SUMMARY REPORT 104 ASPEN STREET (FORMERLY 369 ASPEN 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

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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



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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
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	
031	underground storage tank



#### 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 104 Aspen Street (Formerly 369 Aspen 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 104 Aspen Street (Formerly 369 Aspen Street). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 369 Aspen Street* (MCAS Beaufort, 2013). The UST Assessment Report is provided in Appendix B.

#### 2.1 UST Removal and Soil Sampling

On March 26, 2012, a single 280 gallon heating oil UST was removed from the landscaped area adjacent to the driveway at 104 Aspen Street (Formerly 369 Aspen Street). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The UST was removed and properly disposed of (i.e., shipped offsite for recycling or transported to a landfill). There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depth to the base of the UST was 6'0" bgs and a single soil sample was collected from that depth. The



sample was collected from the fill port side of the former UST to represent a worst case scenario.

Following UST removal, a soil sample was collected from the base of the excavation and shipped to an offsite laboratory for analysis of the petroleum COPCs. Sampling was performed in accordance with applicable South Carolina regulation R.61-92, Part 280 (SCDHEC, 2017) and assessment guidelines.

### 2.2 Soil Analytical Results

A summary of the laboratory analytical results and SCDHEC RBSLs is presented in Table 1. A copy of the laboratory analytical data report is included in the UST Assessment Report presented in Appendix B. The laboratory analytical data report includes the soil results for the additional PAHs that were analyzed, but do not have associated RBSLs.

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST location were used by MCAS Beaufort, in consultation with SCDHEC, to determine a path forward (i.e., additional sampling or NFA) for the property. The soil results collected from 104 Aspen Street (Formerly 369 Aspen Street) 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.

#### 3.0 PROPERTY STATUS

Based on the analytical results for soil, SCDHEC made the determination that NFA was required for 104 Aspen Street (Formerly 369 Aspen Street). This NFA determination was obtained in a letter dated July 1, 2015. SCDHEC's NFA letter is provided in Appendix C.

#### 4.0 REFERENCES

- Marine Corps Air Station Beaufort, 2013. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 369 Aspen Street, Laurel Bay Military Housing Area, April 2013.
- 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.

Table



#### Table 1 Laboratory Analytical Results - Soil 104 Aspen Street (Formerly 369 Aspen Street) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Results Sample Collected 03/26/12						
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)								
Benzene	0.003	ND						
Ethylbenzene	1.15	ND						
Naphthalene	0.036	0.00614						
Toluene	0.627	ND						
Xylenes, Total	13.01	ND						
Semivolatile Organic Compounds Anal	yzed by EPA Method 8270D (mg/kg)							
Benzo(a)anthracene	0.66	0.0428						
Benzo(b)fluoranthene	0.66	ND						
Benzo(k)fluoranthene	0.66	ND						
Chrysene	0.66	0.0448						
Dibenz(a,h)anthracene	0.66	ND						

#### Notes:

<sup>(1)</sup> South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.0 and 3.1 (SCDHEC, May 2015 and SCDHEC, February 2016) and the Underground Storage Tank Assessment Guidelines (SCDHEC, February 2006).

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligram per kilogram

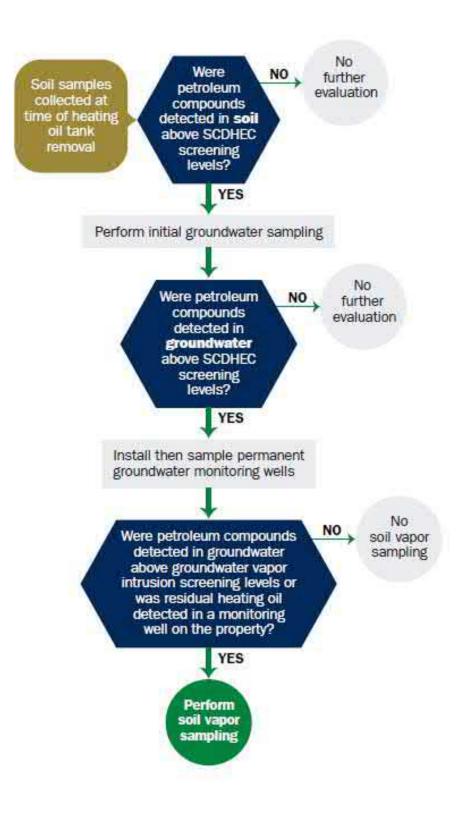
ND - not detected at the reporting limit (or method detection limit if shown on the laboratory report). The laboratory report is provided in Appendix B.

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Appendix A Multi-Media Selection Process for LBMH





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

Appendix B UST Assessment Report



#### Attachment 1

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

Date Received

State Use Only

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

### I. OWNERSHIP OF UST (S)

	nding Officer Attn: NRE	AO (Craig Ehde)						
Owner Name (Corporation, Individual, Public Agency, Other)								
P.O. Box 55001	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. #			_	- 1			
Laurel Bay Military H	lousing Area,	<u>Marine</u>	Corps	Air	Station,	<u>Beautort,</u>	<u>SC</u>
Facility Name or Company Site	Identifier						
369 Aspen Street, Lat Street Address or State Road (as		ltary Ho	using .	Area			
Beaufort,	Beaufort	1					
City	County						

Attachment 2

### **Insurance Statement**

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

Is there now, or has there ever been an insurance policy or other financial mechanism that covers this UST release? YES\_\_\_\_ NO\_\_\_\_ (check one)

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

My policy provider is: \_\_\_\_\_\_ The policy deductible is: \_\_\_\_\_\_ The policy limit is:

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

### IV. REQUEST FOR SUPERB FUNDING

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

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

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

Name (Type or print.)

Signature

### To be completed by Notary Public:

Sworn before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

(Name)

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

### VI. UST INFORMATION

	VI. USI INFORMATION	369Aspen
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 1980s
F.	Depth (ft.) To Base of Tank	6 '
G.	Spill Prevention Equipment Y/N	No
H·	Overfill Prevention Equipment Y/N	No
I.	Method of Closure Removed/Filled	Removed
J <sub>.</sub>	Date Tanks Removed/Filled	3/26/2012
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) <u>UST 369Aspen was removed from the ground and disposed at a</u> 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 369Aspen was previously filled with sand by others.

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

### VII. PIPING INFORMATION

		369Aspen
		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
т		

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

Corrosion and pitting were found on the surface of the steel vent pipe. Copper supply and return lines were sound.

#### **VIII. BRIEF SITE DESCRIPTION AND HISTORY**

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

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

## IX. SITE CONDITIONS

### X. SAMPLE INFORMATION

## A. SCDHEC Lab Certification Number 84009

В.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
369 Aspen	Excav at fill end	Soil	Sandy	6'	3/26/12 1215 hrs	P. Shaw	
1000011							
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.

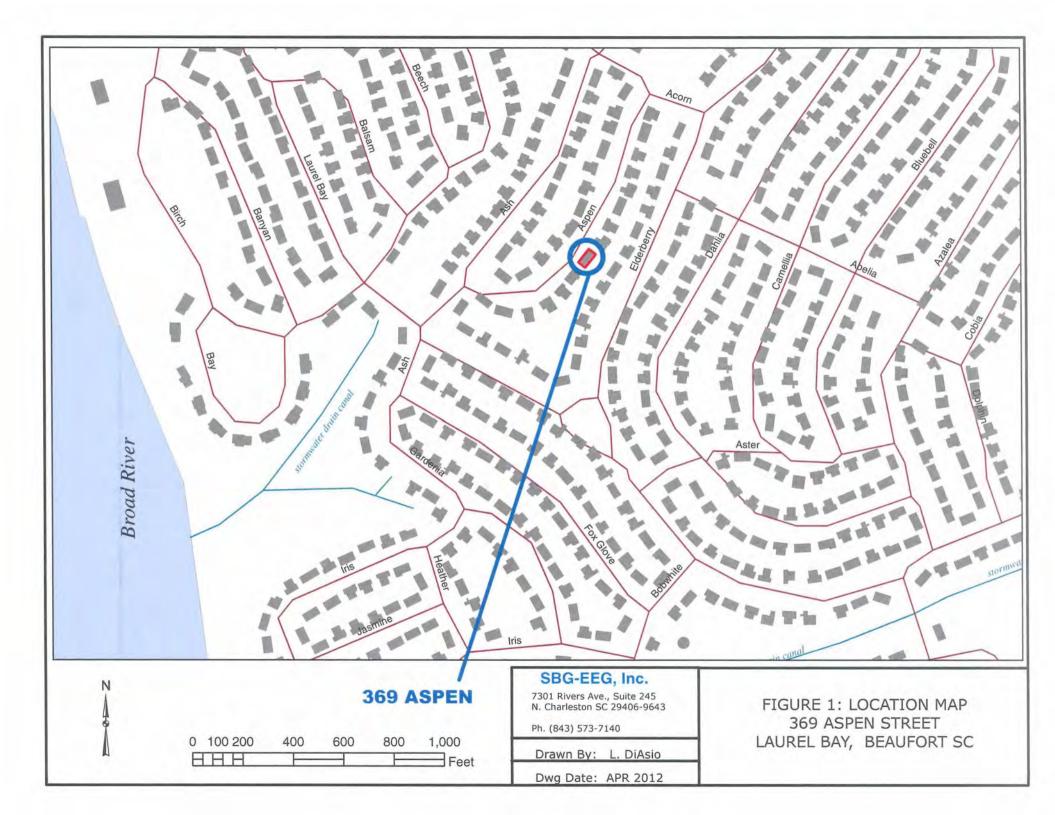
### **XII. RECEPTORS**

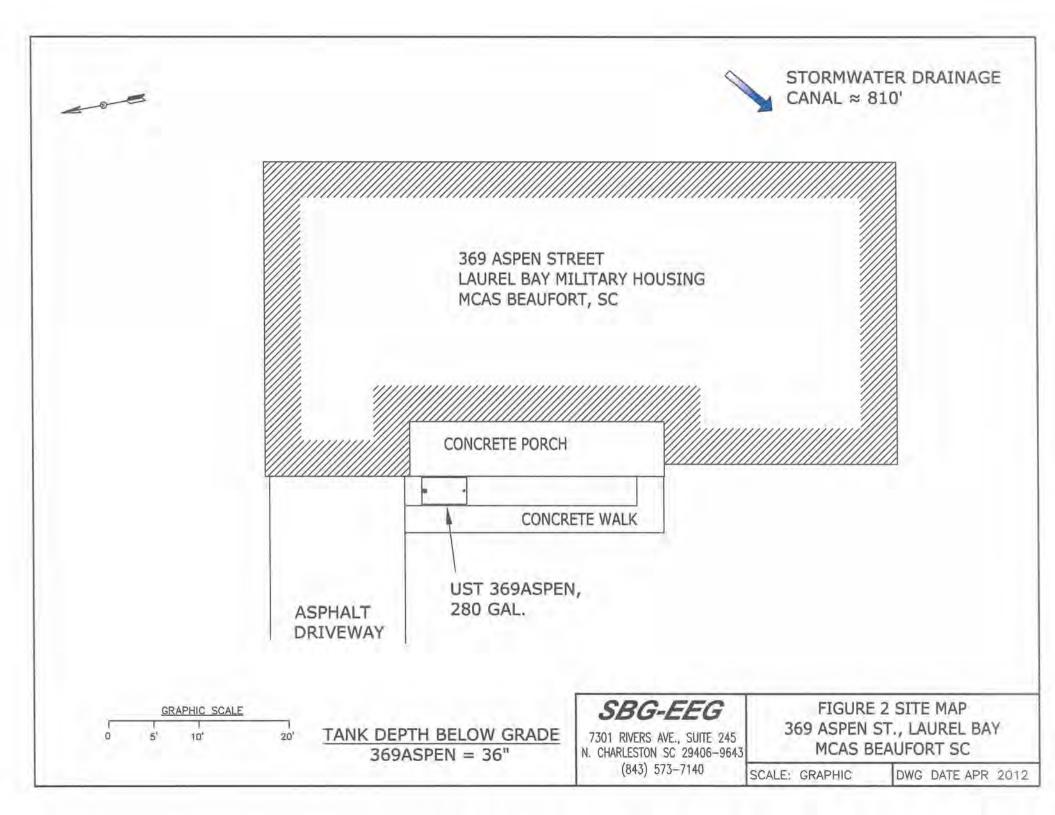
		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?	*X	
	*~ 810' to drainage c	anal	
	If yes, indicate type of receptor, distance, and direction on site map.		
В.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		X
	If yes, indicate type of well, distance, and direction on site map.		
C.	Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?		х
	If yes, indicate type of structure, distance, and direction on site map.		
D.	Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination? *Sewer, water, el cable, & fiber op		city,
	If yes, indicate the type of utility, distance, and direction on the site map.		
E.	Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete?		Х
	If yes, indicate the area of contaminated soil on the site map.		

