SUMMARY REPORT 45 EAGLE LANE (FORMERLY 1292 EAGLE LANE) LAUREL BAY MILITARY HOUSING AREA MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SC

> Revision: 0 Prepared for:

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

and



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

JUNE 2021

SUMMARY REPORT 45 EAGLE LANE (FORMERLY 1292 EAGLE LANE) LAUREL BAY MILITARY HOUSING AREA MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SC

> Revision: 0 Prepared for:

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

and



Naval Facilities Engineering Command Atlantic

9324 Virginia Avenue Norfolk, Virginia 23511-3095

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 45 Eagle Lane (Formerly 1292 Eagle Lane) 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	UST REMOVAL AND SOIL SAMPLING	-
2.2	SOIL ANALYTICAL RESULTS	4
2.3	GROUNDWATER SAMPLING	4
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 45 Eagle Lane (Formerly 1292 Eagle Lane). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

1.1 Background Information

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



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

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

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

1.2 UST Removal and Assessment Process

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

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

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



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

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

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 45 Eagle Lane (Formerly 1292 Eagle Lane). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1292 Eagle Lane* (MCAS Beaufort, 2013). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Groundwater Investigation Report – November and December 2015* (Resolution Consultants, 2016). 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 August 19, 2013, a single 280 gallon heating oil UST was removed from the concrete porch area adjacent to the driveway at 45 Eagle Lane (Formerly 1292 Eagle Lane). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The UST was removed, cleaned, and shipped offsite for recycling. There was no visual evidence (i.e.,



staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depth to the base of the UST was 5'7" 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 45 Eagle Lane (Formerly 1292 Eagle Lane) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated July 1, 2015, SCDHEC requested an IGWA for 45 Eagle Lane (Formerly 1292 Eagle Lane) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

2.3 Groundwater Sampling

On December 3, 2015, a temporary monitoring well was installed at 45 Eagle Lane (Formerly 1292 Eagle Lane), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST. The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – November and December 2015* (Resolution Consultants, 2016).



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 *Groundwater Investigation Report – November and December 2015* (Resolution Consultants, 2016).

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 45 Eagle Lane (Formerly 1292 Eagle Lane) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated that the groundwater was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

3.0 **PROPERTY STATUS**

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 45 Eagle Lane (Formerly 1292 Eagle Lane). This NFA determination was obtained in a letter dated June 8, 2016. SCDHEC's NFA letter is provided in Appendix D.

4.0 **REFERENCES**

- Marine Corps Air Station Beaufort, 2013. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report 1292 Eagle Lane, Laurel Bay Military Housing Area*, October 2013.
- Resolution Consultants, 2016. *Initial Groundwater Investigation Report November and December 2015 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, April 2016.



- 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 45 Eagle Lane (Formerly 1292 Eagle Lane) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Results Sample Collected 08/19/13			
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)					
Benzene	0.003	ND			
Ethylbenzene	1.15	ND			
Naphthalene	0.036	ND			
Toluene	0.627	ND			
Xylenes, Total	13.01	ND			
Semivolatile Organic Compounds Ana	lyzed by EPA Method 8270D (mg/kg)				
Benzo(a)anthracene	0.66	2.16			
Benzo(b)fluoranthene	0.66	2.36			
Benzo(k)fluoranthene	0.66	0.945			
Chrysene	0.66	2.92			
Dibenz(a,h)anthracene	0.66	0.160			

Notes:

⁽¹⁾ 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 - 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 - Groundwater45 Eagle Lane (Formerly 1292 Eagle Lane)Laurel Bay Military Housing AreaMarine Corps Air Station BeaufortBeaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Site-Specific Groundwater VISLs (µg/L) ⁽²⁾	Results Sample Collected 12/04/15
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	yzed by EPA Method 8270) (µg/L)	
Benzo(a)anthracene	10	NA	ND
Benzo(b)fluoranthene	10	NA	ND
Benzo(k)fluoranthene	10	NA	ND
Chrysene	10	NA	ND
Dibenz(a,h)anthracene	10	NA	ND

Notes:

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

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

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - Not Applicable

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

RBSL - Risk-Based Screening Level

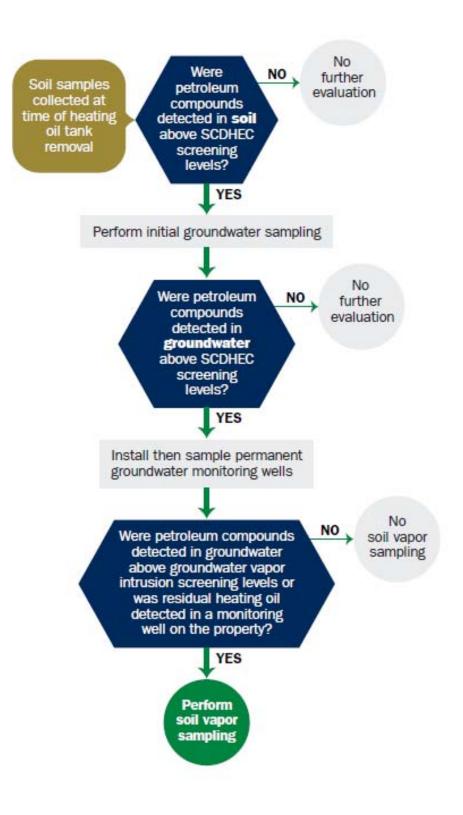
SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

Appendix A Multi-Media Selection Process for LBMH





Appendix A - Multi-Media Selection Process for LBMH

Appendix B UST Assessment Report



Attachment 1

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

Date Received State Us	e Only	Submit Completed Form To: UST Program SCDHEC 2600 Bull Street Columbia, South Carolina 29201
RECET OCT 2 3	VED 201 4 3	Telephone (803) 896-7957
STC DHEC - Bu Land & Waste Ma	reeu of nagement I. OWNERSHIP	OF UST (S)
	anding Officer Attn: Ni	REAO (Craig Ehde)
	ndividual, 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		Marine C	orps Air	Station,	Beaufort, SC
Facility Name or Company	Site Identifier				
1292 Eagle Lane, Street Address or State Ro	Laurel Bay Milit ad (as applicable)	ary Hous	ing Area		
Beaufort,	Beaufort	A State			
City	County)			
				Atta	chment ?

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

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	5'7"
G.	Spill Prevention Equipment Y/N	No
H·	Overfill Prevention Equipment Y/N	No
I.	Method of Closure Removed/Filled	Removed
1 [.]	Date Tanks Removed/Filled	8/19/2013
K.	Visible Corrosion or Pitting Y/N	Yes
L.	Visible Holes Y/N	Yes

1292Eagle

M. Method of disposal for any USTs removed from the ground (attach disposal manifests) UST 1292Eagle was removed from the ground, cleaned and recycled. See Attachment "A."

N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests) Contaminated water was removed from the tank and disposed by MCAS.

