10/24/11		
		314 Ash-1	314 Ash-2	
Volatile Organic Compounds Analyzed	l by EPA Method 8260B (mg/kg)			
Benzene	0.003	0.00705	0.00192	
Ethylbenzene	1.15	0.426	0.0976	
Naphthalene	0.036	2.92	3.33	
Toluene	0.627	0.0127	0.00207	
Xylenes, Total	13.01	1.30	0.0464	
Semivolatile Organic Compounds Ana	lyzed by EPA Method 8270D (mg/kg)			
Benzo(a)anthracene	0.66	1.10	0.110	
Benzo(b)fluoranthene	0.66	0.488	0.0585	
Benzo(k)fluoranthene	0.66	0.649	0.0459	
Chrysene	0.66	1.05	0.111	
Dibenz(a,h)anthracene	0.66	ND	ND	

Notes:

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

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 - Groundwater141 Ash Street (Formerly 314 Ash Street)Laurel Bay Military Housing AreaMarine Corps Air Station BeaufortBeaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾ SCDHEC RBSLs ⁽¹⁾ SCDHEC RBSLs ⁽¹⁾ SCDHEC RBSLs ⁽²⁾		Results Sample Collected 05/22/15
Volatile Organic Compounds Analyzed	by EPA Method 8260B (µg	/L)	
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	ND
Naphthalene	25	29.33	ND
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	ND
Semivolatile Organic Compounds Ana	lyzed by EPA Method 8270	D (µg/L)	
Benzo(a)anthracene	10	NA	ND
Benzo(b)fluoranthene	10	NA	ND
Benzo(k)fluoranthene	10	NA	ND
Chrysene	10	NA	ND
Dibenz(a,h)anthracene	10	NA	ND

Notes:

⁽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 1×10^{-6} , a target hazard quotient of 1 (per target organ), and a default residential exposure scenario, assuming exposure for 24 hours/day, 350 days/year, for 26 years. Modeling was performed for a range of depths to groundwater for application as appropriate in different areas of the Laurel Bay Military Housing Area. The most conservative levels are presented for comparison. Refer to Appendix H of the Uniform Federal Policy Sampling Analysis and Sampling Plan for Vapor Media, Revision 4 (Resolution Consultants, April 2017) for additional information.

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - Not Applicable

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

RBSL - Risk-Based Screening Level

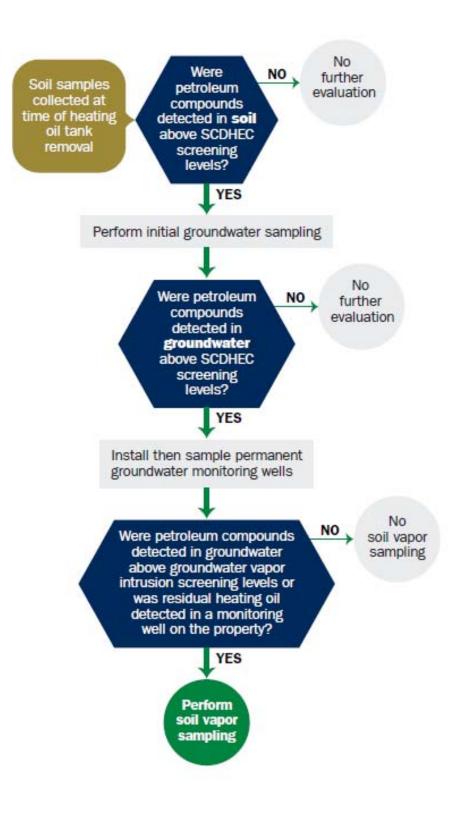
SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

Appendix A Multi-Media Selection Process for LBMH





Appendix A - Multi-Media Selection Process for LBMH

Appendix B UST Assessment Report



Attachment 1

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

				1.11.5
Date Recei	ved			
		2 3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	Sta	te Use Onl	v	and the second
		CONTR.	<u>,</u>	

Г

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

I. OWNERSHIP OF UST (S)

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

II. SITE IDENTIFICATION AND LOCATION

Permit I.D. # Laurel Bay Milita Facility Name or Company	<u> </u>	Corps Air Station	, Beaufort, SC				
	314 Ash Street, Laurel Bay Military Housing Area Street Address or State Road (as applicable)						
Beaufort, City	Beaufort County						

Attachment 2

III. INSURANCE INFORMATION

Insurance Statement

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

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

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

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

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

IV. REQUEST FOR SUPERB FUNDING

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

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

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

Name (Type or print.)

Signature

To be completed by Notary Public:

Sworn before me this _____ day of _____, 20____

(Name)

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

VI. **UST INFORMATION**

		314Ash-1	314Ash-2
A.	Product(ex. Gas, Kerosene)	Heating oil	Heating oil
B.	Capacity(ex. 1k, 2k)	280 gal	280 gal
C.	Age	Late 1950s	Late 1950s
D.	Construction Material(ex. Steel, FRP)	Steel	Steel
E٠	Month/Year of Last Use	Mid 80s	Mid 80s
F.	Depth (ft.) To Base of Tank	6'	4 '
G.	Spill Prevention Equipment Y/N	No	No
11		No	No
Η·	Method of Closure Removed/Filled	Removed	Removed
I. 1	Date Tanks Removed/Filled	10/24/11	10/24/11
ч. К.	Visible Corrosion or Pitting Y/N	Yes	Yes
ĸ. L.	Visible Holes Y/N	Yes	Yes

M. Method of disposal for any USTs removed from the ground (attach disposal manifests) UST 314Ash-1 was removed from the ground, cleaned and recycled. UST 314Ash-2 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) Contaminated water was pumped from UST 314Ash-1 and disposed by MCAS. UST 314Ash-2 was previously filled with sand by others.

If any corrosion, pitting, or holes were observed, describe the location and extent for each UST О. Corrosion, pitting and holes were found in both tanks.

VII. PIPING INFORMATION

			<u> </u>			
		314Ash-1	314Ash-2			
		Steel	Steel			
4.	Construction Material(ex. Steel, FRP)	& Copper	& Copper			
3.	Distance from UST to Dispenser	N/A	N/A			
С.	Number of Dispensers	N/A	N/A			
D.	Type of System Pressure or Suction	Suction	Suction			
Е.	Was Piping Removed from the Ground? Y/N	No	No			
F.	Visible Corrosion or Pitting Y/N	Yes	Yes			
G.	Visible Holes Y/N	No	No			
H.	Age	Late 1950s	Late 1950s			
•	If any corrosion, pitting, or holes were observed, dea	scribe the location	n and extent for each	piping run.		
	Steel vent piping for both tanks were corroded and pitted. All					

copper supply and return piping were sound.

VIII. BRIEF SITE DESCRIPTION AND HISTORY

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

IX. SITE CONDITIONS

	Yes	No	Unk
 A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells? If yes, indicate depth and location on the site map. 		Х	
If yes, indicate departand rocation on the site map.			
B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells? *Tank-1 excavation had r tank-2 had strong odor.		or;	
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?		x	
If yes, indicate location and thickness.			

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009

В.

Sample #		Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
314Ash-1	Excav at fill end	Soil	Sandy	6'	10/24/11 1145 hrs	P. Shaw	
314Ash-2	Excav at		Sandy	4'	10/24/11 1445 hrs	P. Shaw	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

* = Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

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

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

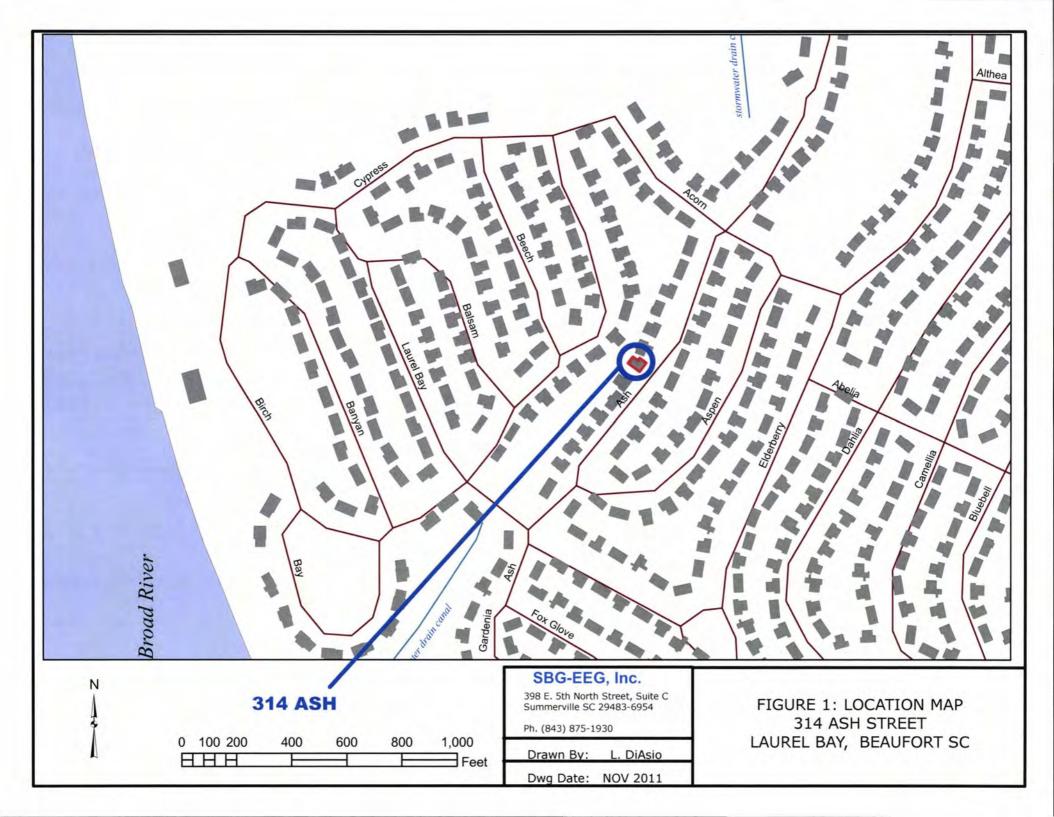
XII. RECEPTORS

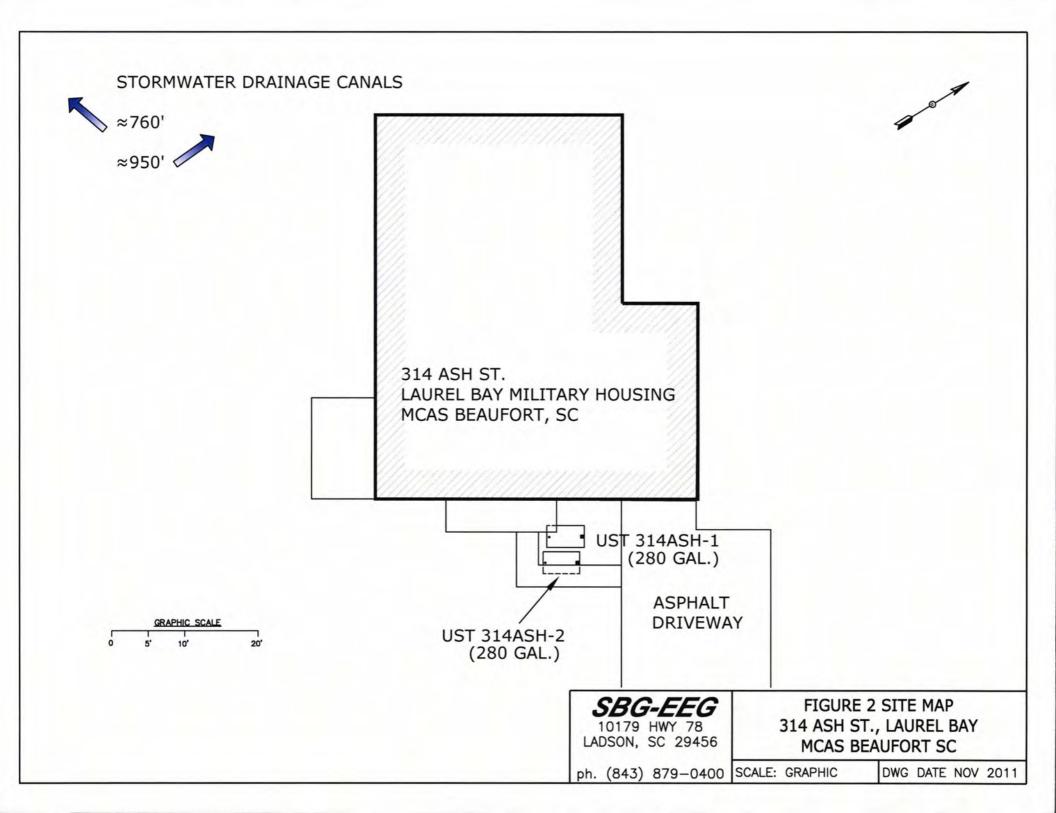
r		Yes	No
Α.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?	*X	
	*stormwater canals at ~760	· & '	950'
	If yes, indicate type of receptor, distance, and direction on site map.		
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		Х
	If yes, indicate type of well, distance, and direction on site map.		
C.	Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?		х
	If yes, indicate type of structure, distance, and direction on site map.		
D.	Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the	*X	
	contamination? *Sewer, water, el	ectri	city,
	cable & fiber opt If yes, indicate the type of utility, distance, and direction on the site map.	ic	
Е.	Has contaminated soil been identified at a depth less than 3 feet		x
	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.		

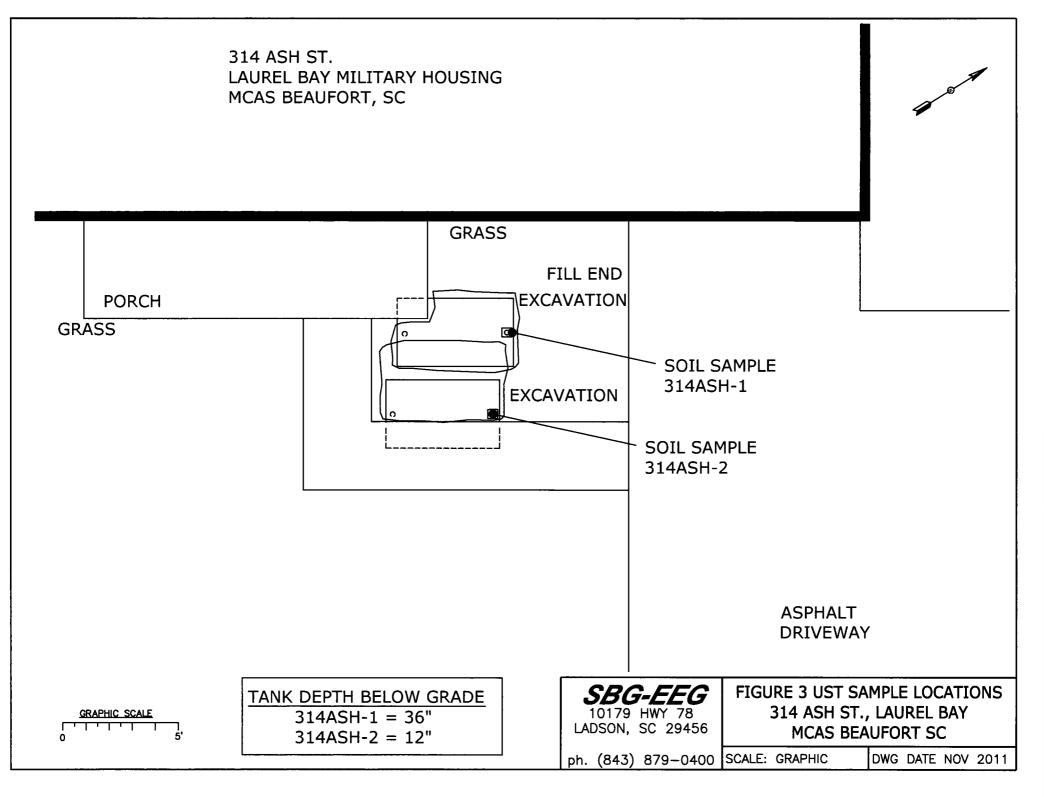
XIII. SITE MAP

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 tanks at 314 Ash Street.



Picture 2: Excavation of UST 314Ash-1.



Picture 3: UST 314 Ash-2 excavation.



Picture 4: Tanks being prepared for transport.

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> </u>
CoC UST			314Ash-2			
Benzene 0.00705 mg/k		ng/kg	0.0019	92 mg/kg		
Toluene	0.0127 mg	0.0127 mg/kg		0.00207 mg/kg		
Ethylbenzene	0.426 mg/	kg	0.0976 mg/kg			
Xylenes	1.30 mg/k	g	0.0464 mg/kg			
Naphthalene	2.92 mg/k	g	3.33 r	mg/kg		
Benzo (a) anthracene	1.10 mg/k	ra	0.110	mg/kg		
Benzo (b) fluoranthene	0.488 mg/	kg	0.0585 mg/kg			
Benzo (k) fluoranthene	0.649 mg/	kg	0.045	9 mg/kg		
Chrysene	1.05 mg/k	a	0.111 mg/kg			
Dibenz (a, h) anthracene		ND		ND		
ТРН (ЕРА 3550)	PH (EPA 3550)					
·····						
CoC						
Benzene						
Toluene						
Ethylbenzene						
Xylenes						
Naphthalene						
Benzo (a) anthracene						-
Benzo (b) fluoranthene						
Benzo (k) fluoranthene						
Chrysene						
Dibenz (a, h) anthracene						
TPH (EPA 3550)						

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

CoC	RBSL (µg/l)	W -1	W-2	W -3	W -4
Free Product Thickness	None				
Benzene	5				
Toluene	1,000				
Ethylbenzene	700				
Xylenes	10,000				
Total BTEX	N/A				
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: NUJ3850

Client Project/Site: [none] Client Project Description: Laurel Bay Housing Project

For:

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

Attn: Tom McElwee

Roxanne L. Connor

Authorized for release by: 11/9/2011 2:06:15 PM Roxanne Connor Program Manager - Conventional Accounts roxanne.connor@testamericainc.com

Designee for

..... LINKS

Review your project results through

Total Access

Have a Question?

www.testamericainc.com

Visit us at:

Ask The

Expert

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

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

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

Table of Contents

0
6
8
9
0
1

Sample Summary

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
NUJ3850-01	314 Ash-1	Soil	10/24/11 11:45	10/29/11 08:20
NUJ3850-02	314 Ash-2	Soil	10/24/11 14:45	10/29/11 08:20
NUJ3850-03	229 Cypress	Soil	10/26/11 12:00	10/29/11 08:20

Definitions/Glossary

ľ

jø,

Qualifiers

GCMS Volatiles

Qualifier	Qualifier Description	
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.	
M8	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).	
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.	
RL1	Reporting limit raised due to sample matrix effects.	