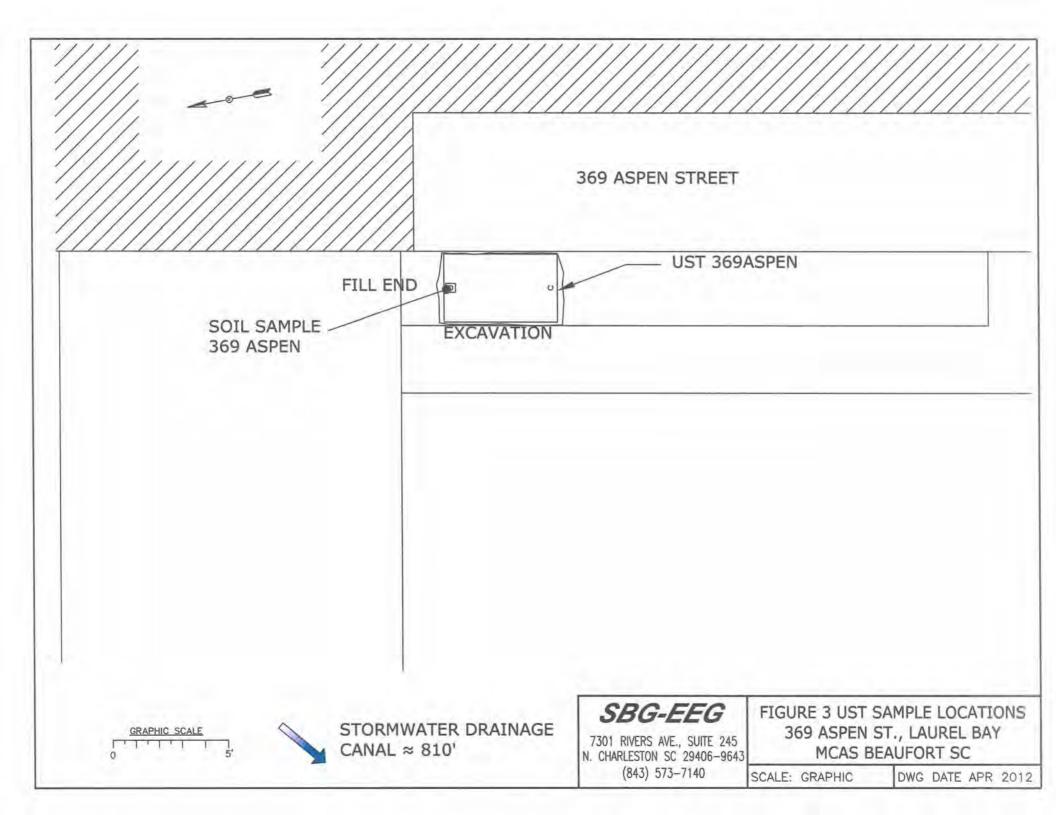
### XIII. SITE MAP

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

(Attach Site Map Here)









Picture 1: Location of UST 369Aspen.



Picture 2: UST 369Aspen excavation pit.

### XIV. SUMMARY OF ANALYSIS RESULTS

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

CoC UST	369Aspen				
Benzene	ND				
Toluene	ND				
Ethylbenzene	ND				
Xylenes	ND				
Naphthalene	0.00614 mg/k	g			
Benzo (a) anthracene	0.0428 mg/kg				
Benzo (b) fluoranthene	ND				
Benzo (k) fluoranthene	ND				
Chrysene	0.0448 mg/kg				
Dibenz (a, h) anthracene	ND				
TPH (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)	<b>W-1</b>	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: NWC3984

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

### For:

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

Attn: Tom McElwee

Vin Sa Hay

Authorized for release by: 5/3/2012 4:56:40 PM

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.

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Certification Summary	24
Chain of Custody	25

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	9
NWC3984-01	369 Aspen	Soil	03/26/12 12:15	03/31/12 08:30	
NWC3984-02	359 Aspen	Soil	03/27/12 11:30	03/31/12 08:30	
NWC3984-03	362 Aspen	Soil	03/28/12 11:45	03/31/12 08:30	
NWC3984-04	361 Aspen	Soil	03/29/12 14:45	03/31/12 08:30	

#### Job ID: NWC3984

#### Laboratory: TestAmerica Nashville

#### Narrative

REVISED REPORT: 05/03/12 KAH - To report result for Benzene on NWC3984-01. This report replaces the one generated on 04/16/12 @ 1720.

#### 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
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.
H2	Initial analysis within holding time. Reanalysis for the required dilution or confirmation was past holding time.
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.
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

#### 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
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dloxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

#### Client Sample ID: 369 Aspen

Date Collected: 03/26/12 12:15 Date Received: 03/31/12 08:30

#### Lab Sample ID: NWC3984-01 Matrix: Soil Percent Solids: 83.8

6

Method: SW846 8260B - Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00252	0.00138	mg/kg dry	10	03/31/12 14:37	04/05/12 22:10	1.00
Ethylbenzene	ND		0.00252	0.00138	mg/kg dry	10	03/31/12 14:37	04/05/12 22:10	1.00
Naphthalene	0.00614	J	0.00630	0.00315	mg/kg dry	17	03/31/12 14:37	04/05/12 22:10	1.00
Toluene	ND		0.00252	0.00138	mg/kg dry	10	03/31/12 14:37	04/05/12 22:10	1.00
Xylenes, total	ND		0.00630	0.00315	mg/kg dry	10	03/31/12 14:37	04/05/12 22:10	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	97		70 - 130				03/31/12 14:37	04/05/12 22:10	1.00
Dibromofluoromethane	100		70 - 130				03/31/12 14:37	04/05/12 22:10	1.00
Toluene-d8	95		70 - 130				03/31/12 14:37	04/05/12 22:10	1.00
4-Bromofluorobenzene	104		70 - 130				03/31/12 14:37	04/05/12 22:10	1.00
Method: SW846 8270D	Polyaromatic Hydroca	rbons by B	EPA 8270D						
Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0797	0.0404	mg/kg dry		04/02/12 16:18	04/03/12 17:40	1.00
Acenaphthylene	ND		0.0797	0.0404	mg/kg dry	9	04/02/12 16:18	04/03/12 17:40	1.00
Anthracene	ND		0.0797	0.0404	mg/kg dry	н	04/02/12 16:18	04/03/12 17:40	1.00
Benzo (a) anthracene	0.0428	1	0.0797	0.0404	mg/kg dry	13	04/02/12 16:18	04/03/12 17:40	1.00
Benzo (a) pyrene	ND		0.0797	0.0404	mg/kg dry	12	04/02/12 16:18	04/03/12 17:40	1.00
Benzo (b) fluoranthene	ND		0.0797	0.0404	mg/kg dry	373	04/02/12 16:18	04/03/12 17:40	1,00
Benzo (g,h,i) perylene	ND		0.0797	0.0404	mg/kg dry	12	04/02/12 16:18	04/03/12 17:40	1.00
Benzo (k) fluoranthene	ND		0.0797	0.0404	mg/kg dry	12	04/02/12 16:18	04/03/12 17:40	1.00
Chrysene	0.0448	J	0.0797	0.0404	mg/kg dry	п	04/02/12 16:18	04/03/12 17:40	1.00
Dibenz (a,h) anthracene	ND		0.0797	0.0404	mg/kg dry	12	04/02/12 16:18	04/03/12 17:40	1.00
Fluoranthene	0.0539	d.	0.0797	0.0404	mg/kg dry	a	04/02/12 16:18	04/03/12 17:40	1.00
Fluorene	ND		0.0797	0.0404	mg/kg dry	12	04/02/12 16:18	04/03/12 17:40	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0797	0.0404	mg/kg dry	12	04/02/12 16:18	04/03/12 17:40	1.00
Naphthalene	ND		0.0797	0.0404	mg/kg dry	12	04/02/12 16:18	04/03/12 17:40	1.00
Phenanthrene	ND		0.0797	0.0404	mg/kg dry	13	04/02/12 16:18	04/03/12 17:40	1.00
Pyrene	0.0460	1	0.0797	0.0404	mg/kg dry	13	04/02/12 16:18	04/03/12 17:40	1.00
1-Methylnaphthalene	ND		0.0797	0.0404	mg/kg dry	п	04/02/12 16:18	04/03/12 17:40	1.00
2-Methylnaphthalene	ND		0.0797	0.0404	mg/kg dry	÷.	04/02/12 16:18	04/03/12 17:40	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	87		18 - 120				04/02/12 16:18	04/03/12 17:40	1.00
2-Fluorobiphenyl	68		14 - 120				04/02/12 16:18	04/03/12 17:40	1.00
Nitrobenzene-d5	69		17 - 120				04/02/12 16:18	04/03/12 17:40	1.00
Method: SW-846 - Gene	ral Chemistry Paramete	rs						1000	0.20
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	83.8		0.500	0.500	%		04/07/12 15:56	04/07/12 17:07	1.00