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

		1292Eagle
		Steel
A.	Construction Material(ex. Steel, FRP)	& Copper
B.	Distance from UST to Dispenser	N/A
C.	Number of Dispensers	N/A
D.	Type of System Pressure or Suction	Suction
E.	Was Piping Removed from the Ground? Y/N	No
F.	Visible Corrosion or Pitting Y/N	Yes
G.	Visible Holes Y/N	No
H.	Age	Late 1950s
I.	If any corrosion, pitting, or holes were observed, de	escribe 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
A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells?If yes, indicate depth and location on the site map.		Х	
 B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells? If yes, indicate location on site map and describe the odor (strong, 		х	
mild, etc.)C. Was water present in the UST excavation, soil borings, or trenches?If yes, how far below land surface (indicate location and depth)?		x	
 D. Did contaminated soils remain stockpiled on site after closure? If yes, indicate the stockpile location on the site map. 		х	
Name of DHEC representative authorizing soil removal:			
E. Was a petroleum sheen or free product detected on any excavation or boring waters?If yes, indicate location and thickness.		х	

IX. SITE CONDITIONS

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009

Β.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
1292 Eagle	Excav at fill end	Soil	Sandy	5'7"	8/19/13 1445 hrs	P. Shaw	
Bagie							
				· ·			
8			· · · · · · · · · · · · · · · · · · ·				
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20			Dalars the Surre				

* = 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.

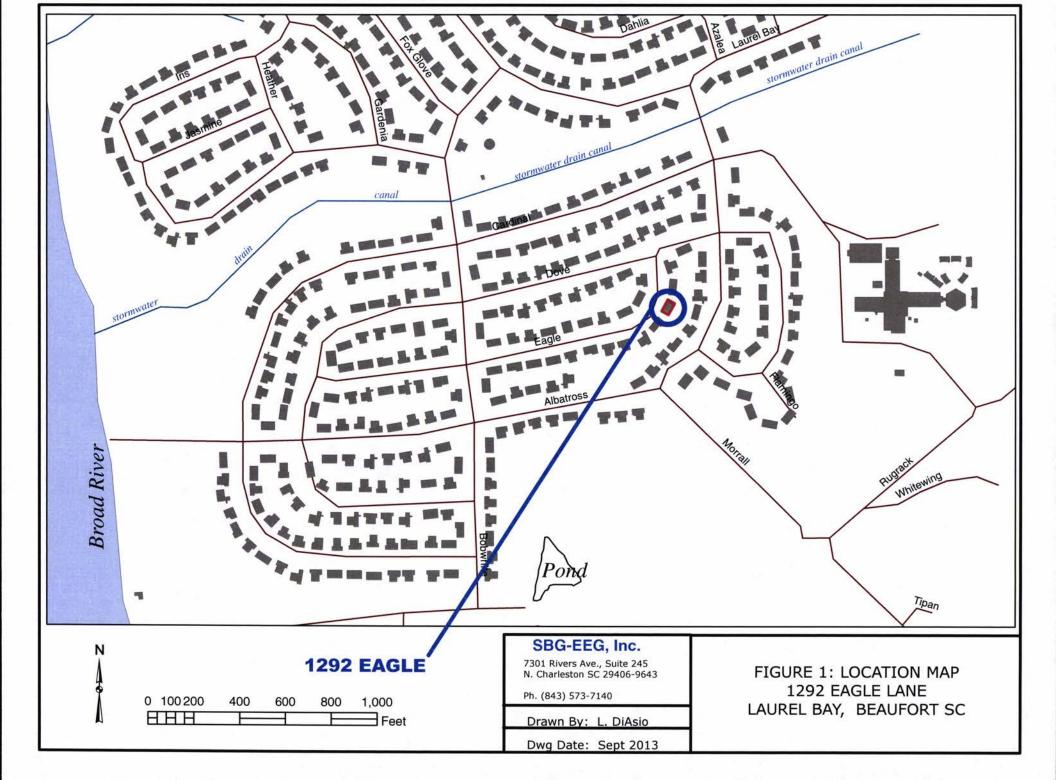
XII. RECEPTORS

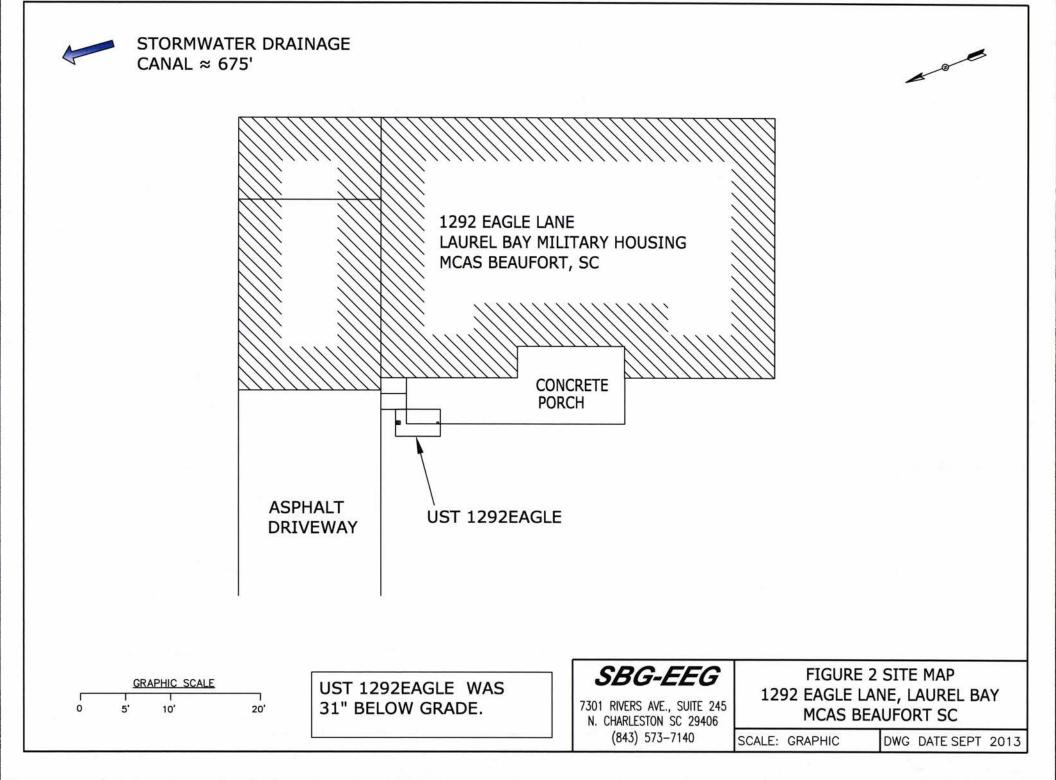
		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?	*X	
	*stormwater drainage If yes, indicate type of receptor, distance, and direction on site map.	canal	
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		х
	If yes, indicate type of well, distance, and direction on site map.		
C.	Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?		х
	If yes, indicate type of structure, distance, and direction on site map.		
D.	Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the	*X	
	contamination? *Sewer, water, electrici	A	
	cable, fiber optic & geo If yes, indicate the type of utility, distance, and direction on the site map.	cnerm	la⊥
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.		