GCMS Semivolatiles

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

Glossary

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

TestAmerica Job ID: NUJ3850

Client Sample ID: 314 Ash-1 Date Collected: 10/24/11 11:45 Date Received: 10/29/11 08:20

Lab Sample ID: NUJ3850-01 Matrix: Soil

Percent Solids: 79.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00705		0.00225	0.00124	mg/kg dry	\$	10/24/11 11:45	11/05/11 02:40	1.00
Toluene	0.0127		0.00225	0.00124	mg/kg dry	\$	10/24/11 11:45	11/05/11 02:40	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	119		70 - 130				10/24/11 11:45	11/05/11 02:40	1.00
Dibromofluoromethane	113		70 - 130				10/24/11 11:45	11/05/11 02:40	1.00
Toluene-d8	219	ZX	70 - 130				10/24/11 11:45	11/05/11 02:40	1.00
4-Bromofluorobenzene	430	ZX	70 - 130				10/24/11 11:45	11/05/11 02:40	1.00

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.426		0.116	0.0636	mg/kg dry	ţ.	10/24/11 11:45	11/07/11 12:42	50.0
Naphthalene	2.92		0.289	0.145	mg/kg dry	¢£	10/24/11 11:45	11/07/11 12:42	50.0
Xylenes, total	1.30		0.289	0.145	mg/kg dry	¢	10/24/11 11:45	11/07/11 12:42	50.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	102		70 - 130				10/24/11 11:45	11/07/11 12:42	50.0
Dibromofluoromethane	100		70 - 130				10/24/11 11:45	11/07/11 12:42	50.0
Toluene-d8	100		70 - 130				10/24/11 11:45	11/07/11 12:42	50.0
4-Bromofluorobenzene	114		70 - 130				10/24/11 11:45	11/07/11 12:42	50.0

Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	2.12		0.831	0.422	mg/kg dry	Ø	11/04/11 08:50	11/06/11 05:33	10.0
Acenaphthylene	ND		0.831	0.422	mg/kg dry	\$	11/04/11 08:50	11/06/11 05:33	10.0
Anthracene	1.07		0.831	0.422	mg/kg dry	\$	11/04/11 08:50	11/06/11 05:33	10.0
Benzo (a) anthracene	1.10		0.831	0.422	mg/kg dry	\$	11/04/11 08:50	11/06/11 05:33	10.0
Benzo (a) pyrene	0.546	J	0.831	0.422	mg/kg dry	\$	11/04/11 08:50	11/06/11 05:33	10.0
Benzo (b) fluoranthene	0.488	J	0.831	0.422	mg/kg dry	\$	11/04/11 08:50	11/06/11 05:33	10.0
Benzo (g,h,i) perylene	ND		0.831	0.422	mg/kg dry	\$	11/04/11 08:50	11/06/11 05:33	10.0
Benzo (k) fluoranthene	0.649	J	0.831	0.422	mg/kg dry	\$	11/04/11 08:50	11/06/11 05:33	10.0
Chrysene	1.05		0.831	0.422	mg/kg dry	¢	11/04/11 08:50	11/06/11 05:33	10.0
Dibenz (a,h) anthracene	ND		0.831	0.422	mg/kg dry	\$	11/04/11 08:50	11/06/11 05:33	10.0
Fluoranthene	3.26		0.831	0.422	mg/kg dry	\$	11/04/11 08:50	11/06/11 05:33	10.0
Fluorene	5.56		0.831	0.422	mg/kg dry	¢	11/04/11 08:50	11/06/11 05:33	10.0
Indeno (1,2,3-cd) pyrene	ND		0.831	0.422	mg/kg dry	\$	11/04/11 08:50	11/06/11 05:33	10.0
Naphthalene	4.24		0.831	0.422	mg/kg dry	¢.	11/04/11 08:50	11/06/11 05:33	10.0
Phenanthrene	10.1		0.831	0.422	mg/kg dry	\$	11/04/11 08:50	11/06/11 05:33	10.0
Pyrene	2.90		0.831	0.422	mg/kg dry	\$2	11/04/11 08:50	11/06/11 05:33	10.0
1-Methylnaphthalene	19.0		0.831	0.422	mg/kg dry	¢	11/04/11 08:50	11/06/11 05:33	10.0
2-Methylnaphthalene	37.6		0.831	0.422	mg/kg dry	¢	11/04/11 08:50	11/06/11 05:33	10.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	117		18-120				11/04/11 08:50	11/06/11 05:33	10.0
2-Fluorobiphenyl	98		14 - 120				11/04/11 08:50	11/06/11 05:33	10.0
Nitrobenzene-d5	46		17 - 120				11/04/11 08:50	11/06/11 05:33	10.0
Method: SW-846 - General C	hemistry Paramete	ers							
Analyte	and the second sec	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	79.4	_	0.500	0.500	%		11/07/11 13:04	11/08/11 11:04	1.00

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

TestAmerica Job ID: NUJ3850

Client Sample ID: 314 Ash-2 Date Collected: 10/24/11 14:45

Lab Sample ID: NUJ3850-02 Matrix: Soil

Percent Solids: 81.3

Date Received: 10/29/11 08:20

Mathad, CM/04C 02COD Valatile Organia	Compounds by EDA Method 9260D
Method: SW846 8260B - Volatile Organic	Compounds by EFA Method 02000

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00192	J	0.00232	0.00128	mg/kg dry	ō	10/24/11 14:45	11/05/11 03:09	1.00
Ethylbenzene	0.0976		0.00232	0.00128	mg/kg dry	0	10/24/11 14:45	11/05/11 03:09	1.00
Toluene	0.00207	J	0.00232	0.00128	mg/kg dry	Ø	10/24/11 14:45	11/05/11 03:09	1.00
Xylenes, total	0.0464		0.00580	0.00290	mg/kg dry	ø	10/24/11 14:45	11/05/11 03:09	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	110	100	70 - 130				10/24/11 14:45	11/05/11 03:09	1.00
Dibromofluoromethane	101		70 - 130				10/24/11 14:45	11/05/11 03:09	1.00
Toluene-d8	108		70 - 130				10/24/11 14:45	11/05/11 03:09	1.00
4-Bromofluorobenzene	84		70 - 130				10/24/11 14:45	11/05/11 03:09	1.00

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B - RE1

Analyte Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene 3.33		0.290	0.145	mg/kg dry	ġ	10/24/11 14:45	11/07/11 13:11	50.0
Surrogate %Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 100	1	70 - 130				10/24/11 14:45	11/07/11 13:11	50.0
Dibromofluoromethane 97		70 - 130				10/24/11 14:45	11/07/11 13:11	50.0
Toluene-d8 98		70 - 130				10/24/11 14:45	11/07/11 13:11	50.0
4-Bromofluorobenzene 109		70 - 130				10/24/11 14:45	11/07/11 13:11	50.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.424	_	0.0817	0.0415	mg/kg dry	Ø	11/04/11 08:50	11/04/11 19:59	1.00
Acenaphthylene	ND		0.0817	0.0415	mg/kg dry	¢	11/04/11 08:50	11/04/11 19:59	1.00
Anthracene	0.220		0.0817	0.0415	mg/kg dry	Ŷ	11/04/11 08:50	11/04/11 19:59	1.00
Benzo (a) anthracene	0.110		0.0817	0.0415	mg/kg dry	\$	11/04/11 08:50	11/04/11 19:59	1.00
Benzo (a) pyrene	0.0484	J	0.0817	0.0415	mg/kg dry	Ø	11/04/11 08:50	11/04/11 19:59	1.00
Benzo (b) fluoranthene	0.0585	J	0.0817	0.0415	mg/kg dry	\$	11/04/11 08:50	11/04/11 19:59	1.00
Benzo (g,h,i) perylene	ND		0.0817	0.0415	mg/kg dry	ø	11/04/11 08:50	11/04/11 19:59	1.00
Benzo (k) fluoranthene	0.0459	J	0.0817	0.0415	mg/kg dry	ø	11/04/11 08:50	11/04/11 19:59	1.00
Chrysene	0.111		0.0817	0.0415	mg/kg dry	ø	11/04/11 08:50	11/04/11 19:59	1.00
Dibenz (a,h) anthracene	ND		0.0817	0.0415	mg/kg dry	0	11/04/11 08:50	11/04/11 19:59	1.00
Fluoranthene	0.243		0.0817	0.0415	mg/kg dry	Ð	11/04/11 08:50	11/04/11 19:59	1.00
Fluorene	1.27		0.0817	0.0415	mg/kg dry	÷Ģ.	11/04/11 08:50	11/04/11 19:59	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0817	0.0415	mg/kg dry	0	11/04/11 08:50	11/04/11 19:59	1.00
Naphthalene	1.07		0.0817	0.0415	mg/kg dry	ø	11/04/11 08:50	11/04/11 19:59	1.00
Phenanthrene	2.79		0.0817	0.0415	mg/kg dry	Ð	11/04/11 08:50	11/04/11 19:59	1.00
Pyrene	0.395		0.0817	0.0415	mg/kg dry	-02	11/04/11 08:50	11/04/11 19:59	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	80		18 - 120				11/04/11 08:50	11/04/11 19:59	1.00
2-Fluorobiphenyl	57		14 - 120				11/04/11 08:50	11/04/11 19:59	1.00

Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D - RE1

Nitrobenzene-d5

69

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	5.28		0.409	0.207	mg/kg dry	Ø	11/04/11 08:50	11/06/11 04:46	5.00
2-Methylnaphthalene	9.12		0.409	0.207	mg/kg dry	Ф	11/04/11 08:50	11/06/11 04:46	5.00

17-120

11/04/11 19:59

1.00

11/04/11 08:50

Client: EEG - Small Business Group, Inc. (2449) Project/Site: [none] TestAmerica Job ID: NUJ3850

Client Sample ID: 314 Ash-2

Date Collected: 10/24/11 14:45 Date Received: 10/29/11 08:20

Lab Sample ID: NUJ3850-02 Matrix: Soil Percent Solids: 81.3

Method: SW-846 - General C	hemistry Paramete	rs							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	81.3		0.500	0.500	%		11/07/11 13:04	11/08/11 11:04	1.00