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

### Lab Sample ID: NWC3984-02 Matrix: Soil Percent Solids: 90.6

6

# Client Sample ID: 359 Aspen Date Collected: 03/27/12 11:30

Date Received: 03/31/12 08:30

% Dry Solids

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.00216	0.00119	mg/kg dry	Ξ	03/31/12 14:37	04/05/12 22:42	1.00	
Ethylbenzene	ND		0.00216	0.00119	mg/kg dry		03/31/12 14:37	04/05/12 22:42	1.00	
Toluene	ND		0.00216	0.00119	mg/kg dry	đ	03/31/12 14:37	04/05/12 22:42	1.00	
Xylenes, total	ND		0.00540	0.00270	mg/kg dry	11	03/31/12 14:37	04/05/12 22:42	1.00	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4	102		70 - 130				03/31/12 14:37	04/05/12 22:42	1.00	
Dibromofluoromethane	99		70 - 130				03/31/12 14:37	04/05/12 22:42	1.00	
Toluene-d8	100		70 - 130				03/31/12 14:37	04/05/12 22:42	1.00	
4-Bromofluorobenzene	138	ZX	70 - 130				03/31/12 14:37	04/05/12 22:42	1.00	
Method: SW846 8260B - Vo	latile Organic Comp	ounds by	EPA Method 82	60B - RE2	2					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Naphthalene	ND	H2 RL1	0.263	0.132	mg/kg dry	D	03/27/12 11:30	04/11/12 13:52	50.0	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4	97		70 - 130				03/27/12 11:30	04/11/12 13:52	50.0	
Dibromofluoromethane	91		70 + 130				03/27/12 11:30	04/11/12 13:52	50.0	
Toluene-d8	96		70 - 130				03/27/12 11:30	04/11/12 13:52	50.0	
4-Bromofluorobenzene	124		70 - 130				03/27/12 11:30	04/11/12 13:52	50.0	
Method: SW846 8270D - Po	lyaromatic Hydroca	rbons by E	PA 8270D							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Acenaphthene	ND		0.0722	0.0366	mg/kg dry	12	04/02/12 16:18	04/03/12 18:00	1.00	
Acenaphthylene	ND		0.0722	0.0366	mg/kg dry	13	04/02/12 16:18	04/03/12 18:00	1.00	
Anthracene	ND		0.0722	0.0366	mg/kg dry	12.	04/02/12 16:18	04/03/12 18:00	1.00	
Benzo (a) anthracene	ND		0.0722	0.0366	mg/kg dry		04/02/12 16:18	04/03/12 18:00	1.00	
Benzo (a) pyrene	ND		0.0722	0.0366	mg/kg dry	0	04/02/12 16:18	04/03/12 18:00	1.00	
Benzo (b) fluoranthene	0.348		0.0722	0.0366	mg/kg dry		04/02/12 16:18	04/03/12 18:00	1.00	
Benzo (g,h,i) perylene	0.154		0.0722	0.0366	mg/kg dry	12	04/02/12 16:18	04/03/12 18:00	1.00	
Benzo (k) fluoranthene	0.0600	J	0.0722	0.0366	mg/kg dry	11	04/02/12 16:18	04/03/12 18:00	1.00	
Chrysene	0.146		0.0722	0.0366	mg/kg dry	12.	04/02/12 16:18	04/03/12 18:00	1.00	
Dibenz (a,h) anthracene	0.0510	J	0.0722	0.0366	mg/kg dry		04/02/12 16:18	04/03/12 18:00	1.00	
Fluoranthene	ND		0.0722	0.0366	mg/kg dry	10	04/02/12 16:18	04/03/12 18:00	1.00	
Fluorene	ND		0.0722	0.0366	mg/kg dry	.00	04/02/12 16:18	04/03/12 18:00	1.00	
Indeno (1,2,3-cd) pyrene	0,160		0.0722	0.0366	mg/kg dry	-87	04/02/12 16:18	04/03/12 18:00	1.00	
Naphthalene	ND		0.0722	0.0366	mg/kg dry	α,	04/02/12 16:18	04/03/12 18:00	1.00	
Phenanthrene	ND		0.0722	0.0366	mg/kg dry	-10	04/02/12 16:18	04/03/12 18:00	1.00	
Pyrene	ND		0.0722	0.0366	mg/kg dry	÷.	04/02/12 16:18	04/03/12 18:00	1.00	
1-Methylnaphthalene	ND		0.0722	0.0366	mg/kg dry	a,	04/02/12 16:18	04/03/12 18:00	1.00	
2-Methylnaphthalene	ND		0.0722	0.0366	mg/kg dry	0	04/02/12 16:18	04/03/12 18:00	1.00	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
Terphenyl-d14	74		18 - 120				04/02/12 16:18	04/03/12 18:00	1.00	
2-Fluorobiphenyl	58		14 - 120				04/02/12 16:18	04/03/12 18:00	1.00	
Nitrobenzene-d5	59		17 - 120				04/02/12 16:18	04/03/12 18:00	1.00	
Method: SW-846 - General C	Chemistry Parameter	rs								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	

1.00

04/07/12 15:56 04/07/12 17:07

0.500

90.6

0.500 %

### Client Sample ID: 362 Aspen

Date Collected: 03/28/12 11:45 Date Received: 03/31/12 08:30

#### Lab Sample ID: NWC3984-03 Matrix: Soil Percent Solids: 83.9

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Method: SW846 8260B -				MDL	Hait	D	Prepared	Analyzed	Dil Fac
Analyte		Qualifier	RL			4	03/31/12 14:37	04/06/12 13:44	1.00
Benzene	ND		0.00189	0.00104	mg/kg dry		03/31/12 14:37	04/00/12 13:44	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1.2-Dichloroethane-d4	118		70 - 130				03/31/12 14:37	04/06/12 13:44	1.00
Dibromofluoromethane	120		70 - 130				03/31/12 14:37	04/06/12 13:44	1.00
Toluene-d8	156	ZX	70 - 130				03/31/12 14:37	04/06/12 13:44	1.00
4-Bromofluorobenzene	682	ZX	70 - 130				03/31/12 14:37	04/06/12 13:44	1.00
Method: SW846 8260B -	Volatile Organic Comp	ounds by F	PA Method 82	60B - RE2	2				
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.745		0.101	0.0558	mg/kg dry	10	03/31/12 14:37	04/06/12 14:16	50.0
Naphthalene	7.98		0.254	0.127	mg/kg dry	- 0	03/31/12 14:37	04/06/12 14:16	50.0
Toluene	0.149		0.101	0.0558	mg/kg dry	- 32	03/31/12 14:37	04/06/12 14:16	50.0
Xylenes, total	3.97		0.254	0.127	mg/kg dry	ġ,	03/31/12 14:37	04/06/12 14:16	50.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1.2-Dichloroethane-d4	91		70 - 130				03/31/12 14:37	04/06/12 14:16	50.0
Dibromofluoromethane	92		70 - 130				03/31/12 14:37	04/06/12 14:16	50.0
Toluene-d8	96		70 - 130				03/31/12 14:37	04/06/12 14:16	50.0
4-Bromofluorobenzene	105		70 - 130				03/31/12 14:37	04/06/12 14:16	50.0
		A star bur F	04 02700						
Method: SW846 8270D - Analyte		Qualifier	RL RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
and the second second	0.611	-	0.0795	0.0403	mg/kg dry	īπ.	04/02/12 16:18	04/03/12 18:21	1.00
Acenaphthene	0.829		0.0795	0.0403	mg/kg dry	10	04/02/12 16:18	04/03/12 18:21	1.00
Acenaphthylene Anthracene	ND		0.0795	0.0403	mg/kg dry	-02	04/02/12 16:18	04/03/12 18:21	1.00
Benzo (a) anthracene	ND		0.0795	0.0403	mg/kg dry	32.	04/02/12 16:18	04/03/12 18:21	1.00
Benzo (a) pyrene	ND		0.0795	0.0403	mg/kg dry	(12)	04/02/12 16:18	04/03/12 18:21	1.00
Benzo (b) fluoranthene	ND		0.0795	0.0403	mg/kg dry	12	04/02/12 16:18	04/03/12 18:21	1.00
	ND		0.0795	0.0403	mg/kg dry	-0-	04/02/12 16:18	04/03/12 18:21	1.00
Benzo (g,h,i) perylene Benzo (k) fluoranthene	ND		0.0795	0.0403	mg/kg dry	25	04/02/12 16:18	04/03/12 18:21	1.00
	0.0684	J	0.0795	0.0403	mg/kg dry	31	04/02/12 16:18	04/03/12 18:21	1.00
Chrysene Dibora (a b) asthrooma	ND	2	0.0795	0.0403	mg/kg dry	10	04/02/12 16:18	04/03/12 18:21	1.00
Dibenz (a,h) anthracene Fluoranthene	ND		0.0795	0.0403	mg/kg dry	300	04/02/12 16:18	04/03/12 18:21	1.00
	3.61		0.0795	0.0403	mg/kg dry	0	04/02/12 16:18	04/03/12 18:21	1.00
Fluorene Indeno (1,2,3-cd) pyrene	ND		0.0795	0.0403	mg/kg dry	10	04/02/12 16:18	04/03/12 18:21	1.00
Contraction of the second second second	3.44		0.0795	0.0403	mg/kg dry	a.	04/02/12 16:18	04/03/12 18:21	1.00
Naphthalene Pyrene	0.505		0.0795	0.0403	mg/kg dry	ġ	04/02/12 16:18	04/03/12 18:21	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Contraction of the second s	93	diamina	18 - 120				04/02/12 16:18	04/03/12 18:21	1.00
Terphenyl-d14	72		14 - 120				04/02/12 16:18	04/03/12 18:21	1.00
2-Fluorobiphenyl Nitrobenzene-d5	121	ZX	17 - 120				04/02/12 16:18	04/03/12 18:21	1.00
Method: SW846 8270D -	Polyaromatic Hudroon	thons by E	PA 82700 - PE	1					
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	9.35	A State of the sta	0.795	0.403			04/02/12 16:18	04/04/12 11:15	10.0
	16.9		0.795		mg/kg dry		04/02/12 16:18	04/04/12 11:15	10.0
1-Methylnaphthalene									

TestAmerica Job ID: NWC3984

Matrix: Soil

Percent Solids: 83.9

Lab Sample ID: NWC3984-03

### Client Sample ID: 362 Aspen Date Collected: 03/28/12 11:45

Date Received: 03/31/12 08:30

Method: SW-846 - General	Chemistry Paramete	rs							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	83,9		0.500	0.500	%		04/07/12 15:56	04/07/12 17:07	1.00

#### Client Sample ID: 361 Aspen

Date Collected: 03/29/12 14:45 Date Received: 03/31/12 08:30

### Lab Sample ID: NWC3984-04 Matrix: Soil Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00206	0.00113	mg/kg dry	Ē.	03/31/12 14:37	04/05/12 23:46	1.00
Ethylbenzene	ND		0.00206	0.00113	mg/kg dry	10	03/31/12 14:37	04/05/12 23:46	1.00
Naphthalene	0.00276	J	0.00515	0.00258	mg/kg dry	£	03/31/12 14:37	04/05/12 23:46	1.00
Toluene	ND		0.00206	0.00113	mg/kg dry	.0	03/31/12 14:37	04/05/12 23:46	1.00
Xylenes, total	ND		0.00515	0.00258	mg/kg dry	112	03/31/12 14:37	04/05/12 23:46	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	95		70 - 130				03/31/12 14:37	04/05/12 23:46	1.00
Dibromofluoromethane	100		70 - 130				03/31/12 14:37	04/05/12 23:46	1.00
Toluene-d8	.93		70 - 130				03/31/12 14:37	04/05/12 23:46	1.00
4-Bromofluorobenzene	101		70 - 130				03/31/12 14:37	04/05/12 23:46	1.00

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

the still net we do not be seen a se	in the state of the state of the state		and the second of the second						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0775	0.0393	mg/kg dry	12	04/02/12 16:18	04/03/12 18:41	1.00
Acenaphthylene	ND		0.0775	0.0393	mg/kg dry	E	04/02/12 16:18	04/03/12 18:41	1.00
Anthracene	ND		0.0775	0.0393	mg/kg dry	17	04/02/12 16:18	04/03/12 18:41	1.00
Benzo (a) anthracene	ND		0.0775	0.0393	mg/kg dry	10	04/02/12 16:18	04/03/12 18:41	1.00
Benzo (a) pyrene	ND		0.0775	0.0393	mg/kg dry	10	04/02/12 16:18	04/03/12 18:41	1.00
Benzo (b) fluoranthene	ND		0.0775	0.0393	mg/kg dry	(II)	04/02/12 16:18	04/03/12 18:41	1.00
Benzo (g,h,i) perylene	ND		0.0775	0.0393	mg/kg dry	0	04/02/12 16:18	04/03/12 18:41	1.00
Benzo (k) fluoranthene	ND		0.0775	0.0393	mg/kg dry	10	04/02/12 16:18	04/03/12 18:41	1.00
Chrysene	ND		0.0775	0.0393	mg/kg dry	9	04/02/12 16:18	04/03/12 18:41	1.00
Dibenz (a,h) anthracene	ND		0.0775	0.0393	mg/kg dry	1	04/02/12 16:18	04/03/12 18:41	1.00
Fluoranthene	ND		0.0775	0.0393	mg/kg dry		04/02/12 16:18	04/03/12 18:41	1.00
Fluorene	ND		0.0775	0.0393	mg/kg dry	9	04/02/12 16:18	04/03/12 18:41	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0775	0.0393	mg/kg dry	11	04/02/12 16:18	04/03/12 18:41	1.00
Naphthalene	ND		0.0775	0.0393	mg/kg dry	'n	04/02/12 16:18	04/03/12 18:41	1.00
Phenanthrene	ND		0.0775	0.0393	mg/kg dry	12	04/02/12 16:18	04/03/12 18:41	1.00
Pyrene	ND		0.0775	0.0393	mg/kg dry	.0	04/02/12 16:18	04/03/12 18:41	1.00
1-Methylnaphthalene	ND		0.0775	0.0393	mg/kg dry	- 12	04/02/12 16:18	04/03/12 18:41	1.00
2-Methylnaphthalene	ND		0.0775	0.0393	mg/kg dry	.0	04/02/12 16:18	04/03/12 18:41	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	79		18 - 120				04/02/12 16:18	04/03/12 18:41	1.00
2-Fluorobiphenyl	61		14 - 120				04/02/12 16:18	04/03/12 18:41	1.00
Nitrobenzene-d5	61		17 - 120				04/02/12 16:18	04/03/12 18:41	1.00
Method: SW-846 - Gene	ral Chemistry Paramete	rs							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	85.3		0.500	0.500	%		04/07/12 15:56	04/07/12 17:07	1.00