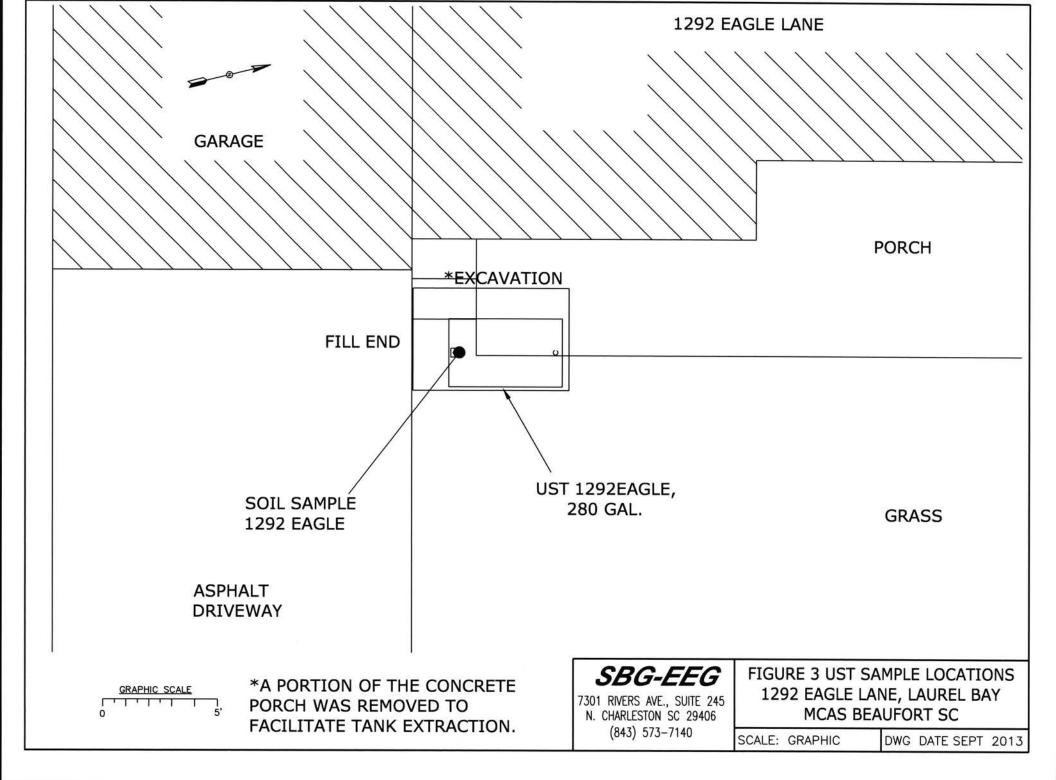
XIII. SITE MAP

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 1292Eagle.



Picture 2: UST 1292Eagle excavation.

XIV. SUMMARY OF ANALYSIS RESULTS

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

CoC UST	1292Eagle		
Benzene	ND		
Toluene	ND		
Ethylbenzene	ND		
Xylenes	ND		
Naphthalene	ND		
Benzo (a) anthracene	2.16 mg/kg		
Benzo (b) fluoranthene	2.36 mg/kg		
Benzo (k) fluoranthene	0.945 mg/kg		
Chrysene	2.92 mg/kg		
Dibenz (a, h) anthracene	0.160 mg/kg		
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)	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 Drive Nashville, TN 37204 Tel: (615)726-0177

TestAmerica Job ID: 490-34035-1 Client Project/Site: Laurel Bay Housing Project

For:

Small Business Group Inc. 10179 Highway 78 Ladson, South Carolina 29456

Attn: Tom McElwee

Kuth Hay

Authorized for release by: 9/6/2013 1:56:25 PM

Ken Hayes, Project Manager I ken.hayes@testamericainc.com

Have a Question? The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager

at the e-mail address or telephone number listed on this page.

LINKS

Review your project results through

Total Access

Ask

The

www.testamericainc.com

Visit us at:

Expert

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

Cover Page	1
Table of Contents	2
Sample Summary	3
Case Narrative	4
Definitions	5
Client Sample Results	6
QC Sample Results	10
QC Association	17
Chronicle	19
Method Summary	21
Certification Summary	22
Chain of Custody	23
Receipt Checklists	25

Client: Small Business Group Inc. Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-34035-1

6

8

9 10

12

13

Project/Site: Laurel	Bay Housing Project				4
Lab Sample ID	Client Sample ID	Matrix	Collected	Received	3
490-34035-1	1292 Eagle	Soil	08/19/13 14:45	08/27/13 08:00	
490-34035-2	1178 Bobwhite	Soil	08/20/13 14:15	08/27/13 08:00	
490-34035-3	402 Elderberry	Soil	08/21/13 14:15	08/27/13 08:00	B
490-34035-4	1410 Eagle	Soil	08/22/13 14:45	08/27/13 08:00	12

Client: Small Business Group Inc. Project/Site: Laurel Bay Housing Project

Job ID: 490-34035-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-34035-1

Comments

No additional comments.

Receipt

The samples were received on 8/27/2013 8:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.2° C.

GC/MS VOA

Method(s) 8260B: Internal standard responses were outside of acceptance limits for the following sample(s): 1292 Eagle (490-34035-1). The sample(s) shows evidence of matrix interference.

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: 1292 Eagle (490-34035-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 103825. See LCS/LCSD

Method(s) 8260B: The following sample was diluted due to the nature of the sample matrix: 402 Elderberry (490-34035-3). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: Reanalysis of the following sample for Naphthalene was performed outside of the analytical holding time: 1292 Eagle (490-34035-1).

Method(s) 8260B: The following sample(s) was diluted due to the nature of the sample matrix: 1292 Eagle (490-34035-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The method blank for batch 104525 contained Toluene and Xylenes above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No other analytical or quality issues were noted.

GC/MS Semi VOA

Method(s) 8270D: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 103822.

No other analytical or quality issues were noted.

Organic Prep

Method(s) Moisture: The sample duplicate precision for the following sample associated with batch 103009 was outside control limits: (490-34035-1 DU). The associated Laboratory Control Sample / Laboratory Control Sample Duplicate (LCS/LCSD) precision met acceptance criteria.

No other analytical or quality issues were noted.

VOA Prep

No analytical or quality issues were noted.