TestAmerica Job ID: NUJ3850

Client Sample ID: 229 Cypress
Date Collected: 10/26/11 12:00

Date Received: 10/29/11 08:20

Lab Sample ID: NUJ3850-03 Matrix: Soil

Percent Solids: 77.2

Method: SW846 8260B - Volatile Org Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.110		0.00226		mg/kg dry	- 0	10/26/11 12:00	11/05/11 03:39	1.00
Surragata	W Basawani	Qualifiar	Limite				Proposed	Anabiand	
Surrogate	%Recovery 130	Quaimer	Limits 70 - 130				Prepared 10/26/11 12:00	Analyzed	Dil Fac
1,2-Dichloroethane-d4	130							11/05/11 03:39	
Dibromofluoromethane		zx	70 - 130				10/26/11 12:00	11/05/11 03:39	1.00
Toluene-d8	1480		70 - 130				10/26/11 12:00	11/05/11 03:39	1.00
4-Bromofluorobenzene	458	ZX	70 - 130				10/26/11 12:00	11/05/11 03:39	1.00
Method: SW846 8260B - Volatile Org	anic Comp	ounds by E	PA Method 82	60B - RE					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	12.3		0.124	0.0684	mg/kg dry	Q.	10/26/11 12:00	11/07/11 13:41	50.0
Foluene	0.0864	J RL1	0.124	0.0684	mg/kg dry	\$	10/26/11 12:00	11/07/11 13:41	50.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	98		70 - 130				10/26/11 12:00	11/07/11 13:41	50.0
Dibromofluoromethane	99		70 - 130				10/26/11 12:00	11/07/11 13:41	50.0
Toluene-d8	113		70 - 130				10/26/11 12:00	11/07/11 13:41	50.0
4-Bromofluorobenzene	107		70 - 130				10/26/11 12:00	11/07/11 13:41	50.0
Method: SW846 8260B - Volatile Org	anic Comn	ounds by F	PA Method 82	60B - RE	,				
Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	39.5		3.11	1.55	mg/kg dry	- 0	10/26/11 12:00	11/07/11 14:11	500
Xylenes, total	58.6		3.11	1.55	mg/kg dry	ø	10/26/11 12:00	11/07/11 14:11	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	96		70 - 130				10/26/11 12:00	11/07/11 14:11	500
Dibromofluoromethane	96		70 - 130				10/26/11 12:00	11/07/11 14:11	500
Toluene-d8	99		70 - 130				10/26/11 12:00	11/07/11 14:11	500
4-Bromofluorobenzene	95		70 - 130				10/26/11 12:00	11/07/11 14:11	500
Method: SW846 8270D - Polyaromat	ic Hydroca	rhons by Fl	PA 8270D						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.749	7	0.0863	0.0438	mg/kg dry		11/04/11 08:50	11/04/11 20:22	1.00
Acenaphthylene	ND		0.0863	0.0438	mg/kg dry	\$	11/04/11 08:50	11/04/11 20:22	1.00
Anthracene	0.331		0.0863	0.0438	mg/kg dry	ø	11/04/11 08:50	11/04/11 20:22	1.00
Benzo (a) anthracene	ND		0.0863	0.0438	mg/kg dry	ø	11/04/11 08:50	11/04/11 20:22	1.00
Benzo (a) pyrene	ND		0.0863	0.0438	mg/kg dry	ø	11/04/11 08:50	11/04/11 20:22	1.00
Benzo (b) fluoranthene	ND		0.0863	0.0438	mg/kg dry	ø	11/04/11 08:50	11/04/11 20:22	1.00
Benzo (g,h,i) perylene	ND		0.0863	0.0438	mg/kg dry	ø	11/04/11 08:50	11/04/11 20:22	1.00
Benzo (k) fluoranthene	ND		0.0863		mg/kg dry	ø	11/04/11 08:50	11/04/11 20:22	1.00
Chrysene	ND		0.0863	0.0438	mg/kg dry	ф	11/04/11 08:50	11/04/11 20:22	1.00
Dibenz (a,h) anthracene	ND		0.0863	0.0438	mg/kg dry	0	11/04/11 08:50	11/04/11 20:22	1.00
Fluoranthene	0.0773	J	0.0863	0.0438	mg/kg dry	\$	11/04/11 08:50	11/04/11 20:22	1.00
Fluorene	1.86		0.0863		mg/kg dry	ø	11/04/11 08:50	11/04/11 20:22	1.00
ndeno (1,2,3-cd) pyrene	ND		0.0863	0.0438	mg/kg dry	ø	11/04/11 08:50	11/04/11 20:22	1.00
Naphthalene	2.68		0.0863	0.0438	mg/kg dry	ø	11/04/11 08:50	11/04/11 20:22	1.00
Phenanthrene	3.07		0.0863	0.0438	mg/kg dry	¢	11/04/11 08:50	11/04/11 20:22	1.00
Pyrene	0.332		0.0863	0.0438	mg/kg dry	ø	11/04/11 08:50	11/04/11 20:22	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	85		18 - 120				11/04/11 08:50	11/04/11 20:22	1.00

Client: EEG - Small Business Group, Inc. (2449) Project/Site: [none] TestAmerica Job ID: NUJ3850

Client Sample ID: 229 Cypress

Date Collected: 10/26/11 12:00 Date Received: 10/29/11 08:20

Lab Sample ID: NUJ3850-03 Matrix: Soil

Percent Solids: 77.2

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
Nitrobenzene-d5	76		17 - 120				11/04/11 08:50	11/04/11 20:22	1.0
Method: SW846 8270D - Polyar	omatic Hydroca	rbons by Ef	PA 8270D - RE1						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1-Methylnaphthalene	8.96		0.432	0.219	mg/kg dry	~	11/04/11 08:50	11/06/11 05:09	5.00
					1	-			
2-MethyInaphthalene	15.0		0.432	0.219	mg/kg dry	\$	11/04/11 08:50	11/06/11 05:09	5.00
	and the second	rs	0.432	0.219	mg/kg dry	\$	11/04/11 08:50	11/06/11 05:09	5.00
2-Methylnaphthalene Method: SW-846 - General Che Analyte	mistry Paramete	ualifier	0.432 RL		mg/kg dry Unit	D	11/04/11 08:50 Prepared	11/06/11 05:09 Analyzed	5.00 Dil Fac

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

Lab Sample ID: 11J7344-BLK1							Client Sa	mple ID: Metho	
Matrix: Soil								Prep Typ	
Analysis Batch: U019634	Blank	Blank						Prep Batch: 11.	1/344_P
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		10/31/11 13:27	11/04/11 20:41	1.00
Ethylbenzene	ND		0.00200	0.00110	mg/kg wet		10/31/11 13:27	11/04/11 20:41	1.00
Naphthalene	ND		0.00500	0.00250	mg/kg wet		10/31/11 13:27	11/04/11 20:41	1.00
Toluene	ND		0.00200	0.00110	mg/kg wet		10/31/11 13:27	11/04/11 20:41	1.00
Xylenes, total	ND		0.00500	0.00250	mg/kg wet		10/31/11 13:27	11/04/11 20:41	1.00
	Blank	Blank							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	118		70 - 130				10/31/11 13:27	11/04/11 20:41	1.00
Dibromofluoromethane	107		70 - 130				10/31/11 13:27	11/04/11 20:41	1.00
Toluene-d8	99		70 - 130				10/31/11 13:27	11/04/11 20:41	1.00
4-Bromofluorobenzene	96		70 - 130				10/31/11 13:27	11/04/11 20:41	1.00

Lab Sample ID: 11J7344-BS1 Matrix: Soil Analysis Batch: U019634

Client Sample ID: Lab Control Sample Prep Type: Total

Prep Batch: 11J7344_P

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	50.0	50.0	-	ug/kg		100	75 - 127	
Ethylbenzene	50.0	48.7		ug/kg		97	80 - 134	
Naphthalene	50.0	40.3		ug/kg		81	69 - 150	
Toluene	50.0	49.3		ug/kg		99	80 - 132	
Xylenes, total	150	149		ug/kg		100	80 - 137	

LCS	LCS	
%Recovery	Qualifier	Limits
123		70 - 130
109		70 - 130
99		70 - 130
98		70 - 130
	%Recovery 123 109 99	109 99

Lab Sample ID: 11J7344-MS1 Matrix: Soil

Analysis Batch: U019634

	Sample	Sample	Spike	Matrix Spike	Matrix Spil	ke			%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.00167		0.0466	0.0448	_	mg/kg wet	-	93	31 - 143	
Ethylbenzene	ND		0.0466	0.0427		mg/kg wet		92	23 - 161	
Naphthalene	ND		0.0466	0.0283		mg/kg wet		61	10 - 176	
Toluene	0.00109		0.0466	0.0431		mg/kg wet		90	30 - 155	
Xylenes, total	ND		0.140	0.128		mg/kg wet		92	25 - 162	

	Matrix Spike	Matrix Spike	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	128		70 - 130
Dibromofluoromethane	107		70 - 130
Toluene-d8	97		70 - 130
4-Bromofluorobenzene	91		70 - 130