RL

0.00200

0.00200

0.00500

0.00200

0.00500

MDL Unit

0.00110 mg/kg wet

0.00110 mg/kg wet

0.00250 mg/kg wet

0.00110 mg/kg wet

0.00250 mg/kg wet

D

Prepared

04/06/12 00:00

04/06/12 00:00

04/06/12 00:00

04/06/12 00:00

04/06/12 00:00

Prepared

04/06/12 00:00

04/06/12 00:00

04/06/12 00:00

04/06/12 00:00

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

Client Sample ID: Method Blank

Analyzed

04/06/12 12:08

04/06/12 12:08

04/06/12 12:08

04/06/12 12:08

04/06/12 12:08

Analyzed

04/06/12 12:08

04/06/12 12:08

04/06/12 12:08

04/06/12 12:08

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Type: Total

Prep Type: Total Prep Batch: 12C6374\_P

Dil Fac

1.00

1.00

1.00

1.00

1.00

Dil Fac

1.00

1.00

1.00

1.00

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

Lab Sample ID: 12C6374-BLK1		
Matrix: Soil		
Analysis Batch: V005859		
	Blank	Blank
Analyte	Result	Qualifier
Benzene	ND	
Ethylbenzene	ND	
Naphthalene	ND	
Toluene	ND	
Xylenes, total	ND	

	Blank Blank	
Surrogate	%Recovery Qualifier	Limits
1,2-Dichloroethane-d4	92	70 - 130
Dibromofluoromethane	101	70 - 130
Toluene-d8	95	70 - 130
4-Bromofluorobenzene	99	70 - 130

#### Lab Sample ID: 12C6374-BLK2 Matrix: Soil

Analysis Batch: V005859							F	Prep Batch: 120	
	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0550	mg/kg wet		04/06/12 00:00	04/06/12 12:40	50.0
Ethylbenzene	ND		0.100	0.0550	mg/kg wet		04/06/12 00:00	04/06/12 12:40	50.0
Naphthalene	ND		0.250	0.125	mg/kg wet		04/06/12 00:00	04/06/12 12:40	50.0
Toluene	ND		0.100	0.0550	mg/kg wet		04/06/12 00:00	04/06/12 12:40	50.0
Xylenes, total	ND		0.250	0.125	mg/kg wet		04/06/12 00:00	04/06/12 12:40	50.0
	Blank	Blank							
Surrogate	%Recovery	Qualifier	Limite				Prenared	Analyzed	Dil Fac

Surroyate	Janecovery Quanner	Linnis	Frepareu	Analyzeu	Dirrac
1,2-Dichloroethane-d4	93	70 - 130	04/06/12 00:00	04/06/12 12:40	50.0
Dibromofluoromethane	100	70 - 130	04/06/12 00:00	04/06/12 12:40	50.0
Toluene-d8	95	70 - 130	04/06/12 00:00	04/06/12 12:40	50.0
4-Bromofluorobenzene	99	70 - 130	04/06/12 00:00	04/06/12 12:40	50.0

# Lab Sample ID: 12C6374-BS1

Matrix: Soil

		Spike	LCS	LCS				Prep Batch: 12C6374_P %Rec.
		Added	Result	Qualifier	Unit	D	%Rec	Limits
		50.0	56.6		ug/kg		113	75 - 127
		50.0	53.3		ug/kg		107	80 - 134
		50.0	57.9		ug/kg		116	69 - 150
		50.0	53.2		ug/kg		106	80 - 132
		150	157		ug/kg		105	80 - 137
LCS	LCS							
%Recovery	Qualifier	Limits						
93		70 - 130						
	%Recovery	LCS LCS %Recovery Qualifier 93	Added 50.0 50.0 50.0 50.0 50.0 150 LCS LCS %Recovery Qualifier Limits	Added         Result           50.0         56.6           50.0         53.3           50.0         57.9           50.0         53.2           150         157           LCS         LCS           %Recovery         Qualifier         Limits	Added         Result         Qualifier           50.0         56.6         50.0         53.3           50.0         57.9         50.0         53.2           50.0         53.2         150         157           LCS         LCS         Limits         50.0         50.0	Added         Result         Qualifier         Unit           50.0         56.6         ug/kg           50.0         53.3         ug/kg           50.0         57.9         ug/kg           50.0         53.2         ug/kg           150         157         ug/kg           LCS         LCS         Limits	Added         Result         Qualifier         Unit         D           50.0         56.6         ug/kg              D            D            D            D             Ug/kg	Added         Result         Qualifier         Unit         D         %Rec           50.0         56.6         ug/kg         113           50.0         53.3         ug/kg         107           50.0         57.9         ug/kg         116           50.0         53.2         ug/kg         106           150         157         ug/kg         105           LCS         LCS         Limits         Limits

1,2-Dicitior0601806-04	30	10-100
Dibromofluoromethane	104	70 - 130
Toluene-d8	95	70 - 130
4-Bromofluorobenzene	98	70 - 130

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

Lab Sample ID: 12C6374-MS1								Client	Sample ID	: Matrix	Spike
Matrix: Soil									Pr	ер Туре	: Total
Analysis Batch: V005859									Prep Bato		
	Sample	Sample	Spike	Matrix Spike	Matrix Spi	ke			%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Benzene	ND		0.790	0.881		mg/kg wet		112	31 - 143		
Ethylbenzene	0.0881		0.790	0.974		mg/kg wet		112	23 - 161		
Naphthalene	0.330		0.790	1.19		mg/kg wet		109	10 - 176		
Toluene	ND		0.790	0.856		mg/kg wet		108	30 - 155		
Xylenes, total	0.447		2.37	3.00		mg/kg wet		108	25 - 162		
	Matrix Spike	Matrix Spike									
Surrogate	%Recovery	Qualifier	Limits								
1,2-Dichloroethane-d4	89		70 - 130								
Dibromofluoromethane	106		70 - 130								
Toluene-d8	95		70 - 130								
4-Bromofluorobenzene	97		70 - 130								
Lab Sample ID: 12C6374-MSD1						Clie	ent Sa	ample II	): Matrix Sp	oike Dup	licate
Matrix: Soil									Pre	p Type:	Total
Analysis Batch: V005859									Prep Batc		
and a set of the set o	Sample	Sample	Spike	Itrix Spike Dup	Matrix Spil	ke Dur			%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		0.790	0.914		mg/kg wet		116	31 - 143	4	50
Ethylbenzene	0.0881		0.790	0.990		mg/kg wet		114	23 - 161	2	50
Naphthalene	0.330		0.790	1.27		mg/kg wet		119	10 - 176	6	50

0.790

2.37

0.877

3.09

mg/kg wet

mg/kg wet

111

111

30 - 155

25 - 162

Client Sample ID: Method Blank

2

3

Prep Type: Total

50

50

	Matrix Spike Dup	Matrix Spike	Dup
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	89		70 - 130
Dibromofluoromethane	106		70 - 130
Toluene-d8	.93		70 - 130
4-Bromofluorobenzene	97		70 - 130

ND

0.447

#### Lab Sample ID: 12D1186-BLK1 Matrix: Soil

Toluene

Xylenes, total

The second									
Analysis Batch: V005681							1	Prep Batch: 120	01186 P
	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		04/05/12 14:08	04/05/12 16:49	1.00
Ethylbenzene	ND		0.00200	0.00110	mg/kg wet		04/05/12 14:08	04/05/12 16:49	1.00
Naphthalene	ND		0.00500	0.00250	mg/kg wet		04/05/12 14:08	04/05/12 16:49	1.00
Toluene	ND		0.00200	0.00110	mg/kg wet		04/05/12 14:08	04/05/12 16:49	1.00
Xylenes, total	ND		0.00500	0.00250	mg/kg wet		04/05/12 14:08	04/05/12 16:49	1.00
	Blank	Blank							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	93		70 - 130				04/05/12 14:08	04/05/12 16:49	1.00
Dibromofluoromethane	101		70 - 130				04/05/12 14:08	04/05/12 16:49	1.00
Toluene-d8	95		70 - 130				04/05/12 14:08	04/05/12 16:49	1.00
4-Bromofluorobenzene	.98		70 - 130				04/05/12 14:08	04/05/12 16:49	1.00

7

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

Lab Sample ID: 12D1186-BLK2 Matrix: Soil Analysis Batch: V005681	Blank	Blank						mple ID: Metho Prep Typ Prep Batch: 120	e: Total
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0550	mg/kg wet		04/05/12 14:08	04/05/12 17:21	50.0
Ethylbenzene	ND		0.100	0.0550	mg/kg wet		04/05/12 14:08	04/05/12 17:21	50.0
Naphthalene	ND		0.250	0.125	mg/kg wet		04/05/12 14:08	04/05/12 17:21	50.0
Toluene	ND		0.100	0.0550	mg/kg wet		04/05/12 14:08	04/05/12 17:21	50.0
Xylenes, total	ND		0.250	0.125	mg/kg wet		04/05/12 14:08	04/05/12 17:21	50.0
	Blank	Blank							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroelhane-d4	93		70 - 130				04/05/12 14:08	04/05/12 17:21	50.0
Dibromofluoromethane	101		70 - 130				04/05/12 14:08	04/05/12 17:21	50.0
Toluene-d8	96		70 - 130				04/05/12 14:08	04/05/12 17:21	50.0
4-Bromofluorobenzene	98		70 - 130				04/05/12 14:08	04/05/12 17:21	50.0

### Lab Sample ID: 12D1186-BS1 Matrix: Soil

#### Analysis Batch: V005681

	Spike	LCS	LCS		%Rec.	
Analyte	Added	Result	Qualifier Unit	D %Rec	Limits	
Benzene	50.0	54.7	ug/kg	109	75 - 127	
Ethylbenzene	50.0	52.9	ug/kg	106	80 - 134	
Naphthalene	50.0	54.9	ug/kg	110	69 - 150	
Toluene	50.0	50.9	ug/kg	102	80 - 132	
Xylenes, total	150	160	ug/kg	106	80 - 137	

	LUS	LUS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	94		70 - 130
Dibromofluoromethane	104		70 - 130
Toluene-d8	93		70 - 130
4-Bromofluorobenzene	95		70 - 130

100 100

#### Lab Sample ID: 12D1186-BSD1 Matrix: Soil

Analysis Batch: V005681						Prep Batc	h: 12D1	
	Spike	LCS Dup LCS Dup				%Rec.		RPD
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	50.0	54.6	ug/kg		109	75 - 127	0.3	50
Ethylbenzene	50.0	51.7	ug/kg		103	80 - 134	2	50
Naphthalene	50.0	55.0	ug/kg		110	69 - 150	0.09	50
Toluene	50.0	51.1	ug/kg		102	80 - 132	0.4	50
Xylenes, total	150	154	ug/kg		103	80 - 137	3	50
LCS Dup LCS Dup								