TestAmerica Job ID: 490-34035-1

Definitions/Glossary

Client: Small Business Group Inc. Project/Site: Laurel Bay Housing Project

TEF

TEQ

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

TestAmerica Job ID: 490-34035-1

13

Qualifiers	
GC/MS VOA	
Qualifier	Qualifier Description
x	Surrogate is outside control limits
н	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC/MS Semi \	/OA
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
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Client Sample ID: 1292 Eagle

Date Collected: 08/19/13 14:45 Date Received: 08/27/13 08:00 Matrix: Soil Percent Solids: 93.9

6

9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00214	0.000718	mg/Kg	Ω.	08/27/13 15:32	08/30/13 18:29	1
Ethylbenzene	ND		0.00214	0.000718	mg/Kg	32	08/27/13 15:32	08/30/13 18:29	1
Naphthalene	ND	н	0.290	0.0987	mg/Kg	53	08/27/13 15:33	09/04/13 13:28	1
Toluene	ND		0.00214	0.000793	mg/Kg	33	08/27/13 15:32	08/30/13 18:29	1
Xylenes, Total	ND		0.00322	0.000718	mg/Kg	a	08/27/13 15:32	08/30/13 18:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 130				08/27/13 15:32	08/30/13 18:29	1
1,2-Dichloroethane-d4 (Surr)	89		70 - 130				08/27/13 15:33	09/04/13 13:28	1
4-Bromofluorobenzene (Surr)	136	x	70 - 130				08/27/13 15:32	08/30/13 18:29	1
4-Bromofluorobenzene (Surr)	110		70 - 130				08/27/13 15:33	09/04/13 13:28	1
Dibromofluoromethane (Surr)	102		70 - 130				08/27/13 15:32	08/30/13 18:29	1
Dibromofluoromethane (Surr)	100		70 - 130				08/27/13 15:33	09/04/13 13:28	1
Toluene-d8 (Surr)	114		70 - 130				08/27/13 15:32	08/30/13 18:29	1
Toluene-d8 (Surr)	110		70 - 130				08/27/13 15:33	09/04/13 13:28	4
Toldene-do (Sun)	110		10 - 130				00/21/10 10.00	03/04/13 13.20	1
		nds (GC/MS					0021110 10.00	03/04/13 13.20	-
Method: 8270D - Semivolatile	Organic Compou	nds (GC/MS Qualifier		MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8270D - Semivolatile Analyte	Organic Compou		;)	MDL 0.00990	Unit mg/Kg	D			Dil Fac
Method: 8270D - Semivolatile Analyte Acenaphthene	Organic Compou Result		i) RL				Prepared	Analyzed	Dil Fac
Method: 8270D - Semivolatile Analyte Acenaphthene Acenaphthylene	Organic Compou Result ND		5) RL 0.0663	0.00990	mg/Kg	π	Prepared 08/30/13 09:37	Analyzed 09/03/13 14:07	Dil Fac
Method: 8270D - Semivolatile Analyte Acenaphthene Acenaphthylene Anthracene	Organic Compou Result ND ND		6) RL 0.0663 0.0663	0.00990 0.00891	mg/Kg mg/Kg mg/Kg	a	Prepared 08/30/13 09:37 08/30/13 09:37	Analyzed 09/03/13 14:07 09/03/13 14:07	7 Dil Fac 1 1 1 1
Method: 8270D - Semivolatile Analyte Acenaphthene Acenaphthylene Anthracene Benzo[a]anthracene	Organic Compou Result ND ND 0.125		6) RL 0.0663 0.0663 0.0663	0.00990 0.00891 0.00891	mg/Kg mg/Kg mg/Kg mg/Kg	2 2 2	Prepared 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37	Analyzed 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07	Dil Fac 1 1 1 1 1
Method: 8270D - Semivolatile Analyte Acenaphthene Acenaphthylene Anthracene Benzo[a]anthracene Benzo[a]pyrene	Organic Compou Result ND 0.125 2.16		 RL 0.0663 0.0663 0.0663 0.0663 	0.00990 0.00891 0.00891 0.0148	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	2 2 2 2 2	Prepared 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37	Analyzed 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07	7 Dil Fac 1 1 1 1 1 1
Method: 8270D - Semivolatile Analyte Acenaphthene Acenaphthylene Anthracene Benzo[a]anthracene Benzo[a]pyrene Benzo[b]fluoranthene	Organic Compou Result ND 0.125 2.16 1.17		 RL 0.0663 0.0663 0.0663 0.0663 0.0663 0.0663 	0.00990 0.00891 0.00891 0.0148 0.0119	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Prepared 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37	Analyzed 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07	Dil Fac 1 1 1 1 1 1 1
Method: 8270D - Semivolatile Analyte Acenaphthene Acenaphthylene Anthracene Benzo[a]anthracene Benzo[a]pyrene Benzo[b]fluoranthene Benzo[g,h,i]perylene	Organic Compou Result ND 0.125 2.16 1.17 2.36		 RL 0.0663 0.0663 0.0663 0.0663 0.0663 0.0663 0.0663 	0.00990 0.00891 0.00891 0.0148 0.0119 0.0119	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Prepared 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37	Analyzed 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07	Dil Fac 1 1 1 1 1 1 1 1 1
Method: 8270D - Semivolatile Analyte Acenaphthene Acenaphthylene Anthracene Benzo[a]anthracene Benzo[a]pyrene Benzo[b]fluoranthene Benzo[g,h,i]perylene Benzo[k]fluoranthene	Organic Compou Result ND 0.125 2.16 1.17 2.36 0.446		 RL 0.0663 0.0663 0.0663 0.0663 0.0663 0.0663 0.0663 0.0663 	0.00990 0.00891 0.00891 0.0148 0.0119 0.0119 0.00891	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg		Prepared 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37	Analyzed 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07	Dil Fac 1 1 1 1 1 1 1 1 1 1 1
Method: 8270D - Semivolatile Analyte Acenaphthene Acenaphthylene Anthracene Benzo[a]anthracene Benzo[a]pyrene Benzo[b]fluoranthene Benzo[g,h,i]perylene Benzo[k]fluoranthene 1-Methylnaphthalene	Organic Compou Result ND 0.125 2.16 1.17 2.36 0.446 0.945		 RL 0.0663 	0.00990 0.00891 0.00891 0.0148 0.0119 0.0119 0.00891 0.0139 0.0139	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg		Prepared 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37	Analyzed 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1
Method: 8270D - Semivolatile Analyte Acenaphthene Acenaphthylene Anthracene Benzo[a]anthracene Benzo[a]pyrene Benzo[b]fluoranthene Benzo[g,h,i]perylene Benzo[k]fluoranthene 1-Methylnaphthalene Pyrene	Organic Compou Result ND 0.125 2.16 1.17 2.36 0.446 0.945 ND		 RL 0.0663 	0.00990 0.00891 0.00891 0.0148 0.0119 0.0119 0.00891 0.0139 0.0139	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg		Prepared 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37	Analyzed 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07	1 1 1 1 1 1 1 1 1
Method: 8270D - Semivolatile Analyte Acenaphthene Acenaphthylene Anthracene Benzo[a]anthracene Benzo[a]pyrene Benzo[b]fluoranthene Benzo[g,h,i]perylene Benzo[k]fluoranthene 1-Methylnaphthalene Pyrene Phenanthrene Chrysene	Organic Compou Result ND 0.125 2.16 1.17 2.36 0.446 0.945 ND 4.10		RL 0.0663 0.0663 0.0663 0.0663 0.0663 0.0663 0.0663 0.0663 0.0663 0.0663	0.00990 0.00891 0.00891 0.0148 0.0119 0.0119 0.00891 0.0139 0.0139 0.119	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg		Prepared 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37 08/30/13 09:37	Analyzed 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07 09/03/13 14:07	1 1 1 1 1 1 1 1 1 1 10