Client Sample ID: Matrix Spike
Prep Type: Total
Prep Batch: 11J7344_P

l

202

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

Lab Sample ID: 11J7344-MSE	01								C	lie	nt San	nple ID:	Matrix Spi	ke Duj	plicate
Matrix: Soil													Prep	о Туре	: Tota
Analysis Batch: U019634													Prep Batch	: 11J7	344_F
	Sample	Sam	ple	Spike	Matrix S	pike Dup	Ma	trix Spike	Dut				%Rec.		RPD
Analyte	Result	Qual	lifier	Added		Result	Qu	alifier	Unit		D	%Rec	Limits	RPD	Limit
Benzene	0.00167	-		0.0462		0.0375	_		mg/kg w	/et		77	31 - 143	18	50
Ethylbenzene	ND			0.0462		0.0360			mg/kg w	vet		78	23 - 161	17	50
Naphthalene	ND			0.0462		0.0202			mg/kg w	/et		44	10 - 176	33	50
Toluene	0.00109			0.0462		0.0368			mg/kg w	/et		77	30 - 155	16	50
Xylenes, total	ND			0.139		0.108			mg/kg w	vet		78	25 - 162	17	5
	Matrix Spike Dup	Matr	ix Spike D	up											
Surrogate	%Recovery	Qual	lifier	Limits											
1,2-Dichloroethane-d4	120	_		70 - 130											
Dibromofluoromethane	107			70 - 130											
Toluene-d8	96			70 - 130											
4-Bromofluorobenzene	91			70 - 130											
Lab Sample ID: 11K1275-BLK	(1										С	lient Sa	ample ID: N	lethod	Blank
Matrix: Soil														туре	
Analysis Batch: U019682													Prep Batch		
Analysis Baten. 0015002	F	lank	Blank										Fiep Daten		210_1
Analyte			Qualifier		RL	м	DL	Unit		D	Pre	pared	Analyze	d	Dil Fac
Benzene		ND	addition	0	.00200		<u></u>	mg/kg we		_		11 06:55	11/07/11 12		1.00
Ethylbenzene		ND			.00200			mg/kg we				11 06:55	11/07/11 12		1.00
Naphthalene		ND			.00500			mg/kg we				11 06:55	11/07/11 1:		1.00
Toluene		ND			.00200			mg/kg we				11 06:55	11/07/11 12		1.00
Xylenes, total		ND			.00500			mg/kg we				11 06:55	11/07/11 1:		1.0
	B	lank	Blank												
Surrogate	%Reco	very	Qualifier	Lin	nits						Prep	pared	Analyze	d	Dil Fac
1,2-Dichloroethane-d4		105		70	- 130						11/05/	11 06:55	11/07/11 1	2:09	1.00
Dibromofluoromethane		103		70	- 130						11/05/	11 06:55	11/07/11 1	2:09	1.00
Toluene-d8		96			- 130							11 06:55	11/07/11 1		1.00
4-Bromofluorobenzene		95		70	- 130						11/05/	11 06:55	11/07/11 1	2:09	1.00
Lab Sample ID: 11K1275-BLK	2										C	lient Sa	ample ID: N	lethod	Blank
Matrix: Soil	-										-	inchit Ot	and the second sec	Туре	
Analysis Batch: U019682													Prep Batch		
Analysis Daten. 0019002		lank	Blank										riep batch	. TIKI	210_P
Analyte			Qualifier		RL	м	DL	Unit		D	Pre	pared	Analyze	d	Dil Fac
Benzene		ND			0.100	0.05	50	mg/kg we	et	-	11/05/1	1 06:55	11/07/11 1	1:40	50.0
Ethylbenzene		ND			0.100	0.05	50	mg/kg we	et		11/05/1	1 06:55	11/07/11 1	1:40	50.0
Naphthalene		ND			0.250	0,1	25	mg/kg we	et		11/05/1	1 06:55	11/07/11 1	1:40	50.0
Toluene		ND			0.100			mg/kg we			11/05/1	11 06:55	11/07/11 1	1:40	50.0
loudene							00				11/00/				

	Blank	Blank				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	100		70 - 130	11/05/11 06:55	11/07/11 11:40	50.0
Dibromofluoromethane	101		70 - 130	11/05/11 06:55	11/07/11 11:40	50.0
Toluene-d8	98		70 - 130	11/05/11 06:55	11/07/11 11:40	50.0
4-Bromofluorobenzene	94		70 - 130	11/05/11 06:55	11/07/11 11:40	50.0

QC Sample Results

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

Lab Sample ID: 11K1275-BS1							Client S	Sample	ID: Lab Control Sample
Matrix: Soil									Prep Type: Total
Analysis Batch: U019682									Prep Batch: 11K1275_P
			Spike	LCS	LCS				%Rec.
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene			50.0	50.7		ug/kg		101	75 - 127
Ethylbenzene			50.0	49.6		ug/kg		99	80 - 134
Naphthalene			50.0	49.3		ug/kg		99	69 - 150
Toluene			50.0	49.5		ug/kg		99	80 - 132
Xylenes, total			150	154		ug/kg		103	80 - 137
	LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits						

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	115		70 - 130
Dibromofluoromethane	105		70 - 130
Toluene-d8	98		70 - 130
4-Bromofluorobenzene	95		70 - 130

Lab Sample ID: 11K1275-BSD1

Matrix: Soil

Analysis Batch: U019682

Client Sample ID: Lab Control Sample Dup Prep Type: Total Prep Batch: 11K1275 P

	Spike	LCS Dup	LCS Dup				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	50.0	52.2		ug/kg		104	75 - 127	3	50
Ethylbenzene	50.0	50.9		ug/kg		102	80 - 134	3	50
Naphthalene	50.0	50.0		ug/kg		100	69 - 150	2	50
Toluene	50.0	51.3		ug/kg		103	80 - 132	4	50
Xylenes, total	150	156		ug/kg		104	80 - 137	1	50

Surrogate	LCS Dup %Recovery	Limits
1,2-Dichloroethane-d4	115	 70 - 130
Dibromofluoromethane	104	70 - 130
Toluene-d8	100	70 - 130
4-Bromofluorobenzene	95	70 - 130

Lab Sample ID: 11K1275-MS1 Matrix: Soil

Analysis Batch: U019682

Sam	le Sample	Spike	Matrix Spike	Matrix Spil	ke			%Rec.
Analyte Res	ult Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	ID	0.0487	0.0424		mg/kg dry		87	31 - 143
Ethylbenzene	ID	0.0487	0.0376		mg/kg dry	-	77	23 - 161
Naphthalene	ID	0.0487	0.00430	M8 J	mg/kg dry	-	9	10 - 176
Toluene	ID	0.0487	0.0394		mg/kg dry	ø	81	30 - 155
Xylenes, total	ID	0.146	0.108		mg/kg dry	Q	74	25 - 162

	Matrix Spike	Matrix Spike	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	112		70 - 130
Dibromofluoromethane	107		70 - 130
Toluene-d8	99		70 - 130
4-Bromofluorobenzene	99		70 - 130

Client Sample ID: Matrix Spike

Prep Type: Total

Prep Batch: 11K1275_P

QC Sample Results

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

Lab Sample ID: 11K1275-N	ISD1					Clien	t Sar	nple ID:	Matrix Sp	ike Dup	plicate
Matrix: Soil									Pre	p Type:	: Total
Analysis Batch: U019682								9	Prep Batch	h: 11K1	275_P
	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spi	ke Duş			%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		0.0475	0.0388		mg/kg dry	ō	82	31 - 143	9	50
Ethylbenzene	ND		0.0475	0.0322		mg/kg dry	¢	68	23 - 161	16	50
Naphthalene	ND		0.0475	0.00365	M8 J	mg/kg dry	¢	8	10 - 176	16	50
Toluene	ND		0.0475	0.0347		mg/kg dry	ø	73	30 - 155	13	50
Xylenes, total	ND		0.142	0.0921		mg/kg dry	Ø	65	25 - 162	16	50
	Matrix Spike Dup	Matrix Spike	Dup								
Surrogate	%Recovery	Qualifier	Limits								
1,2-Dichloroethane-d4	114		70 - 130								
Dibromofluoromethane	106		70 - 130								
Toluene-d8	98		70 - 130								
4-Bromofluorobenzene	98		70 - 130								

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

Lab Sample ID: 11J7299-BLK1 Matrix: Soil Analysis Batch: 11J7299

Client Sample ID: Method Blank Prep Type: Total Prep Batch: 11J7299 P

Blank Blank Analyte **Result Qualifier** RL MDL Unit D Prepared Analyzed **Dil Fac** ND 0.0670 Acenaphthene 0.0340 mg/kg wet 11/04/11 08:50 11/04/11 16:51 1.00 Acenaphthylene ND 0.0670 0.0340 mg/kg wet 11/04/11 08:50 11/04/11 16:51 1.00 Anthracene ND 0.0670 0.0340 mg/kg wet 11/04/11 08:50 11/04/11 16:51 1.00 ND 0.0670 0.0340 mg/kg wet 11/04/11 08:50 Benzo (a) anthracene 11/04/11 16:51 1.00 ND 0.0670 0.0340 mg/kg wet 11/04/11 08:50 11/04/11 16:51 Benzo (a) pyrene 1.00 Benzo (b) fluoranthene ND 0.0670 0.0340 mg/kg wet 11/04/11 08:50 11/04/11 16:51 1.00 ND 0.0670 11/04/11 08:50 11/04/11 16:51 Benzo (g.h.i) perylene 0.0340 mg/kg wet 1.00 11/04/11 08:50 Benzo (k) fluoranthene ND 0.0670 0.0340 mg/kg wet 11/04/11 16:51 1.00 Chrysene ND 0.0670 0.0340 mg/kg wet 11/04/11 08:50 11/04/11 16:51 1.00 ND 0.0670 Dibenz (a,h) anthracene 0.0340 mg/kg wet 11/04/11 08:50 11/04/11 16:51 1 00 Fluoranthene ND 0.0670 0.0340 mg/kg wet 11/04/11 08:50 11/04/11 16:51 1.00 ND 0.0670 0.0340 mg/kg wet 11/04/11 08:50 11/04/11 16:51 1.00 Fluorene Indeno (1,2,3-cd) pyrene ND 0.0670 0.0340 mg/kg wet 11/04/11 08:50 11/04/11 16:51 1.00 Naphthalene ND 0.0670 0.0340 mg/kg wet 11/04/11 08:50 11/04/11 16:51 1.00 Phenanthrene ND 0.0670 0.0340 mg/kg wet 11/04/11 08:50 11/04/11 16:51 1.00 Pyrene ND 0.0670 0.0340 mg/kg wet 11/04/11 08:50 11/04/11 16:51 1.00 0.0670 11/04/11 16:51 1-Methylnaphthalene ND 0.0340 mg/kg wet 11/04/11 08:50 1.00 2-Methylnaphthalene ND 0.0670 0.0340 mg/kg wet 11/04/11 08:50 11/04/11 16:51 1.00 Blank Blank Limits Surrogate %Recovery Qualifier Prepared Analyzed Dil Fac Terphenyl-d14 83 18-120 11/04/11 08:50 11/04/11 16:51 1.00 2-Fluorobiphenyl 57 14 - 120 11/04/11 08:50 11/04/11 16:51 1.00 Nitrobenzene-d5 64 17 - 120 11/04/11 08:50 11/04/11 16:51 1 00 Lab Sample ID: 11J7299-BS1 **Client Sample ID: Lab Control Sample** Matrix: Soil Prep Type: Total