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	94		70 - 130
Dibromofluoromethane	104		70 - 130
Toluene-d8	95		70 - 130
4-Bromofluorobenzene	96		70 - 130

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 12D1186\_P

Clie	nt San	ple ID:	Lab Contro	Sampl	e Dup
			Pre	p Type:	Total
			Prep Batch	n: 12D1	
			%Rec.		RPD
it	D	%Rec	Limits	RPD	Limit
		100	75 107		

7

50 50 50

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

Lab Sample ID: 12D1186-MS1											
								Client	Sample ID	: Matrix	Spike
Matrix: Soil										ер Туре	
Analysis Batch: V005681									Prep Bato	h: 12D1	186_P
	Sample	Sample	Spike	Matrix Spike	Matrix Spil	(e			%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Benzene	ND		2.28	2.83		mg/kg wet		124	31 - 143		
Ethylbenzene	ND		2.28	2.79		mg/kg wet		122	23 - 161		
Naphthalene	ND		2.28	2.70		mg/kg wet		118	10 - 176		
Toluene	ND		2.28	2.72		mg/kg wet		119	30 - 155		
Xylenes, total	ND		6.84	8.16		mg/kg wet		119	25 - 162		
	Matrix Spike	Matrix Spike									
Surrogate	%Recovery	Qualifier	Limits								
1,2-Dichloroethane-d4	92		70 - 130								
Dibromofluoromethane	102		70 - 130								
Toluene-d8	95		70 - 130								
4-Bromofluorobenzene	96		70 - 130								
Lab Sample ID: 12D1186-MSD1						Clie	nt Sa	mple ID	): Matrix Sp	oike Dup	licate
Matrix: Soil										p Type:	
Analysis Batch: V005681									Prep Batc		
and the second sec	Sample	Sample	Spike	Itrix Spike Dup	Matrix Spik	e Duş			%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		2.28	2.64		mg/kg wet		116	31 - 143	7	50
Ethylbenzene	ND		2.28	2.57		mg/kg wet		113	23 - 161	8	50

Benzene	ND		2.28	2.64	mg/kg wet	116	31 - 143	7
Ethylbenzene	ND		2.28	2.57	mg/kg wet	113	23 - 161	8
Naphthalene	ND		2.28	2.48	mg/kg wet	109	10 - 176	9
Toluene	ND		2.28	2.52	mg/kg wet	110	30 - 155	8
Xylenes, total	ND		6.84	7.50	mg/kg wet	110	25 - 162	8
	Matrix Spike Dup	Matrix Spike	Dup					
Surrogate	%Recovery	Qualifier	Limits					
	the second se		100 March 100 Ma					

1,2-Dichloroethane-d4	92	70 - 130
Dibromofluoromethane	101	70 - 130
Toluene-d8	95	70 - 130
4-Bromofluorobenzene	98	70 - 130

### Lab Sample ID: 12D2062-BLK1 Matrix: Soil

Analysis Batch: V006026

	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		04/11/12 00:53	04/11/12 12:16	1.00
Ethylbenzene	ND		0.00200	0.00110	mg/kg wet		04/11/12 00:53	04/11/12 12:16	1.00
Naphthalene	ND		0.00500	0.00250	mg/kg wet		04/11/12 00:53	04/11/12 12:16	1.00
Toluene	ND		0.00200	0.00110	mg/kg wet		04/11/12 00:53	04/11/12 12:16	1.00
Xylenes, total	ND		0.00500	0.00250	mg/kg wet		04/11/12 00:53	04/11/12 12:16	1.00
	Blank	Blank							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	96		70 - 130				04/11/12 00:53	04/11/12 12:16	1.00
Dibromofluoromethane	99		70 - 130				04/11/12 00:53	04/11/12 12:16	1.00
Toluene-d8	99		70 - 130				04/11/12 00:53	04/11/12 12:16	1.00
4-Bromofluorobenzene	100		70 - 130				04/11/12 00:53	04/11/12 12:16	1.00

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 12D2062 P

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

Lab Sample ID: 12D2062-BLK2							Client Sa	mple ID: Metho	d Blank
Matrix: Soil								Prep Typ	
Analysis Batch: V006026							1	Prep Batch: 120	2062 P
and the second se	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0550	mg/kg wet		04/11/12 00:53	04/11/12 12:48	50.0
Ethylbenzene	ND		0.100	0.0550	mg/kg wet		04/11/12 00:53	04/11/12 12:48	50.0
Naphthalene	ND		0.250	0.125	mg/kg wet		04/11/12 00:53	04/11/12 12:48	50.0
Toluene	ND		0.100	0.0550	mg/kg wet		04/11/12 00:53	04/11/12 12:48	50.0
Xylenes, total	ND		0.250	0.125	mg/kg wet		04/11/12 00:53	04/11/12 12:48	50.0
	Blank	Blank							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	88		70 - 130				04/11/12 00:53	04/11/12 12:48	50.0
Dibromofluoromethane	96		70 - 130				04/11/12 00:53	04/11/12 12:48	50.0
Toluene-d8	102		70 - 130				04/11/12 00:53	04/11/12 12:48	50.0
4-Bromofluorobenzene	100		70 - 130				04/11/12 00:53	04/11/12 12:48	50.0

### Lab Sample ID: 12D2062-BS1 Matrix: Soil

#### Analysis Batch: V006026

		Spike	LCS	LCS				%Rec.	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene		50.0	50.9		ug/kg		102	75 - 127	
Ethylbenzene		50.0	52,5		ug/kg		105	80 - 134	
Naphthalene		50.0	56.9		ug/kg		114	69 - 150	
Toluene		50.0	52.1		ug/kg		104	80 - 132	
Xylenes, total		150	154		ug/kg		103	80 - 137	
	105 105								

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	95		70 - 130
Dibromofluoromethane	103		70 - 130
Toluene-d8	100		70 - 130
4-Bromofluorobenzene	.99		70 - 130

#### Lab Sample ID: 12D2062-MS1 Matrix: Soil

Analysis Batch: V006026	Sample	Sample	Spike	Matrix Spike	Matrix Spi	ke			Prep Batch: 12D2062_ %Rec.	P
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	ND		2.63	2.82		mg/kg dry	ü	107	31 - 143	
Ethylbenzene	ND		2.63	3.14		mg/kg dry	12	119	23 - 161	
Naphthalene	ND	H2 RL1	2.63	2.92		mg/kg dry	8	111	10 - 176	
Toluene	ND		2.63	3.00		mg/kg dry	a	114	30 - 155	
Xylenes, total	ND		7.90	9.29		mg/kg dry	a	118	25 - 162	
	Matrix Calka	Matrix Calka								

	maute opine	matrix opine		
Surrogate	%Recovery	Qualifier	Limits	
1,2-Dichloroethane-d4	89		70 - 130	
Dibromofluoromethane	97		70 - 130	
Toluene-d8	100		70 - 130	
4-Bromofluorobenzene	97		70 - 130	

#### Client Sample ID: Lab Control Sample

Prep Type: Total Prep Batch: 12D2062\_P 7

Client	Sample ID: 359 Aspen
	Prep Type: Total

7

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

Lab Sample ID: 12D2062-M	ISD1							Clie	nt Sample			
Matrix: Soil									Pro	ер Туре	Total	
Analysis Batch: V006026									Prep Batc	h: 12D2	062_P	
	Sample	Sample	Spike	Itrix Spike Dup	Matrix Spi	ke Duj			%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	ND		2.63	2.63		mg/kg dry	E	100	31 - 143	7	50	
Ethylbenzene	ND		2.63	2.92		mg/kg dry	1	111	23 - 161	7	50	1
Naphthalene	ND	H2 RL1	2.63	3.04		mg/kg dry	п	116	10 - 176	4	50	ł
Toluene	ND		2.63	2.79		mg/kg dry	0	106	30 - 155	7	50	1
Xylenes, total	ND		7.90	8.58		mg/kg dry	32	109	25 - 162	8	50	
	Matrix Spike Dup	Matrix Spike	Dup									
Surrogate	%Recovery	Qualifier	Limits									
1,2-Dichloroethane-d4	92		70 - 130									
Dibromofluoromethane	97		70.130									
Toluene-d8	100		70 - 130									

70 - 130

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

99

Diante Diante

Lab Sample	ID:	12D0126-BLK1
Matrix: Soil		

4-Bromofluorobenzene

Analysis Batch: 12D0126

#### Client Sample ID: Method Blank Prep Type: Total Prep Batch: 12D0126\_P

	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0340	mg/kg wet		04/02/12 16:18	04/03/12 16:18	1.00
Acenaphthylene	ND		0.0670	0.0340	mg/kg wet		04/02/12 16:18	04/03/12 16:18	1.00
Anthracene	ND		0.0670	0.0340	mg/kg wet		04/02/12 16:18	04/03/12 16:18	1.00
Benzo (a) anthracene	ND		0.0670	0.0340	mg/kg wet		04/02/12 16:18	04/03/12 16:18	1.00
Benzo (a) pyrene	ND		0.0670	0.0340	mg/kg wet		04/02/12 16:18	04/03/12 16:18	1.00
Benzo (b) fluoranthene	ND		0.0670	0.0340	mg/kg wet		04/02/12 16:18	04/03/12 16:18	1.00
Benzo (g,h,i) perylene	ND		0.0670	0.0340	mg/kg wet		04/02/12 16:18	04/03/12 16:18	1.00
Benzo (k) fluoranthene	ND		0.0670	0.0340	mg/kg wet		04/02/12 16:18	04/03/12 16:18	1.00
Chrysene	ND		0.0670	0.0340	mg/kg wet		04/02/12 16:18	04/03/12 16:18	1.00
Dibenz (a,h) anthracene	ND		0.0670	0.0340	mg/kg wet		04/02/12 16:18	04/03/12 16:18	1.00
Fluoranthene	ND		0.0670	0.0340	mg/kg wet		04/02/12 16:18	04/03/12 16:18	1.00
Fluorene	ND		0.0670	0.0340	mg/kg wet		04/02/12 16:18	04/03/12 16:18	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0670	0.0340	mg/kg wet		04/02/12 16:18	04/03/12 16:18	1.00
Naphthalene	ND		0.0670	0.0340	mg/kg wet		04/02/12 16:18	04/03/12 16:18	1.00
Phenanthrene	ND		0.0670	0.0340	mg/kg wet		04/02/12 16:18	04/03/12 16:18	1.00
Pyrene	ND		0.0670	0.0340	mg/kg wet		04/02/12 16:18	04/03/12 16:18	1.00
1-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		04/02/12 16:18	04/03/12 16:18	1.00
2-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		04/02/12 16:18	04/03/12 16:18	1.00
	Blank	Blank							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	95		18 - 120				04/02/12 16:18	04/03/12 16:18	1.00
2-Fluorobiphenyl	73		14 - 120				04/02/12 16:18	04/03/12 16:18	1.00
Nitrobenzene-d5	75		17 - 120				04/02/12 16:18	04/03/12 16:18	1.00
Lab Sample ID: 12D0126-BS1						С	lient Sample	D: Lab Control	Sample
Matrix: Soil								Prep Typ	e: Total
Analysis Batch: 12D0126			Spike	LCS LCS				Prep Batch: 12D %Rec.	
Analyte			Added	Result Qual	ifier Unit		D %Rec	Limits	