0.0663

0.663

0.0663

0.0663

0.0663

0.0663

Limits

29 - 120

13 - 120

27 - 120

RL

0.10

0.160

5.04

0.0394 J

ND

ND

%Recovery Qualifier

94

86

83

94

Result Qualifier

0.454

General Chemistry	
Analyte	
Percent Solids	

Dibenz(a,h)anthracene

Indeno[1,2,3-cd]pyrene

2-Methylnaphthalene

2-Fluorobiphenyl (Surr)

Nitrobenzene-d5 (Surr)

Terphenyl-d14 (Surr)

Fluoranthene

Fluorene

Naphthalene

Surrogate

 RL
 Unit

 0.10
 %

0.00693 mg/Kg

0.0891 mg/Kg

0.0119 mg/Kg

0.00990 mg/Kg

0.00891 mg/Kg

0.0158 mg/Kg

¤ 08/30/13 09:37

¹² 08/30/13 09:37

08/30/13 09:37

08/30/13 09:37

Prepared

08/30/13 09:37

08/30/13 09:37

08/30/13 09:37

Prepared

08/30/13 09:37 09/03/13 14:07

08/30/13 09:37 09/03/13 14:07

17

12

325

12

D

09/03/13 14:07

09/04/13 15:46

09/03/13 14:07

09/03/13 14:07

Analyzed

09/03/13 14:07

09/03/13 14:07

09/03/13 14:07

Analyzed

08/27/13 15:07

1

10

1

1

1

1

1

1

1

1

Dil Fac

Dil Fac

Client Sample ID: 1178 Bobwhite

Lab Sample ID: 490-34035-2 Matrix: Soil

Percent Solids: 83.3

6

8

9 10

Method: 8260B - Volatile Organi	c Compounds	GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00206	0.000691	mg/Kg	Ħ	08/27/13 15:32	08/30/13 18:58	1
Ethylbenzene	0.00300		0.00206	0.000691	mg/Kg	n	08/27/13 15:32	08/30/13 18:58	1
Naphthalene	0.0117		0.00515	0.00175	mg/Kg	n	08/27/13 15:32	08/30/13 18:58	1
Toluene	0.00462		0.00206	0.000763	mg/Kg	ŭ	08/27/13 15:32	08/30/13 18:58	1
Xylenes, Total	0.0135		0.00309	0.000691	mg/Kg	12	08/27/13 15:32	08/30/13 18:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 130				08/27/13 15:32	08/30/13 18:58	1
4-Bromofluorobenzene (Surr)	110		70 - 130				08/27/13 15:32	08/30/13 18:58	1
Dibromofluoromethane (Surr)	93		70 - 130				08/27/13 15:32	08/30/13 18:58	1
Toluene-d8 (Surr)	102		70 - 130				08/27/13 15:32	08/30/13 18:58	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0661	0.00987	mg/Kg	¤	09/03/13 15:52	09/04/13 19:03	1
Acenaphthylene	ND		0.0661	0.00888	mg/Kg	a	09/03/13 15:52	09/04/13 19:03	1
Anthracene	ND		0.0661	0.00888	mg/Kg	a	09/03/13 15:52	09/04/13 19:03	1
Benzo[a]anthracene	0.0439	J	0.0661	0.0148	mg/Kg	a	09/03/13 15:52	09/04/13 19:03	1
Benzo[a]pyrene	ND		0.0661	0.0118	mg/Kg	a	09/03/13 15:52	09/04/13 19:03	1
Benzo[b]fluoranthene	0.0413	J	0.0661	0.0118	mg/Kg	a	09/03/13 15:52	09/04/13 19:03	1
Benzo[g,h,i]perylene	ND		0.0661	0.00888	mg/Kg	12	09/03/13 15:52	09/04/13 19:03	1
Benzo[k]fluoranthene	0.0186	J	0.0661	0.0138	mg/Kg	α	09/03/13 15:52	09/04/13 19:03	1
1-Methylnaphthalene	ND		0.0661	0.0138	mg/Kg	ä	09/03/13 15:52	09/04/13 19:03	1
Pyrene	0.0518	J	0.0661	0.0118	mg/Kg	a	09/03/13 15:52	09/04/13 19:03	1
Phenanthrene	ND		0.0661	0.00888	mg/Kg	a	09/03/13 15:52	09/04/13 19:03	1
Chrysene	ND		0.0661	0.00888	mg/Kg	a	09/03/13 15:52	09/04/13 19:03	1
Dibenz(a,h)anthracene	ND		0.0661	0.00691	mg/Kg	n	09/03/13 15:52	09/04/13 19:03	1
Fluoranthene	0.0622	J	0.0661	0.00888	mg/Kg	ä	09/03/13 15:52	09/04/13 19:03	1
Fluorene	ND		0.0661	0.0118	mg/Kg	a	09/03/13 15:52	09/04/13 19:03	1
Indeno[1,2,3-cd]pyrene	ND		0.0661	0.00987	mg/Kg	a	09/03/13 15:52	09/04/13 19:03	1
Naphthalene	ND		0.0661	0.00888	mg/Kg	0	09/03/13 15:52	09/04/13 19:03	1
2-Methylnaphthalene	ND		0.0661	0.0158	mg/Kg	¤	09/03/13 15:52	09/04/13 19:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	57		29 - 120				09/03/13 15:52	09/04/13 19:03	1
Terphenyl-d14 (Surr)	72		13 - 120				09/03/13 15:52	09/04/13 19:03	1
Nitrobenzene-d5 (Surr)	55		27 - 120				09/03/13 15:52	09/04/13 19:03	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83	11.1	0.10	0.10	%			08/27/13 15:07	1