Analysis Batch: 11J7299							Prep Batch: 11J7	299_P
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Acenaphthene	1.67	1.29	-	mg/kg wet	-	77	36 - 120	

TestAmerica Nashville 11/9/2011

Client Sample ID: Matrix Spike

Prep Type: Total

1

,

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

Lab Sample ID: 11J7299-BS1				Cli	ent S	Sample	ID: Lab Control Sample
Matrix: Soil							Prep Type: Total
Analysis Batch: 11J7299							Prep Batch: 11J7299_P
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthylene	1.67	1.17		mg/kg wet		70	38 - 120
Anthracene	1.67	1.34		mg/kg wet		81	46 - 124
Benzo (a) anthracene	1.67	1.33		mg/kg wet		80	45 - 120
Benzo (a) pyrene	1.67	1.49		mg/kg wet		89	45 - 120
Benzo (b) fluoranthene	1.67	1.32		mg/kg wet		79	42 - 120
Benzo (g,h,i) perylene	1.67	1.32		mg/kg wet		79	38 - 120
Benzo (k) fluoranthene	1.67	1.50		mg/kg wet		90	42 - 120
Chrysene	1.67	1.31		mg/kg wet		79	43 - 120
Dibenz (a,h) anthracene	1.67	1.29		mg/kg wet		77	32 - 128
Fluoranthene	1.67	1.35		mg/kg wet		81	46 - 120
Fluorene	1.67	1.29		mg/kg wet		78	42 - 120
Indeno (1,2,3-cd) pyrene	1.67	1.31		mg/kg wet		78	41 - 121
Naphthalene	1.67	1.21		mg/kg wet		73	32 - 120
Phenanthrene	1.67	1.32		mg/kg wet		79	45 - 120
Pyrene	1.67	1.37		mg/kg wet		82	43 - 120
1-Methylnaphthalene	1.67	0.928		mg/kg wet		56	32 - 120
2-Methylnaphthalene	1.67	1.14		mg/kg wet		68	28 - 120

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Terphenyl-d14	84		18 - 120
2-Fluorobiphenyl	63		14 - 120
Nitrobenzene-d5	56		17 - 120

Lab Sample ID: 11J7299-MS1 Matrix: Soil Analysis

Analysis Batch: 11J7299	ample Sample	Spike	Matrix Spike	Matrix Spi	ke			Prep Batch: 11J7299_P %Rec.
Analyte	Result Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthene	ND	2.04	1.57		mg/kg dry	ō	77	19 - 120
Acenaphthylene	ND	2.04	1.35		mg/kg dry	\$	67	25 - 120
Anthracene	ND	2.04	1.62		mg/kg dry	\$	79	28 - 125
Benzo (a) anthracene	ND	2.04	1.58		mg/kg dry	0	78	23 - 120
Benzo (a) pyrene	ND	2.04	1.81		mg/kg dry	\$	89	15 - 128
Benzo (b) fluoranthene	ND	2.04	1.51		mg/kg dry	¢	74	12 - 133
Benzo (g,h,i) perylene	ND	2.04	1.60		mg/kg dry	ø	78	22 - 120
Benzo (k) fluoranthene	ND	2.04	1.44		mg/kg dry	æ	71	28 - 120
Chrysene	ND	2.04	1.49		mg/kg dry	\$	73	20 - 120
Dibenz (a,h) anthracene	ND	2.04	1.58		mg/kg dry	\$	78	12 - 128
Fluoranthene	ND	2.04	1.60		mg/kg dry	ø	79	10 - 143
Fluorene	ND	2.04	1.60		mg/kg dry	ø	79	20 - 120
Indeno (1,2,3-cd) pyrene	ND	2.04	1.61		mg/kg dry	\$	79	22 - 121
Naphthalene	0.242	2.04	1.57		mg/kg dry	\$	65	10 - 120
Phenanthrene	ND	2.04	1.58		mg/kg dry	¢	78	21 - 122
Pyrene	ND	2.04	1.63		mg/kg dry	ø	80	20 - 123
1-Methylnaphthalene	0.365	2.04	1.23		mg/kg dry	ø	42	10 - 120
2-Methylnaphthalene	0.800	2.04	1.62		mg/kg dry	¢	40	13 - 120
Matrix	Spike Matrix Spil	ke						

%Recovery Qualifier Limits

82

Terphenyl-d14

Surrogate

18-120

Client Sample ID: Matrix Spike

Prep Type: Total

Prep Batch: 11J7299 P

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

Sample Sample

Lab Sample ID: 11J7299-MS1 Matrix: Soil Analysis Batch: 11J7299

Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits
2-Fluorobiphenyl	63		14 - 120
Nitrobenzene-d5	55		17 - 120

Lab Sample ID: 11J7299-MSD1 Matrix: Soil Analysis Batch: 11J7299

Client Sample ID: Matrix Spike Duplicate Prep Type: Total Prep Type: Total Spike Matrix Spike Dup Matrix Spike Dup %Rec. RPD Added Result Qualifier Unit D %Rec. RPD 2.06 1.73 1.73 mg/kg dry 9 84 19 - 120 10 50

Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthene	ND		2.06	1.73	-	mg/kg dry		84	19 - 120	10	50
Acenaphthylene	ND		2.06	1.55		mg/kg dry	\$	75	25 - 120	13	50
Anthracene	ND		2.06	1.76		mg/kg dry	\$	85	28 - 125	8	49
Benzo (a) anthracene	ND		2.06	1.67		mg/kg dry	\$	81	23 - 120	6	50
Benzo (a) pyrene	ND		2.06	1.84		mg/kg dry	¢	89	15 - 128	1	50
Benzo (b) fluoranthene	ND		2.06	1.77		mg/kg dry	\$	86	12 - 133	15	50
Benzo (g,h,i) perylene	ND		2.06	1.65		mg/kg dry	\$	80	22 - 120	3	50
Benzo (k) fluoranthene	ND		2.06	1.82		mg/kg dry	\$	89	28 - 120	23	45
Chrysene	ND		2.06	1.64		mg/kg dry	¢	80	20 - 120	9	49
Dibenz (a,h) anthracene	ND		2.06	1.59		mg/kg dry	\$	78	12 - 128	0.8	50
Fluoranthene	ND		2.06	1.76		mg/kg dry	¢	86	10 - 143	9	50
Fluorene	ND		2.06	1.74		mg/kg dry	¢	84	20 - 120	8	50
Indeno (1,2,3-cd) pyrene	ND		2.06	1.63		mg/kg dry	¢	79	22 - 121	1	50
Naphthalene	0.242		2.06	1.60		mg/kg dry	\$	66	10 - 120	2	50
Phenanthrene	ND		2.06	1.74		mg/kg dry	\$	84	21 - 122	9	50
Pyrene	ND		2.06	1.71		mg/kg dry	\$	83	20 - 123	5	50
1-Methylnaphthalene	0.365		2.06	1.26		mg/kg dry	¢	44	10 - 120	2	50
2-Methylnaphthalene	0.800		2.06	1.68		mg/kg dry	¢	43	13 - 120	3	50
	Matrix Spike Dup	Matrix Spike	Dup								

	Matrix Spike Dup	Matrix Spike	e Dup
Surrogate	%Recovery	Qualifier	Limits
Terphenyl-d14	81		18 - 120
2-Fluorobiphenyl	62		14 - 120
Nitrobenzene-d5	57		17 - 120

Method: SW-846 - General Chemistry Parameters

Lab Sample ID: 11K1587-DUP1 Matrix: Soil							Client Sample ID: Dup Prep Type	
Analysis Batch: 11K1587							Prep Batch: 11K1	587_P
	Sample	Sample	Duplicate	Duplicate				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
% Dry Solids	79.9		81.8		%		2	20

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

GCMS Volatiles

Analysis Batch: U019634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7344-BLK1	Method Blank	Total	Soil	SW846 8260B	11J7344_P
11J7344-BS1	Lab Control Sample	Total	Soil	SW846 8260B	11J7344_P
11J7344-MS1	Matrix Spike	Total	Soil	SW846 8260B	11J7344_P
11J7344-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8260B	11J7344_P
NUJ3850-01	314 Ash-1	Total	Soil	SW846 8260B	11J7344_P
NUJ3850-02	314 Ash-2	Total	Soil	SW846 8260B	11J7344_P
NUJ3850-03	229 Cypress	Total	Soil	SW846 8260B	11J7344_P