Acenaphthene

1.47

1.67

TestAmerica Nashville 5/3/2012

88

mg/kg wet

36 - 120

7

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

Lab Sample ID: 12D0126-BS1							Client	Sample	e ID: Lab Control Sample
Matrix: Soil									Prep Type: Tota
Analysis Batch: 12D0126					1.00				Prep Batch: 12D0126_F
			Spike		LCS				%Rec.
Analyte			Added		Qualifier	Unit	D	%Rec	Limits
Acenaphthylene			1.67	1.42		mg/kg wet		85	38 - 120
Anthracene			1.67	1.55		mg/kg wet		93	46 - 124
Benzo (a) anthracene			1.67	1.63		mg/kg wet		98	45 - 120
Benzo (a) pyrene			1.67	1.69		mg/kg wet		101	45 - 120
Benzo (b) fluoranthene			1.67	1.76		mg/kg wet		106	42 - 120
Benzo (g,h,i) perylene			1.67	1.55		mg/kg wet		93	38 - 120
Benzo (k) fluoranthene			1.67	1.48		mg/kg wet		89	42 - 120
Chrysene			1.67	1.54		mg/kg wet		93	43 - 120
Dibenz (a,h) anthracene			1.67	1.57		mg/kg wet		94	32 - 128
Fluoranthene			1.67	1.65		mg/kg wet		99	46 - 120
Fluorene			1.67	1.55		mg/kg wet		93	42 - 120
Indeno (1,2,3-cd) pyrene			1,67	1.57		mg/kg wet		94	41 - 121
Naphthalene			1.67	1.38		mg/kg wet		83	32 - 120
Phenanthrene			1.67	1.55		mg/kg wet		93	45 - 120
Pyrene			1.67	1.66		mg/kg wet		99	43 - 120
1-Methylnaphthalene			1.67	1.03		mg/kg wet		62	32 - 120
2-Methylnaphthalene			1.67	1.33		mg/kg wet		80	28 - 120
		LCS							
Surrogate	the second second second	Qualifier	Limits						
Terphenyl-d14	96		18 - 120						
2-Fluorobiphenyl	72		14 - 120						
Nitrobenzene-d5	68		17 - 120						

#### Lab Sample ID: 12D0126-MS1 Matrix: Soil

#### Analysis Batch: 12D0126

Analysis Batch: 1200120									the bear and a second
Colored and an and a second	Sample	Sample	Spike	Matrix Spike	Matrix Spike				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthene	ND		1.95	1.54		mg/kg dry	ii.	79	19 - 120
Acenaphthylene	ND		1.95	1.52	( )	mg/kg dry	13	78	25 - 120
Anthracene	ND		1.95	1.67		mg/kg dry	13	86	28 - 125
Benzo (a) anthracene	0.0428	J	1.95	1.75		mg/kg dry	13	88	23 - 120
Benzo (a) pyrene	ND		1.95	1.79		mg/kg dry	12	92	15 - 128
Benzo (b) fluoranthene	ND		1.95	1.83		mg/kg dry	.0	94	12 - 133
Benzo (g,h,i) perylene	ND		1.95	1.63		mg/kg dry	19	83	22 - 120
Benzo (k) fluoranthene	ND		1.95	1.61	1	mg/kg dry	12	82	28 - 120
Chrysene	0.0448	J	1.95	1.65	( ) (	mg/kg dry	13	83	20 - 120
Dibenz (a,h) anthracene	ND		1.95	1.65	)	mg/kg dry	10	84	12 - 128
Fluoranthene	0.0539	J	1.95	1.83	6 0	mg/kg dry	12	91	10 - 143
Fluorene	ND		1.95	1.61		mg/kg dry	U	83	20 - 120
Indeno (1,2,3-cd) pyrene	ND		1.95	1.66	1	mg/kg dry	17	85	22 - 121
Naphthalene	ND		1.95	1.49	4	mg/kg dry	12	76	10 - 120
Phenanthrene	ND		1.95	1.71		mg/kg dry	12	88	21 - 122
Pyrene	0.0460	J	1.95	1.79		mg/kg dry		90	20 - 123
1-Methylnaphthalene	ND		1.95	1.10	0	mg/kg dry	17	57	10 - 120
2-Methylnaphthalene	ND		1.95	1.44		mg/kg dry	n	74	13 - 120
	Matrix Spike	Matrix Spike							
Surrogate	%Recovery	Qualifier	Limits						

Terphenyl-d14

18 - 120

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### Client Sample ID: 369 Aspen Prep Type: Total

Prep Batch: 12D0126\_P

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

#### Lab Sample ID: 12D0126-MS1 Matrix: Soil Analysis Batch: 12D0126

	Matrix Spike	Matrix Spike	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl	64		14 - 120
Nitrobenzene-d5	62		17 - 120

### Lab Sample ID: 12D0126-MSD1 Matrix: Soil

Analysis Batch: 12D0126									Prep Batc	h: 12D0	126_P
	Sample	Sample	Spike	trix Spike Dup	Matrix Spi	ke Duj			%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthene	ND		1.96	1.58		mg/kg dry	73	81	19 - 120	2	50
Acenaphthylene	ND		1.96	1.57		mg/kg dry	13	80	25 - 120	3	50
Anthracene	ND		1.96	1.72		mg/kg dry	u.	87	28 - 125	3	49
Benzo (a) anthracene	0.0428	J	1.96	1.79		mg/kg dry	-15	89	23 - 120	2	50
Benzo (a) pyrene	ND		1.96	1.87		mg/kg dry	ц.	95	15 - 128	4	50
Benzo (b) fluoranthene	ND		1.96	1.90		mg/kg dry	12	97	12 - 133	4	50
Benzo (g,h,i) perylene	ND		1.96	1.74		mg/kg dry	0	89	22 - 120	7	50
Benzo (k) fluoranthene	ND		1.96	1.70		mg/kg dry	17	86	28 - 120	6	45
Chrysene	0.0448	J	1.96	1.70		mg/kg dry		84	20 - 120	3	49
Dibenz (a,h) anthracene	ND		1.96	1.76		mg/kg dry	10	90	12 - 128	7	50
Fluoranthene	0.0539	J	1.96	1.83		mg/kg dry	12	91	10 - 143	0.4	50
Fluorene	ND		1.96	1.71		mg/kg dry	11	87	20 - 120	6	50
Indeno (1,2,3-cd) pyrene	ND		1.96	1.77		mg/kg dry	-01	90	22 - 121	6	50
Naphthalene	ND		1.96	1.52		mg/kg dry	12	78	10 - 120	2	50
Phenanthrene	ND		1.96	1.73		mg/kg dry	8	88	21 - 122	1	50
Pyrene	0.0460	J	1.96	1.84		mg/kg dry	П	91	20 - 123	3	50
1-Methylnaphthalene	ND		1.96	1.13		mg/kg dry	π.	57	10 - 120	2	50
2-Methylnaphthalene	ND		1.96	1.47		mg/kg dry	0	75	13 - 120	2	50
	Matrix Spike Dup	Matrix Spike L	Dup								
Sector Sector		100 100 A	4.200								

	matrix opine bup	manna opine	Dup
Surrogate	%Recovery	Qualifier	Limits
Terphenyl-d14	91		18 - 120
2-Fluorobiphenyl	68		14 - 120
Nitrobenzene-d5	65		17 - 120

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

Lab Sample ID: 12D1142-DUP1							Client Sample ID: Dup	olicate
Matrix: Soil							Prep Type	: Total
Analysis Batch: 12D1142							Prep Batch: 12D1	142 P
	Sample	Sample	Duplicate	Duplicate				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
% Dry Solids	82.8		83.2		%		0.5	20

Client Sample ID: 369 Aspen

Prep Type: Total

Client Sample ID: 369 Aspen

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### **GCMS** Volatiles

Analy	sis l	Batch:	V005681
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Analysis Batch. 9005		Bron Tunn	Matrix	Method	Prep Batch
Lab Sample ID	Client Sample ID	Prep Type Total	Soil	SW846 8260B	12D1186_P
12D1186-BLK1	Method Blank	Total	Soil	SW846 8260B	12D1186 P
12D1186-BLK2	Method Blank	Total	Soil	SW846 8260B	12D1186 P
12D1186-BS1	Lab Control Sample	Total	Soil	SW846 8260B	12D1186_P
12D1186-BSD1	Lab Control Sample Dup	Total	Soll	SW846 8260B	12D1186_P
12D1186-MS1	Matrix Spike	Total	Soil	SW846 8260B	12D1186 P
12D1186-MSD1	Matrix Spike Duplicale	Total	Soil	SW846 8260B	12D1186_P
NWC3984-01	369 Aspen	Total	Soil	SW846 8260B	12D1186 P
NWC3984-02	359 Aspen	Total	Soll	SW846 8260B	12D1186 P
NWC3984-04	361 Aspen	TOTAL	501	011010 02000	
Analysis Batch: V005	859				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12C6374-BLK1	Method Blank	Total	Soil	SW846 8260B	12C6374_P
12C6374-BLK2	Method Blank	Total	Soll	SW846 8260B	12C6374_P
12C6374-BS1	Lab Control Sample	Total	Soil	SW846 8260B	12C6374_P
12C6374-MS1	Matrix Spike	Total	Soil	SW846 8260B	12C6374_P
12C6374-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8260B	12C6374_P
NWC3984-03 - RE1	362 Aspen	Total	Soil	SW846 8260B	12C6374_P
NWC3984-03 - RE2	362 Aspen	Total	Soll	SW846 8260B	12C6374_P
Analysis Batch: V006	026				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12D2062-BLK1	Method Blank	Total	Soil	SW846 8260B	12D2062_P
12D2062-BLK2	Method Blank	Total	Soil	SW846 8260B	12D2062_P
12D2062-BS1	Lab Control Sample	Total	Soil	SW846 8260B	12D2062_P
12D2062-MS1	359 Aspen	Total	Soil	SW846 8260B	12D2062_P
12D2062-MSD1	359 Aspen	Total	Soll	SW846 8260B	12D2062_P
NWC3984-02 - RE2	359 Aspen	Total	Soil	SW846 8260B	12D2062_P
Prep Batch: 12C6374	P				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12C6374-BLK1	Method Blank	Total	Soil	EPA 5035	
12C6374-BLK2	Method Blank	Total	Soil	EPA 5035	
12C6374-BS1	Lab Control Sample	Total	Soil	EPA 5035	
12C6374-MS1	Matrix Spike	Total	Soil	EPA 5035	
12C6374-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 5035	
NWC3984-03 - RE1	362 Aspen	Total	Soil	EPA 5035	
NWC3984-03 - RE2	362 Aspen	Total	Soil	EPA 5035	
Prep Batch: 12D1186	p				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12D1186-BLK1	Method Blank	Total	Soil	EPA 5035	
12D1186-BLK2	Method Blank	Total	Soil	EPA 5035	
12D1186-BS1	Lab Control Sample	Total	Soil	EPA 5035	
12D1186-BSD1	Lab Control Sample Dup	Total	Soil	EPA 5035	
12D1186-MS1	Matrix Spike	Total	Soll	EPA 5035	
12D1186-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 5035	
NWC3984-01	369 Aspen	Total	Soil	EPA 5035	
NWC3984-02	359 Aspen	Total	Soll	EPA 5035	
NWC3984-04	361 Aspen	Total	Soll	EPA 5035	

# QC Association Summary

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

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# GCMS Volatiles (Continued)

### Prep Batch: 12D2062\_P

Client Sample ID	Prep Type	Matrix	Method	Prep Batch
Method Blank	Total	Soil	EPA 5035	
Method Blank	Total	Soil	EPA 5035	
Lab Control Sample	Total	Soil	EPA 5035	
359 Aspen	Total	Soil	EPA 5035	
359 Aspen	Total	Soil	EPA 5035	
359 Aspen	Total	Soil	EPA 5035	
	Method Blank Method Blank Lab Control Sample 359 Aspen 359 Aspen	Method BlankTotalMethod BlankTotalLab Control SampleTotal359 AspenTotal359 AspenTotal	Method BlankTotalSoilMethod BlankTotalSoilLab Control SampleTotalSoil359 AspenTotalSoil359 AspenTotalSoil359 AspenTotalSoil	Method BlankTotalSoilEPA 5035Method BlankTotalSoilEPA 5035Lab Control SampleTotalSoilEPA 5035359 AspenTotalSoilEPA 5035359 AspenTotalSoilEPA 5035359 AspenTotalSoilEPA 5035359 AspenTotalSoilEPA 5035359 AspenTotalSoilEPA 5035