Client Sample ID: 402 Elderberry

Date Collected: 08/21/13 14:15 Date Received: 08/27/13 08:00

Lab Sample ID: 490-34035-3

Matrix: Soil Percent Solids: 93.3

Method: 8260B - Volatile Orga	nic Compounds (GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00214	0.000717	mg/Kg	12	08/27/13 15:32	08/30/13 19:28	1
Ethylbenzene	ND		0.00214	0.000717	mg/Kg	-	08/27/13 15:32	08/30/13 19:28	1
Naphthalene	ND		0.00535	0.00182	mg/Kg	a	08/27/13 15:32	08/30/13 19:28	1
Toluene	ND		0.00214	0.000792	mg/Kg	α	08/27/13 15:32	08/30/13 19:28	1
Xylenes, Total	ND		0.00321	0.000717	mg/Kg	¤	08/27/13 15:32	08/30/13 19:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		70 - 130				08/27/13 15:32	08/30/13 19:28	1
4-Bromofluorobenzene (Surr)	108		70 - 130				08/27/13 15:32	08/30/13 19:28	1
Dibromofluoromethane (Surr)	88		70 - 130				08/27/13 15:32	08/30/13 19:28	1
Toluene-d8 (Surr)	106		70 - 130				08/27/13 15:32	08/30/13 19:28	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0668	0.00998	mg/Kg	^D	08/30/13 09:37	09/03/13 14:35	1
Acenaphthylene	ND		0.0668	0.00898	mg/Kg	12	08/30/13 09:37	09/03/13 14:35	1
Anthracene	ND		0.0668	0.00898	mg/Kg	Ħ	08/30/13 09:37	09/03/13 14:35	1
Benzo[a]anthracene	ND		0.0668	0.0150	mg/Kg	12	08/30/13 09:37	09/03/13 14:35	1
Benzo[a]pyrene	0.0336	J	0.0668	0.0120	mg/Kg	n	08/30/13 09:37	09/03/13 14:35	1
Benzo[b]fluoranthene	0.0460	J	0.0668	0.0120	mg/Kg	\$	08/30/13 09:37	09/03/13 14:35	1
Benzo[g,h,i]perylene	ND		0.0668	0.00898	mg/Kg	¤	08/30/13 09:37	09/03/13 14:35	1
Benzo[k]fluoranthene	0.0221	J	0.0668	0.0140	mg/Kg	a	08/30/13 09:37	09/03/13 14:35	1
1-Methylnaphthalene	ND		0.0668	0.0140	mg/Kg	a	08/30/13 09:37	09/03/13 14:35	1
Pyrene	ND		0.0668	0.0120	mg/Kg	a	08/30/13 09:37	09/03/13 14:35	1
Phenanthrene	ND		0.0668	0.00898	mg/Kg		08/30/13 09:37	09/03/13 14:35	1
Chrysene	ND		0.0668	0.00898	mg/Kg	-	08/30/13 09:37	09/03/13 14:35	1
Dibenz(a,h)anthracene	ND		0.0668	0.00698	mg/Kg	32	08/30/13 09:37	09/03/13 14:35	1
Fluoranthene	ND		0.0668	0.00898	mg/Kg	~	08/30/13 09:37	09/03/13 14:35	1
Fluorene	ND		0.0668	0.0120	mg/Kg	n	08/30/13 09:37	09/03/13 14:35	1
Indeno[1,2,3-cd]pyrene	ND		0.0668	0.00998	mg/Kg	a	08/30/13 09:37	09/03/13 14:35	1
Naphthalene	ND		0.0668	0.00898	mg/Kg	a	08/30/13 09:37	09/03/13 14:35	1
2-Methylnaphthalene	ND		0.0668	0.0160	mg/Kg	ü	08/30/13 09:37	09/03/13 14:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	74		29 - 120				08/30/13 09:37	09/03/13 14:35	1
Terphenyl-d14 (Surr)	75		13 - 120				08/30/13 09:37	09/03/13 14:35	1
Nitrobenzene-d5 (Surr)	65		27 - 120				08/30/13 09:37	09/03/13 14:35	1
General Chemistry		0				-			
Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10	0.10	%			08/27/13 15:07	1

Client Sample ID: 1410 Eagle

Date Collected: 08/22/13 14:45 Date Received: 08/27/13 08:00

Lab Sample ID: 490-34035-4

Matrix: Soil Percent Solids: 90.8

6

Method: 8260B - Volatile Organi	c Compounds (GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00204	0.000683	mg/Kg	a	08/27/13 15:32	08/30/13 19:57	1
Ethylbenzene	0.0185		0.00204	0.000683	mg/Kg	Ø	08/27/13 15:32	08/30/13 19:57	1
Naphthalene	0.141		0.00510	0.00173	mg/Kg	a	08/27/13 15:32	08/30/13 19:57	1
Toluene	0.00708		0.00204	0.000755	mg/Kg	\$2	08/27/13 15:32	08/30/13 19:57	1
Xylenes, Total	0.0883		0.00306	0.000683	mg/Kg	α	08/27/13 15:32	08/30/13 19:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		70 - 130				08/27/13 15:32	08/30/13 19:57	1
4-Bromofluorobenzene (Surr)	110		70 - 130				08/27/13 15:32	08/30/13 19:57	1
Dibromofluoromethane (Surr)	89		70 - 130				08/27/13 15:32	08/30/13 19:57	1
Toluene-d8 (Surr)	110		70 - 130				08/27/13 15:32	08/30/13 19:57	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg	α	08/30/13 09:37	09/03/13 15:03	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg	13	08/30/13 09:37	09/03/13 15:03	1
Anthracene	0.0163	J	0.0670	0.00900	mg/Kg	α	08/30/13 09:37	09/03/13 15:03	1
Benzo[a]anthracene	0.328		0.0670	0.0150	mg/Kg	a	08/30/13 09:37	09/03/13 15:03	1
Benzo[a]pyrene	0.256		0.0670	0.0120	mg/Kg	a	08/30/13 09:37	09/03/13 15:03	1
Benzo[b]fluoranthene	0.375		0.0670	0.0120	mg/Kg	¤	08/30/13 09:37	09/03/13 15:03	1
Benzo[g,h,i]perylene	0.160		0.0670	0.00900	mg/Kg	\$	08/30/13 09:37	09/03/13 15:03	1
Benzo[k]fluoranthene	0.179		0.0670	0.0140	mg/Kg	α	08/30/13 09:37	09/03/13 15:03	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg	×	08/30/13 09:37	09/03/13 15:03	1
Pyrene	0.314		0.0670	0.0120	mg/Kg	¤	08/30/13 09:37	09/03/13 15:03	1
Phenanthrene	0.0446	J	0.0670	0.00900	mg/Kg	Ω.	08/30/13 09:37	09/03/13 15:03	1
Chrysene	0.518		0.0670	0.00900	mg/Kg	n	08/30/13 09:37	09/03/13 15:03	1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg	n	08/30/13 09:37	09/03/13 15:03	1
Fluoranthene	0.288		0.0670	0.00900	mg/Kg	a	08/30/13 09:37	09/03/13 15:03	1
Fluorene	ND		0.0670	0.0120	mg/Kg	¤	08/30/13 09:37	09/03/13 15:03	1
Indeno[1,2,3-cd]pyrene	0.153		0.0670	0.0100	mg/Kg	α	08/30/13 09:37	09/03/13 15:03	1
Naphthalene	ND		0.0670	0.00900	mg/Kg	32	08/30/13 09:37	09/03/13 15:03	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg	n	08/30/13 09:37	09/03/13 15:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	72		29 - 120				08/30/13 09:37	09/03/13 15:03	1
Terphenyl-d14 (Surr)	69		13 - 120				08/30/13 09:37	09/03/13 15:03	1
Nitrobenzene-d5 (Surr)	69		27 - 120				08/30/13 09:37	09/03/13 15:03	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10	0.10	%			08/27/13 15:07	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-103825/6 Matrix: Solid							Client S	ample ID: Metho Prep Type: 1	
Analysis Batch: 103825	МВ	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			08/30/13 12:37	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			08/30/13 12:37	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			08/30/13 12:37	1
Toluene	ND		0.00200	0.000740	mg/Kg			08/30/13 12:37	1
Xylenes, Total	ND		0.00300	0.000670	mg/Kg			08/30/13 12:37	1
	MB	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 130					08/30/13 12:37	1
4-Bromofluorobenzene (Surr)	109		70 - 130					08/30/13 12:37	1
Dibromofluoromethane (Surr)	95		70 - 130					08/30/13 12:37	1
Toluene-d8 (Surr)	108		70 - 130					08/30/13 12:37	1