Analysis Batch: U019682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K1275-BLK1	Method Blank	Total	Soil	SW846 8260B	11K1275_P
11K1275-BLK2	Method Blank	Total	Soil	SW846 8260B	11K1275_P
11K1275-BS1	Lab Control Sample	Total	Soil	SW846 8260B	11K1275_P
11K1275-BSD1	Lab Control Sample Dup	Total	Soil	SW846 8260B	11K1275_P
11K1275-MS1	Matrix Spike	Total	Soil	SW846 8260B	11K1275_P
11K1275-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8260B	11K1275_P
NUJ3850-01 - RE1	314 Ash-1	Total	Soil	SW846 8260B	11K1275_P
NUJ3850-02 - RE1	314 Ash-2	Total	Soil	SW846 8260B	11K1275_P
NUJ3850-03 - RE1	229 Cypress	Total	Soil	SW846 8260B	11K1275_P
NUJ3850-03 - RE2	229 Cypress	Total	Soil	SW846 8260B	11K1275_P

Prep Batch: 11J7344_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7344-BLK1	Method Blank	Total	Soil	EPA 5035	
11J7344-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11J7344-MS1	Matrix Spike	Total	Soil	EPA 5035	
11J7344-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 5035	
NUJ3850-01	314 Ash-1	Total	Soil	EPA 5035	
NUJ3850-02	314 Ash-2	Total	Soil	EPA 5035	
NUJ3850-03	229 Cypress	Total	Soil	EPA 5035	

Prep Batch: 11K1275_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K1275-BLK1	Method Blank	Total	Soil	EPA 5035	
11K1275-BLK2	Method Blank	Total	Soil	EPA 5035	
11K1275-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11K1275-BSD1	Lab Control Sample Dup	Total	Soil	EPA 5035	
11K1275-MS1	Matrix Spike	Total	Soil	EPA 5035	
11K1275-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 5035	
NUJ3850-01 - RE1	314 Ash-1	Total	Soil	EPA 5035	
NUJ3850-02 - RE1	314 Ash-2	Total	Soil	EPA 5035	
NUJ3850-03 - RE1	229 Cypress	Total	Soil	EPA 5035	
NUJ3850-03 - RE2	229 Cypress	Total	Soil	EPA 5035	

GCMS Semivolatiles

Analysis Batch: 11J7299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7299-BLK1	Method Blank	Total	Soil	SW846 8270D	11J7299_P
11J7299-BS1	Lab Control Sample	Total	Soil	SW846 8270D	11J7299_P
11J7299-MS1	Matrix Spike	Total	Soil	SW846 8270D	11J7299_P
11J7299-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8270D	11J7299_P

QC Association Summary

GCMS Semivolatiles (Continued)

Analysis Batch: 11J7299 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
NUJ3850-02	314 Ash-2	Total	Soil	SW846 8270D	11J7299_P
NUJ3850-03	229 Cypress	Total	Soil	SW846 8270D	11J7299_P

Analysis Batch: U019507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
NUJ3850-01 - RE1	314 Ash-1	Total	Soil	SW846 8270D	11J7299_P
NUJ3850-02 - RE1	314 Ash-2	Total	Soil	SW846 8270D	11J7299_P
NUJ3850-03 - RE1	229 Cypress	Total	Soil	SW846 8270D	11J7299_P

Prep Batch: 11J7299_P

Client Sample ID	Prep Type	Matrix	Method	Prep Batch
Method Blank	Total	Soil	EPA 3550B	
Lab Control Sample	Total	Soil	EPA 3550B	
Matrix Spike	Total	Soil	EPA 3550B	
Matrix Spike Duplicate	Total	Soil	EPA 3550B	
314 Ash-1	Total	Soil	EPA 3550B	
314 Ash-2	Total	Soil	EPA 3550B	
314 Ash-2	Total	Soil	EPA 3550B	
229 Cypress	Total	Soil	EPA 3550B	
229 Cypress	Total	Soil	EPA 3550B	
	Lab Control Sample Matrix Spike Matrix Spike Duplicate 314 Ash-1 314 Ash-2 314 Ash-2 229 Cypress	Lab Control SampleTotalMatrix SpikeTotalMatrix Spike DuplicateTotal314 Ash-1Total314 Ash-2Total314 Ash-2Total229 CypressTotal	Lab Control SampleTotalSoilMatrix SpikeTotalSoilMatrix Spike DuplicateTotalSoil314 Ash-1TotalSoil314 Ash-2TotalSoil314 Ash-2TotalSoil229 CypressTotalSoil	Lab Control SampleTotalSoilEPA 3550BMatrix SpikeTotalSoilEPA 3550BMatrix Spike DuplicateTotalSoilEPA 3550B314 Ash-1TotalSoilEPA 3550B314 Ash-2TotalSoilEPA 3550B314 Ash-2TotalSoilEPA 3550B229 CypressTotalSoilEPA 3550B

Extractions

Analysis Batch: 11K1587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K1587-DUP1	Duplicate	Total	Soil	SW-846	11K1587_P
NUJ3850-01	314 Ash-1	Total	Soil	SW-846	11K1587_P
NUJ3850-02	314 Ash-2	Total	Soil	SW-846	11K1587_P
NUJ3850-03	229 Cypress	Total	Soil	SW-846	11K1587_P

Prep Batch: 11K1587_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K1587-DUP1	Duplicate	Total	Soil	% Solids	
NUJ3850-01	314 Ash-1	Total	Soil	% Solids	
NUJ3850-02	314 Ash-2	Total	Soil	% Solids	
NUJ3850-03	229 Cypress	Total	Soil	% Solids	

Lab Sample ID: NUJ3850-02

Lab Sample ID: NUJ3850-03

Matrix: Soil

Matrix: Soil

Percent Solids: 77.2

Percent Solids: 81.3

Client Sample ID: 314 Ash-1 Lab Sample ID: NUJ3850-01 Date Collected: 10/24/11 11:45 Matrix: Soil Date Received: 10/29/11 08:20 Percent Solids: 79.4 Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab Total Prep EPA 5035 0.893 11J7344 P 10/24/11 11:45 AAN TAL NSH Total Analysis SW846 8260B U019634 11/05/11 02:40 KXC TAL NSH 1.00 Total Prep EPA 5035 RE1 0.919 11K1275 P 10/24/11 11:45 AAN TAL NSH Total SW846 8260B RE1 U019682 11/07/11 12:42 KXC TAL NSH Analysis 50.0 Total EPA 3550B RE1 0.985 11J7299 P 11/04/11 08:50 JJR TAL NSH Prep Total Analysis SW846 8270D RE1 10.0 U019507 11/06/11 05:33 JLS TAL NSH Total 11K1587 P RRS Prep % Solids 1.00 11/07/11 13:04 TAL NSH Total SW-846 11K1587 11/08/11 11:04 TAL NSH Analysis 1.00 RRS

Client Sample ID: 314 Ash-2 Date Collected: 10/24/11 14:45

Date Received: 10/29/11 08:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.943	11J7344_P	10/24/11 14:45	AAN	TAL NSH
Total	Analysis	SW846 8260B		1.00	U019634	11/05/11 03:09	КХС	TAL NSH
Total	Prep	EPA 5035	RE1	0.942	11K1275_P	10/24/11 14:45	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE1	50.0	U019682	11/07/11 13:11	KXC	TAL NSH
Total	Prep	EPA 3550B		0.991	11J7299_P	11/04/11 08:50	JJR	TAL NSH
Total	Analysis	SW846 8270D		1.00	11J7299	11/04/11 19:59	JLS	TAL NSH
Total	Prep	EPA 3550B	RE1	0.991	11J7299_P	11/04/11 08:50	JJR	TAL NSH
Total	Analysis	SW846 8270D	RE1	5.00	U019507	11/06/11 04:46	JLS	TAL NSH
Total	Prep	% Solids		1.00	11K1587_P	11/07/11 13:04	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11K1587	11/08/11 11:04	RRS	TAL NSH

Client Sample ID: 229 Cypress Date Collected: 10/26/11 12:00 Date Received: 10/29/11 08:20

a rank	Batch	Batch	200	Dilution	Batch	Prepared	Stab	
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.873	11J7344_P	10/26/11 12:00	AAN	TAL NSH
Total	Analysis	SW846 8260B		1.00	U019634	11/05/11 03:39	KXC	TAL NSH
Total	Prep	EPA 5035	RE1	0.960	11K1275_P	10/26/11 12:00	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE1	50.0	U019682	11/07/11 13:41	KXC	TAL NSH
Total	Prep	EPA 5035	RE2	0.960	11K1275_P	10/26/11 12:00	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE2	500	U019682	11/07/11 14:11	кхс	TAL NSH
Total	Prep	EPA 3550B		0.995	11J7299_P	11/04/11 08:50	JJR	TAL NSH
Total	Analysis	SW846 8270D		1.00	11J7299	11/04/11 20:22	JLS	TAL NSH
Total	Prep	EPA 3550B	RE1	0.995	11J7299_P	11/04/11 08:50	JJR	TAL NSH
Total	Analysis	SW846 8270D	RE1	5.00	U019507	11/06/11 05:09	JLS	TAL NSH
Total	Prep	% Solids		1.00	11K1587_P	11/07/11 13:04	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11K1587	11/08/11 11:04	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]