### **GCMS** Semivolatiles

#### Analysis Batch: 12D0126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12D0126-BLK1	Method Blank	Total	Soil	SW846 8270D	12D0126_P
12D0126-BS1	Lab Control Sample	Total	Soil	SW846 8270D	12D0126_P
12D0126-MS1	369 Aspen	Total	Soil	SW846 8270D	12D0126_P
12D0126-MSD1	369 Aspen	Total	Soil	SW846 8270D	12D0126_P
NWC3984-01	369 Aspen	Total	Soil	SW846 8270D	12D0126_P
NWC3984-02	359 Aspen	Total	Soil	SW846 8270D	12D0126_P
NWC3984-03	362 Aspen	Total	Soil	SW846 8270D	12D0126_P
NWC3984-03 - RE1	362 Aspen	Total	Soil	SW846 8270D	12D0126_P
NWC3984-04	361 Aspen	Total	Soil	SW846 8270D	12D0126_P

#### Prep Batch: 12D0126\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12D0126-BLK1	Method Blank	Total	Soil	EPA 3550C	
12D0126-BS1	Lab Control Sample	Total	Soil	EPA 3550C	
12D0126-MS1	369 Aspen	Total	Soil	EPA 3550C	
12D0126-MSD1	369 Aspen	Total	Soil	EPA 3550C	
NWC3984-01	369 Aspen	Total	Soil	EPA 3550C	
NWC3984-02	359 Aspen	Total	Soil	EPA 3550C	
NWC3984-03	362 Aspen	Total	Soil	EPA 3550C	
NWC3984-03 - RE1	362 Aspen	Total	Soil	EPA 3550C	
NWC3984-04	361 Aspen	Total	Soil	EPA 3550C	

### Extractions

#### Analysis Batch: 12D1142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12D1142-DUP1	Duplicate	Total	Soil	SW-846	12D1142_P
NWC3984-01	369 Aspen	Total	Soil	SW-846	12D1142_P
NWC3984-02	359 Aspen	Total	Soil	SW-846	12D1142_P
NWC3984-03	362 Aspen	Total	Soil	SW-846	12D1142_P
NWC3984-04	361 Aspen	Total	Soil	SW-846	12D1142_P
Prep Batch: 12D114	2_P				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12D1142-DUP1	Duplicate	Total	Soil	% Solids	
NWC3984-01	369 Aspen	Total	Soil	% Solids	
NWC3984-02	359 Aspen	Total	Soil	% Solids	
NWC3984-03	362 Aspen	Total	Soil	% Solids	
NWC3984-04	361 Aspen	Total	Soil	% Solids	

Matrix: Soil

Matrix: Soil

Percent Solids: 90.6

Lab Sample ID: NWC3984-01

Lab Sample ID: NWC3984-02

### Client Sample ID: 369 Aspen

#### Date Collected: 03/26/12 12:15 Date Received: 03/31/12 08:30

Date Received:	03/31/12 08:3	0					P	ercent Solids: 83.8	ł
	Batch	Batch		Dilution	Batch	Prepared			
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total	Prep	EPA 5035		1.05	12D1186_P	03/31/12 14:37	AAN	TAL NSH	
Total	Analysis	SW846 8260B		1.00	V005681	04/05/12 22:10	ККК Н	TAL NSH	
Total	Prep	EPA 3550C		0.996	12D0126_P	04/02/12 16:18	KDF	TAL NSH	
Total	Analysis	SW846 8270D		1.00	12D0126	04/03/12 17:40	WLS	TAL NSH	
Total	Prep	% Solids		1.00	12D1142_P	04/07/12 15:56	ASL	TAL NSH	
Total	Analysis	SW-846		1.00	12D1142	04/07/12 17:07	ASL	TAL NSH	

### Client Sample ID: 359 Aspen Date Collected: 03/27/12 11:30

Date Received: 03/31/12 08:30

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total	Prep	EPA 5035		0.978	12D1186_P	03/31/12 14:37	AAN	TAL NSH	
Total	Analysis	SW846 8260B		1.00	V005681	04/05/12 22:42	ККК Н	TAL NSH	
Total	Prep	EPA 5035	RE2	0.954	12D2062_P	03/27/12 11:30	AAN	TAL NSH	
Total	Analysis	SW846 8260B	RE2	50.0	V006026	04/11/12 13:52	ККК Н	TAL NSH	
Total	Prep	EPA 3550C		0.977	12D0126_P	04/02/12 16:18	KDF	TAL NSH	
Total	Analysis	SW846 8270D		1.00	12D0126	04/03/12 18:00	HP83	TAL NSH	
Total	Prep	% Solids		1.00	12D1142_P	04/07/12 15:56	ASL	TAL NSH	
Total	Analysis	SW-846		1.00	12D1142	04/07/12 17:07	ASL	TAL NSH	

#### Client Sample ID: 362 Aspen Date Collected: 03/28/12 11:45

Date Received: 03/31/12 08:30

# Lab Sample ID: NWC3984-03

Lab Sample ID: NWC3984-04

#### Matrix: Soil Percent Solids: 83.9

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	EPA 5035	RE1	0.792	12C6374_P	03/31/12 14:37	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE1	1.00	V005859	04/06/12 13:44	ККК Н	TAL NSH
Total	Prep	EPA 5035	RE2	0.852	12C6374_P	03/31/12 14:37	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE2	50.0	V005859	04/06/12 14:16	ККК Н	TAL NSH
Total	Prep	EPA 3550C		0.996	12D0126_P	04/02/12 16:18	KDF	TAL NSH
Total	Analysis	SW846 8270D		1.00	12D0126	04/03/12 18:21	WLS	TAL NSH
Total	Prep	EPA 3550C	RE1	0.996	12D0126_P	04/02/12 16:18	KDF	TAL NSH
Total	Analysis	SW846 8270D	RE1	10.0	12D0126	04/04/12 11:15	WLS	TAL NSH
Total	Prep	% Solids		1.00	12D1142_P	04/07/12 15:56	ASL	TAL NSH
Total	Analysis	SW-846		1.00	12D1142	04/07/12 17:07	ASL	TAL NSH

### Client Sample ID: 361 Aspen Date Collected: 03/29/12 14:45 Date Received: 03/31/12 08:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.879	12D1186_P	03/31/12 14:37	AAN	TAL NSH
Total	Analysis	SW846 8260B		1.00	V005681	04/05/12 23:46	KKK H	TAL NSH

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TestAmerica Nashville 5/3/2012

Matrix: Soil

Percent Solids: 85.3

Matrix: Soil

Percent Solids: 85.3

Lab Sample ID: NWC3984-04

### Client Sample ID: 361 Aspen Date Collected: 03/29/12 14:45

# Date Received: 03/31/12 08:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	EPA 3550C		0.986	12D0126_P	04/02/12 16:18	KDF	TAL NSH
Total	Analysis	SW846 8270D		1.00	12D0126	04/03/12 18:41	WLS	TAL NSH
Total	Prep	% Solids		1.00	12D1142_P	04/07/12 15:56	ASL	TAL NSH
Total	Analysis	SW-846		1.00	12D1142	04/07/12 17:07	ASL	TAL NSH

#### Laboratory References:

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

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]

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Nashville		ACIL	· · · · · · · · · · · · · · · · · · ·	393
TestAmerica Nashville	A2LA	ISO/IEC 17025		0453.07
TestAmerica Nashville	Alabama	State Program	4	41150
TestAmerica Nashville	Alaska (UST)	State Program	10	UST-087
TestAmerica Nashville	Arizona	State Program	9	AZ0473
TestAmerica Nashville	Arkansas DEQ	State Program	6	88-0737
TestAmerica Nashville	California	NELAC	9	1168CA
TestAmerica Nashville	Canadian Assoc Lab Accred (CALA)	Canada		3744
TestAmerica Nashville	Colorado	State Program	8	N/A
TestAmerica Nashville	Connecticut	State Program	1	PH-0220
TestAmerica Nashville	Florida	NELAC	4	E87358
TestAmerica Nashville	Illinois	NELAC	5	200010
TestAmerica Nashville	Iowa	State Program	7	131
TestAmerica Nashville	Kansas	NELAC	7	E-10229
TestAmerica Nashville	Kentucky	State Program	4	90038
TestAmerica Nashville	Kentucky (UST)	State Program	4	19
TestAmerica Nashville	Louisiana	NELAC	6	30613
TestAmerica Nashville	Louisiana	NELAC	6	LA110014
TestAmerica Nashville	Maryland	State Program	3	316
TestAmerica Nashville	Massachusetts	State Program	1	M-TN032
TestAmerica Nashville	Mississippi	State Program	4	N/A
TestAmerica Nashville	Montana (UST)	State Program	8	NA
TestAmerica Nashville	New Hampshire	NELAC	1	2963
TestAmerica Nashville	New Jersey	NELAC	2	TN965
TestAmerica Nashville	New York	NELAC	2	11342
TestAmerica Nashville	North Carolina DENR	State Program	4	387
TestAmerica Nashville	North Dakota	State Program	8	R-146
TestAmerica Nashville	Ohio VAP	State Program	5	CL0033
TestAmerica Nashville	Oklahoma	State Program	6	9412
TestAmerica Nashville	Oregon	NELAC	10	TN200001
TestAmerica Nashville	Pennsylvania	NELAC	3	68-00585
TestAmerica Nashville	Rhode Island	State Program	1	LAO00268
TestAmerica Nashville	South Carolina	State Program	4	84009
TestAmerica Nashville	South Carolina	State Program	4	84009
TestAmerica Nashville	Tennessee	State Program	4	2008
TestAmerica Nashville	Texas	NELAC	6	T104704077-09-TX
TestAmerica Nashville	USDA	Federal		S-48469
TestAmerica Nashville	Utah	NELAC	8	TAN
TestAmerica Nashville	Virginia	NELAC	3	460152
TestAmerica Nashville	Virginia	State Program	3	00323
TestAmerica Nashville	Washington	State Program	10	C789
TestAmerica Nashville	West Virginia DEP	State Program	3	219
TestAmerica Nashville	Wisconsin	State Program	5	998020430
TestAmerica Nashville	Wyoming (UST)	A2LA	8	453.07
l estAmerica Nashville	wyoming (UST)	AZEA	0	400.01

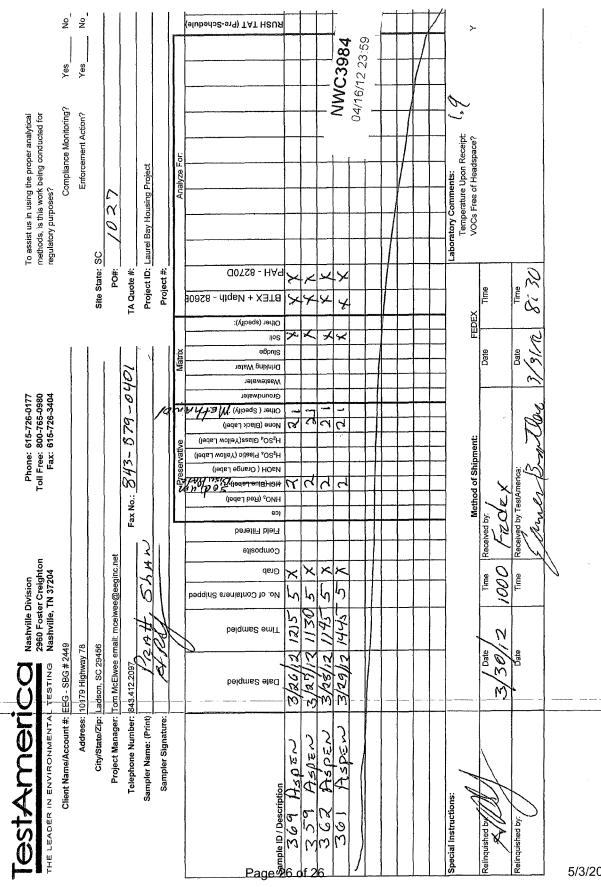
Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