Lab Sample ID: LCS 490-103825/3 Matrix: Solid Analysis Batch: 103825

		Spike	LCS	LCS				%Rec.
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene		0.0500	0.04499		mg/Kg		90	75 - 127
Ethylbenzene		0.0500	0.04551		mg/Kg		91	80 - 134
Naphthalene		0.0500	0.04853		mg/Kg		97	69 - 150
Toluene		0.0500	0.04880		mg/Kg		98	80 - 132
Xylenes, Total		0.150	0.1352		mg/Kg		90	80 - 137
	LCS LCS							

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	100		70 - 130
Dibromofluoromethane (Surr)	97		70 - 130
Toluene-d8 (Surr)	106		70 - 130

Lab Sample ID: LCSD 490-103825/4 Matrix: Solid

Analysis Batch: 103825

			Spike	LCSD	LCSD				%Rec.		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene			0.0500	0.04546		mg/Kg		91	75 - 127	1	50
Ethylbenzene			0.0500	0.04713		mg/Kg		94	80 - 134	3	50
Naphthalene			0.0500	0.04918		mg/Kg		98	69 - 150	1	50
Toluene			0.0500	0.05064		mg/Kg		101	80 - 132	4	50
Xylenes, Total			0.150	0.1391		mg/Kg		93	80 - 137	3	50
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	99		70 - 130								
4-Bromofluorobenzene (Surr)	99		70 - 130								
Diberry Burger and barry (Curry)	07		70 400								

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Type: Total/NA

7

8

9 10

TestAmerica Job ID: 490-34035-1 5

TestAmerica Job ID: 490-34035-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-104525/8							Client Sa	ample ID: Metho	d Blank
Matrix: Solid								Prep Type: T	Total/NA
Analysis Batch: 104525									
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0340	mg/Kg			09/04/13 12:58	1
Ethylbenzene	ND		0.100	0.0340	mg/Kg			09/04/13 12:58	1
Naphthalene	ND		0.250	0.0850	mg/Kg			09/04/13 12:58	1
Toluene	0.03943	J	0.100	0.0370	mg/Kg			09/04/13 12:58	1
Xylenes, Total	0.1211	J	0.150	0.0340	mg/Kg			09/04/13 12:58	1
	МВ	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		70 - 130					09/04/13 12:58	1
4-Bromofluorobenzene (Surr)	112		70 - 130					09/04/13 12:58	1
Dibromofluoromethane (Surr)	99		70 - 130					09/04/13 12:58	1
Toluene-d8 (Surr)	105		70 - 130					09/04/13 12:58	1

Lab Sample ID: LCS 490-104525/4 Matrix: Solid

Analysis Batch: 104525

	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.0500	0.04332		mg/Kg		87	75 - 127
Ethylbenzene	0.0500	0.04544		mg/Kg		91	80 - 134
Naphthalene	0.0500	0.04118		mg/Kg		82	69 - 150
Toluene	0.0500	0.04354		mg/Kg		87	80 - 132
Xylenes, Total	0.100	0.09501		mg/Kg		95	80 - 137

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		70 - 130
4-Bromofluorobenzene (Surr)	106		70 - 130
Dibromofluoromethane (Surr)	103		70 - 130
Toluene-d8 (Surr)	100		70 - 130

Lab Sample ID: LCSD 490-104525/5 Matrix: Solid

Analysis Batch: 104525

		Spike	LCSD	LCSD				%Rec.		RPD
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene		0.0500	0.04321		mg/Kg		86	75 - 127	0	50
Ethylbenzene		0.0500	0.04461		mg/Kg		89	80 - 134	2	50
Naphthalene		0.0500	0.04083		mg/Kg		82	69 - 150	1	50
Toluene		0.0500	0.04306		mg/Kg		86	80 - 132	1	50
Xylenes, Total		0.100	0.09262		mg/Kg		93	80 - 137	3	50
	LCSD LCSD									
Currents	N/D									

		2000	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		70 - 130
4-Bromofluorobenzene (Surr)	105		70 - 130
Dibromofluoromethane (Surr)	103		70 - 130
Toluene-d8 (Surr)	100		70 - 130

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

5

7

8

9 10

Prep	Type:	Total/NA

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-103822/1-A							Client Sa	mple ID: Metho	d Blank
Matrix: Solid								Prep Type: 1	otal/NA
Analysis Batch: 104317								Prep Batch:	103822
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg		08/30/13 08:56	09/03/13 12:43	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		08/30/13 08:56	09/03/13 12:43	1
Anthracene	ND		0.0670	0.00900	mg/Kg		08/30/13 08:56	09/03/13 12:43	1
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		08/30/13 08:56	09/03/13 12:43	1
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		08/30/13 08:56	09/03/13 12:43	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		08/30/13 08:56	09/03/13 12:43	1
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		08/30/13 08:56	09/03/13 12:43	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		08/30/13 08:56	09/03/13 12:43	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		08/30/13 08:56	09/03/13 12:43	1
Pyrene	ND		0.0670	0.0120	mg/Kg		08/30/13 08:56	09/03/13 12:43	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		08/30/13 08:56	09/03/13 12:43	1
Chrysene	ND		0.0670	0.00900	mg/Kg		08/30/13 08:56	09/03/13 12:43	1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		08/30/13 08:56	09/03/13 12:43	1
Fluoranthene	ND		0.0670	0.00900	mg/Kg		08/30/13 08:56	09/03/13 12:43	1
Fluorene	ND		0.0670	0.0120	mg/Kg		08/30/13 08:56	09/03/13 12:43	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		08/30/13 08:56	09/03/13 12:43	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		08/30/13 08:56	09/03/13 12:43	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		08/30/13 08:56	09/03/13 12:43	1
	МВ	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	77		29 - 120				08/30/13 08:56	09/03/13 12:43	1
Terphenyl-d14 (Surr)	91		13 - 120				08/30/13 08:56	09/03/13 12:43	1

Lab Sample ID: LCS 490-103822/2-A Matrix: Solid Analysis Batch: 104317

Nitrobenzene-d5 (Surr)