100

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

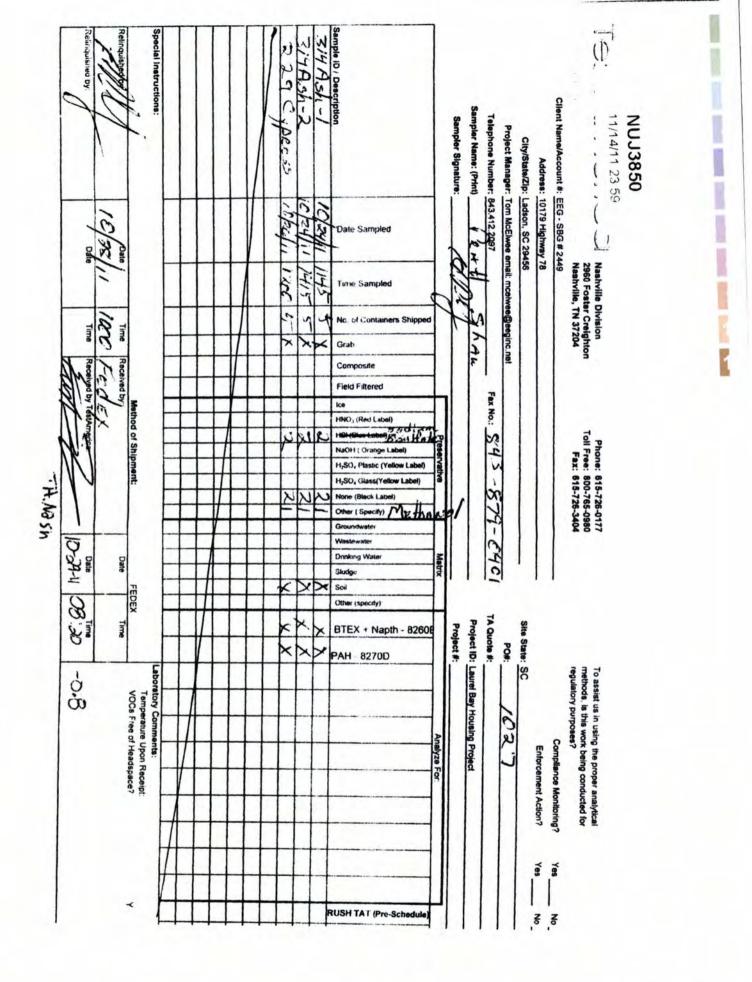
Certification Summary

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

ł

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

UST Certificate of Disposal

CONTRACTOR

Small Business Group, Inc. 10179 Highway 78 Ladson, SC 29456

TEL (843) 879-0403 FAX (843) 879-0401

TANK ID & LOCATION

UST 314Ash-1; 314 Ash Street, Laurel Bay Housing Area, MCAS Beaufort, S.C.

DISPOSAL LOCATION

Coastal Auto Salvage Co., Inc. 130 Laurel Bay Road Beaufort, S.C. 29906

TYPE OF TANK SIZE (GAL)

Steel

280

CLEANING/DISPOSAL METHOD

The tank and piping were unearthed, cut open, cleaned with a pressure washer, cut into sections, and recycled.

DISPOSAL CERTIFICATION

I certify that the above tank, piping and equipment has been properly cleaned and disposed of.

<u>Y. P. L. Olec 1 12/6/11</u> (Name) (Date)

NON-HAZARDOUS MANIFEST	s US EPA ID No.	Manifest Doc	No.	2. Page 1	12-1/0 A 11			
3. Generator's Mailing Address:	Generator's Site Address (f different than m	ailing):	A. Manife	est Number		A LEAD	1
MCAS, BEAUFORT	Sente le de mais au la			W	MNA	00316	6822	1
LAUREL BAY HOUSING BEAUFORT, SC 29907	THE SHEET CONTRACT			The second		Generator's	ID	
4. Generator's Phone 843-228-6461	and the second second							
5. Transporter 1 Company Name	6. US EPA	ID Number	100	1990	NE STREET	S. Cartan		1
EEG, INC.	1 1 1 2 2 1 h			A SQUEET CO	ransporter's I		379-041	11
7. Transporter 2 Company Name	8. US EPA	ID Number	der the	D. Transp	orter's Phone	045-0	579-041	11
In which carting one been a straight of	and the second			E. State T	ransporter's II	D	715701	1
the second s	10		in the second	F. Transp	orter's Phone	1.03		1
HICKORY HILL LANDFILL				G. State F	acility ID	THE REAL		
2621 LOW COUNTRY ROAD					acility Phone	843-9	87-464	13
RIDGELAND, SC 29936	N. C. MILLION SCREET	teres and	1997			THE STORE	1000	
11. Description of Waste Materials			ntainers	13. Total	14. Unit	I. M	lisc. Comme	ents
A. HEATING OIL TANKS FILLED WITH SAND		No.	Туре	Quantity	Wt./Vol.			-
				1980	With Walk		THE REAL	
WM Profile # 102655	SC		1000	1.2.5			236	
		2 200		Setting.	Mars da P	L. M. F.		
WM Profile #		-		The second second		A PLANA PLANA		10020
	Contraction of the second			E STREED			1.100	
			1997	a sile o	No. 201		-celles	-
WM Profile #		-	12000	A STORES	Contraction of the	1.1.1		
		A VOIN	STRAILERS.		New Years			
WM Profile #		-	1.51	MARINE	45 - 2180	Carlo and		
. Additional Descriptions for Materials Listed Above	e	K. Dispos	al Location		Auronalia	The states	122	1
		Cell				Level		
	Sector Sector	Grid		45.92.04				-
5. Special Handling Instructions and Additional Infor		2RSS 1	4)	314A	sh' 6.) 301	As	,4
D 276 Birchs	3 277 8	CRSS D	15)	278	Bierl	1		
urchase Order #	EMERGENCY C	ONTACT / PH	ONE NO .:		- mich		-	
6. GENERATOR'S CERTIFICATE:	State Strategy and the second		1309	S. 8 . 24			100	
hereby certify that the above-described materials are						ave been ful	ly and	
ccurately described, classified and packaged and are rinted Name	Signature "On beh		rding to ap	plicable regu	lations.	Month	Day	
Lo boke	5	6	200			-12	2	1
7. Transporter 1 Acknowledgement of Receipt of Ma		1	L'ante	and the second		1.11.1	Day	T
James Baldw, N	Signature	Roh	1			Month	Day	1
8. Transporter 2 Acknowledgement of Receipt of Ma	aterials	Deve					T	-
Printed Name	Signature					Month	Day	1
	The constant		- peren				THE	1
9. Certificate of Final Treatment/Disposal			111			Silvin		2
	ty, that to the best of my know	ledge, the ab	ove-describ	bed waste w	as managed in	n compliand	e with al	
	he dates listed above.							
applicable laws, regulations, permits and licenses on t	The second s	covered by th	nis manifest		1	Sec. 1	7817.	
certify, on behalf of the above listed treatment facilit applicable laws, regulations, permits and licenses on t 20. Facility Owner or Operator: Certification of receip Printed Name	The second s	covered by th	iis manifest	Д-		Month	Day	1

Appendix C Laboratory Analytical Report - Groundwater



Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Description: BEALB314TW01WG20150522

Laboratory ID: QE23005-003 Matrix: Aqueous

Date Sampled:05/22/2015 0945

Date Received: 05/23/2015											
RunPrep Method15030B	Analytical Methor 8260E		Analysis 05/27/207	•	t Prep	Date	Batch 75865				
Parameter			CAS mber	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene		71-	-43-2	8260B	0.45	U	5.0	0.45	0.21	ug/L	1
Ethylbenzene		100-	-41-4	8260B	0.51	U	5.0	0.51	0.17	ug/L	1
Naphthalene		91-	-20-3	8260B	0.96	U	5.0	0.96	0.32	ug/L	1
Toluene		108-	-88-3	8260B	0.48	U	5.0	0.48	0.16	ug/L	1
Xylenes (total)		1330-	-20-7	8260B	0.57	U	5.0	0.57	0.19	ug/L	1
Surrogate	Q %	Run 1 Recovery	Acceptan Limits								
Bromofluorobenzene		104	75-120								
1,2-Dichloroethane-d4		101	70-120)							
Toluene-d8		111	85-120)							
Dibromofluoromethane		103	85-115	;							

PQL = Practical quantitation limitB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeH = Out of holding timeQ = Surrogate failureND = Not detected at or above the MDLJ = Estimated result < PQL and \geq MDLP = The RPD between two GC columns exceeds 40%N = Recovery is out of criteriaL = LCS/LCSD failureWhere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"S = MS/MSD failure

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

Level 1 Report v2.1

Semivolatile Organic Compounds by GC/MS (SIM)

Client: AECOM - Resolution Consultants

Description: BEALB314TW01WG20150522

Laboratory ID: QE23005-003

Date Sampled:05/22/2015 0945

Matrix: Aqueous

Date Received: 05/23/2015

RunPrep Method13520C	Analytical Method Dilu 8270D (SIM)		v sis Date Analys 2015 2124 RBH			Batch 39 75944		
Parameter		CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL Units Run
Benzo(a)anthracene		56-55-3	8270D (SIM)	0.040	U	0.20	0.040	0.019 ug/L 1
Benzo(b)fluoranthene		205-99-2	8270D (SIM)	0.040	U	0.20	0.040	0.019 ug/L 1
Benzo(k)fluoranthene		207-08-9	8270D (SIM)	0.040	U	0.20	0.040	0.024 ug/L 1
Chrysene		218-01-9	8270D (SIM)	0.040	U	0.20	0.040	0.021 ug/L 1
Dibenzo(a,h)anthracene		53-70-3	8270D (SIM)	0.080	U	0.20	0.080	0.040 ug/L 1
Surrogate	Run Q % Reco							
2-Methylnaphthalene-d10	69	15-	139					
Fluoranthene-d10	75	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)

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		



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	2 hale
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