TestAmerica	
THE LEADER IN ENVIRONMENTAL TESTING Nashville, TN COOLER RECE	
Cooler Received/Opened On <u>3/31/2012 @ 0830</u>	NWC3984
1. Tracking #(last 4 digits, FedEx)	
Courier: FedEx IR Gun ID_14740456	
2. Temperature of rep. sample or temp blank when opened: Degrees Celsius	5
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank f	frozen? YES NO
4. Were custody seals on outside of cooler? If yes, how many and where:	(VES).NONA CK
5. Were the seals intact, signed, and dated correctly?	ESNONA
6. Were custody papers inside cooler?	ESNONA
I certify that I opened the cooler and answered questions 1-6 (intial)	<u> </u>
7. Were custody seals on containers: YES NO and Intact	YESNO. NA
Were these signed and dated correctly?	YESNONA
8. Packing mat'l used? Rubblewrap Rlastic bag Peanuts Vermiculite Foam Insert	Paper Other None
9. Cooling process: (Ce_lce-pack lce (direct contact)	Dry ice Other None
10. Did all containers arrive in good condition (unbroken)?	YESNONA
11. Were all container labels complete (#, date, signed, pres., etc)?	RESNONA
12. Did all container labels and tags agree with custody papers?	YESNONA
13a. Were VOA vials received?	YESNONA
b. Was there any observable headspace present in any VOA vial?	YESNA
14. Was there a Trip Blank in this cooler? YES. NONA If multiple coolers, s	sequence #
I certify that I unloaded the cooler and answered questions 7-14 (initial)	¥3
15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH	level? YESNO.NA
b. Did the bottle labels indicate that the correct preservatives were used	YESNONA
16. Was residual chlorine present?	YESNONA
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (i	intial)
17. Were custody papers properly filled out (ink, signed, etc)?	YESNONA
18. Did you sign the custody papers in the appropriate place?	ESNONA
19. Were correct containers used for the analysis requested?	ESNONA
20. Was sufficient amount of sample sent in each container?	YESNONA
l certify that I entered this project into LIMS and answered questions 17-20 (intial)	<u></u>
I certify that I attached a label with the unique LIMS number to each container (intial)	1/3
21. Were there Non-Conformance issues at login? YES NO Was a PIPE generated?	YES.(NO#

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12



5/3/2012

12

# ATTACHMENT A

NON-HAZARDOUS MANIFEST	1. Generator's US EP/	A ID No. M	lanifest Doc No.	2. Page 1	Lof			
NUN-HAZARDOUS MANIFEST	Large March				1			
3. Generator's Mailing Address:	Gen	erator's Site Address (II	different than mailing):	A. Manif	est Number			
MCAS, BEAUFORT				V	VMNA	00316	5825	
LAUREL BAY HOUSING BEAUFORT, SC 29907					B. State	Generator's	s ID	
	228-6461							
5. Transporter 1 Company Name		6. US EPA I	D Number	Sales and	C. martine	12124	1	
EEG, INC.					Fransporter's II			
7. Transporter 2 Company Name		8. US EPA I	D Number	D. Transp	porter's Phone	843-8	879-04	11
7. Transporter 2 company wante		o. ostrai	o indiniber	E. State 1	Fransporter's II	0	1.7.	-
				F. Transp	orter's Phone			
9. Designated Facility Name and Site	e Address	10. US EPA	ID Number				_	
HICKORY HILL LANDFILL 2621 LOW COUNTRY ROAD					Facility ID	047.0	107 46	17
RIDGELAND, SC 29936				H. State I	Facility Phone	843-9	987-464	43
				1.1.2				
11. Description of Waste Materials			12. Containers No. Typ	e Quantity	14. Unit Wt./Vol.	L.M	lisc. Comm	ents
. HEATING OIL TANKS FILLED	WITH SAND	/						-
								_
WM Prof	file # 102655SC	A A A A A A A A A A A A A A A A A A A					-	
2.								
			-			-		-
WM Profile #								-
"						2		
WM Profile #			The second		S ages 5			
I.				Sono 1				
				- 32 -				
WM Profile #	data Listand Alassia		K Disperal Less	tion	18353			-
. Additional Descriptions for Mater	hais Listed Above		K. Disposal Loca	uon				
			Cell			Level		
e e	A 1101 11 6		Grid		AT			-
5. Special Handling Instructions and	Additional Information	2 ASPEN	-21 7	322	Ash-	21		
1330 Ash	-1/ 25 37	5 ASPEN	5	3.69 A	SPEN	-6) 35	59 A.	5/2
urchase Order #		The second s	NTACT / PHONE NO		-			
6. GENERATOR'S CERTIFICATE:								
						ve been ful	lly and	
	ackaged and are in prope	Signature "On behal	a an indication and a second se	applicable regu	lations.	Month	Day	T
ccurately described, classified and pa						NO	11	
ccurately described, classified and pa	Dutos J.	Signatore Off Dena	A-Z					
ccurately described, classified and parinted Name	PARTY OF A PARTY AND	Signatore on bena	A-C	1				
ccurately described, classified and parinted Name	PARTY OF A PARTY AND	Signature	ndy			Month D.4	Day	1
hereby certify that the above-descril ccurately described, classified and parinted Name 7. Transporter 1 Acknowledgement Printed Name 8. Transporter 2 Acknowledgement	of Receipt of Materials	1.00	Thy		~	Month 09	Day 11	1
ccurately described, classified and parinted Name 7. Transporter 1 Acknowledgement Printed Name	of Receipt of Materials	1.00	ny		~	Month D.Y. Month	Day // Day	
ccurately described, classified and parinted Name 7. Transporter 1 Acknowledgement Printed Name 8. Transporter 2 Acknowledgement	of Receipt of Materials	Signature	Bala			04	-11	
ccurately described, classified and parinted Name 7. Transporter 1 Acknowledgement Printed Name 8. Transporter 2 Acknowledgement Printed Name	of Receipt of Materials	Signature	Bald			04	-11	
ccurately described, classified and parinted Name 7. Transporter 1 Acknowledgement Printed Name 8. Transporter 2 Acknowledgement Printed Name 9. Certificate of Final Treatment/Dis certify, on behalf of the above listed	of Receipt of Materials	Signature Signature o the best of my knowle	Bald	scribed waste w	as managed in	Month 4	- [ ] Day	
ccurately described, classified and parinted Name 7. Transporter 1 Acknowledgement Printed Name 8. Transporter 2 Acknowledgement Printed Name	of Receipt of Materials	Signature Signature o the best of my knowle s listed above.	Bala edge, the above-de		vas managed in	Month 4	- [ ] Day	Y
ccurately described, classified and parinted Name 7. Transporter 1 Acknowledgement Printed Name 8. Transporter 2 Acknowledgement Printed Name 9. Certificate of Final Treatment/Dis certify, on behalf of the above listed pplicable laws, regulations, permits a	of Receipt of Materials	Signature Signature o the best of my knowle s listed above.	Bala edge, the above-de		as managed in	Month 4	- [ ] Day	

Appendix C Regulatory Correspondence





Catherine E. Heigel, Director Promoting and protecting the health of the public and the environment

July 1, 2015

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

RE: No Further Action 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 referenced Underground Storage Tanks (USTs) 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 and agrees there is no indication of soil or groundwater contamination on these properties, 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 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) Bryan Beck (via email)



Catherine E. Heigel, Director Promoting and protecting the health of the public and the environment

Attachment to:	Krieg to Drawdy
	Subject: NFA
	Dated 7/1/2015

# Laurel Bay Underground Storage Tank Assessment Reports for: (153 addresses/161 tanks)

111 Birch	363 Aspen
123 Banyan	364 Aspen
131 Banyan	366 Aspen
134 Banyan	369 Aspen
145 Laurel Bay	373 Aspen
150 Laurel Bay	381 Aspen
153 Laurel Bay	401 Elderberry
154 Laurel Bay	402 Elderberry
155 Laurel Bay	404 Elderberry
200 Balsam	410 Elderberry
202 Balsam	420 Elderberry
203 Balsam	424 Elderberry
208 Balsam	435 Elderberry Tank 3
210 Balsam	452 Elderberry
211 Balsam	460 Elderberry
220 Cypress	465 Dogwood
222 Cypress	477 Laurel Bay
223 Cypress	487Laurel Bay
252 Beech Tank 2	513 Laurel Bay
271 Beech Tank 1	519 Laurel Bay
271 Beech Tank 2	524 Laurel Bay
284 Birch Tank 1	535 Laurel Bay
284 Birch Tank 2	553 Dahlia
308 Ash	590 Aster
311 Ash	591 Aster
312 Ash	610 Dahlia
317 Ash	612 Dahlia
318 Ash	628 Dahlia
337 Ash	636 Dahlia
351 Ash Tank 1	637 Dahlia Tank 1
351 Ash Tank 2	637 Dahlia Tank 2
355 Ash Tank 1	641 Dahlia
355 Ash Tank 2	642 Dahlia Tank 1
360 Aspen	642 Dahlia Tank 2

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL 2600 Bull Street • Columbia, SC 29201 • Phone: (803) 898-3432 • www.scdhec.gov Laurel Bay Underground Storage Tank Assessment Reports for: (153 addresses/161 tanks) cont.

655 Camellia	920 Albacore
662 Camellia	922 Barracuda Tank 1
683 Camellia	922 Barracuda Tank 2
684 Camellia	924 Albacore
689 Abelia	925 Albacore
694 Abelia	926 Albacore
695 Abelia	930 Albacore
741 Blue Bell	931 Albacore
742 Blue Bell	933 Albacore
755 Althea	936 Albacore
757 Althea	938 Albacore
776 Laurel Bay	939 Albacore
777 Azalea	940 Albacore
779 Laurel Bay	1010 Foxglove
781 Laurel Bay	1066 Gardenia
802 Azalea	1068 Gardenia
816 Azalea	1071 Heather Tank 2
822 Azalea	1100 Iris Tank 2
823 Azalea	1128 Iris
825 Azalea	1178 Bobwhite
828 Azalea	1204 Cardinal
837 Azalea	1208 Cardinal
851 Dolphin	1209 Cardinal
856 Dolphin	1210 Cardinal
857 Dolphin	1215 Cardinal
861 Dolphin	1216 Cardinal
864 Dolphin	1217 Cardinal Tank 1
868 Dolphin	1217 Cardinal Tank 2
872 Dolphin	1233 Dove
879 Cobia	1244 Dove
886 Cobia	1250 Dove
888 Cobia	1252 Dove
889 Cobia	1254 Dove
901 Barracuda	1256 Dove
902 Barracuda	1258 Dove
903 Barracuda	1263 Dove
904 Barracuda	1269 Dove
909 Barracuda	1276 Dove
910 Barracuda	1283 Dove
914 Barracuda	1285 Dove
915 Barracuda	1288 Eagle

Laurel Bay Underground Storage Tank Assessment Reports for: (153 addresses/161 tanks) cont.

1296 Eagle	1330 Albatross
1307 Eagle	1331 Albatross
1321 Albatross	1333 Albatross
1322 Albatross	1334 Albatross
1327 Albatross	1335 Albatross
1328 Albatross	