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Acenaphthylene	1.67	1.418		mg/Kg		85	38 - 120	
Anthracene	1.67	1.540		mg/Kg		92	46 - 124	
Benzo[a]anthracene	1.67	1.420		mg/Kg		85	45 - 120	
Benzo[a]pyrene	1.67	1.431		mg/Kg		86	45 - 120	
Benzo[b]fluoranthene	1.67	1.400		mg/Kg		84	42 - 120	
Benzo[g,h,i]perylene	1.67	1.378		mg/Kg		83	38 - 120	
Benzo[k]fluoranthene	1.67	1.534		mg/Kg		92	42 - 120	
1-Methylnaphthalene	1.67	1.365		mg/Kg		82	32 - 120	
Pyrene	1.67	1.486		mg/Kg		89	43 - 120	
Phenanthrene	1.67	1.537		mg/Kg		92	45 - 120	
Chrysene	1.67	1.498		mg/Kg		90	43 - 120	
Dibenz(a,h)anthracene	1.67	1.412		mg/Kg		85	32 - 128	
Fluoranthene	1.67	1.545		mg/Kg		93	46 - 120	
Fluorene	1.67	1.489		mg/Kg		89	42 - 120	
Indeno[1,2,3-cd]pyrene	1.67	1.389		mg/Kg		83	41 - 121	
Naphthalene	1.67	1.351		mg/Kg		81	32 - 120	
2-Methylnaphthalene	1.67	1.380		mg/Kg		83	28 - 120	

27 - 120

70

Client Sample ID: Lab Control Sample

08/30/13 08:56 09/03/13 12:43

Prep Type: Total/NA Prep Batch: 103822

1

TestAmerica Nashville

TestAmerica Job ID: 490-34035-1

5

7

8

9 10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-103822/2-A Matrix: Solid Analysis Batch: 104317

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	84		29 - 120
Terphenyl-d14 (Surr)	87		13 - 120
Nitrobenzene-d5 (Surr)	79		27 - 120

Lab Sample ID: LCSD 490-103822/3-A Matrix: Solid

Analysis Batch: 104317							Prep I	Batch: 1	03822
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthylene	1.67	1.438		mg/Kg		86	38 - 120	1	50
Anthracene	1.67	1.420		mg/Kg		85	46 - 124	8	49
Benzo[a]anthracene	1.67	1.444		mg/Kg		87	45 - 120	2	50
Benzo[a]pyrene	1.67	1.360		mg/Kg		82	45 - 120	5	50
Benzo[b]fluoranthene	1.67	1.497		mg/Kg		90	42 - 120	7	50
Benzo[g,h,i]perylene	1.67	1.392		mg/Kg		84	38 - 120	1	50
Benzo[k]fluoranthene	1.67	1.411		mg/Kg		85	42 - 120	8	45
1-Methylnaphthalene	1.67	1.406		mg/Kg		84	32 - 120	3	50
Pyrene	1.67	1.475		mg/Kg		88	43 - 120	1	50
Phenanthrene	1.67	1.333		mg/Kg		80	45 - 120	14	50
Chrysene	1.67	1.512		mg/Kg		91	43 - 120	1	49
Dibenz(a,h)anthracene	1.67	1.450		mg/Kg		87	32 - 128	3	50
Fluoranthene	1.67	1.425		mg/Kg		86	46 - 120	8	50
Fluorene	1.67	1.507		mg/Kg		90	42 - 120	1	50
Indeno[1,2,3-cd]pyrene	1.67	1.419		mg/Kg		85	41 - 121	2	50
Naphthalene	1.67	1.357		mg/Kg		81	32 - 120	0	50
2-Methylnaphthalene	1.67	1.391		mg/Kg		83	28 - 120	1	50
LCSD LC	SD								

%Recovery	Qualifier	Limits
76		29 - 120
73		13 - 120
71		27 - 120
	76 73	73

Lab Sample ID: MB 490-104447/1-A Matrix: Solid

Analysis Batch: 104641

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg		09/03/13 15:52	09/04/13 18:06	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		09/03/13 15:52	09/04/13 18:06	1
Anthracene	ND		0.0670	0.00900	mg/Kg		09/03/13 15:52	09/04/13 18:06	1
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		09/03/13 15:52	09/04/13 18:06	1
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		09/03/13 15:52	09/04/13 18:06	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		09/03/13 15:52	09/04/13 18:06	1
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		09/03/13 15:52	09/04/13 18:06	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		09/03/13 15:52	09/04/13 18:06	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		09/03/13 15:52	09/04/13 18:06	1
Pyrene	ND		0.0670	0.0120	mg/Kg		09/03/13 15:52	09/04/13 18:06	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		09/03/13 15:52	09/04/13 18:06	1

TestAmerica Nashville

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 104447

TestAmerica Job ID: 490-34035-1

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 103822

Prep Type: Total/NA

Page 13 of 25

RL

0.0670

0.0670

0.0670

0.0670

0.0670

0.0670

0.0670

Limits

29 - 120

13 - 120

27 - 120

MDL Unit

0.00900 mg/Kg

0.00700 mg/Kg

0.00900 mg/Kg

0.0120 mg/Kg

0.0100 mg/Kg

0.00900 mg/Kg

0.0160 mg/Kg

D

Prepared

09/03/13 15:52

09/03/13 15:52

09/03/13 15:52

09/03/13 15:52

09/03/13 15:52

09/03/13 15:52

09/03/13 15:52

Prepared

09/03/13 15:52

09/03/13 15:52

09/03/13 15:52

Client: Small Business Group Inc. Project/Site: Laurel Bay Housing Project

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

MB MB Result Qualifier

ND

ND

ND

ND

ND

ND

ND

68

82

63

MB MB %Recovery Qualifier

Lab Sample ID: MB 490-104447/1-A Matrix: Solid Analysis Batch: 104641

TestAmerica	Job	ID:	490-34035	5-1

Client Sample ID: Method Blank

Analyzed

09/04/13 18:06

09/04/13 18:06

09/04/13 18:06

09/04/13 18:06

09/04/13 18:06

09/04/13 18:06

09/04/13 18:06

Analyzed

09/04/13 18:06

09/04/13 18:06

09/04/13 18:06

Prep Type: Total/NA

Prep Batch: 104447

Prep Type: Total/NA

Prep Batch: 104447

Dil Fac

1

1

1

1

1

1

1

1

1

1

Dil Fac

2 3 4 5 6 7 8 9 10 11

Client	Sample	ID:	Lab	Control	Sample

Lab Sample ID: LCS 490-104447/2-A Matrix: Solid

Analyte

Chrysene

Fluorene

Fluoranthene

Naphthalene

Surrogate

Dibenz(a,h)anthracene

Indeno[1,2,3-cd]pyrene

2-Methylnaphthalene

2-Fluorobiphenyl (Surr)

Terphenyl-d14 (Surr)

Nitrobenzene-d5 (Surr)

Analysis Batch: 104641

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Acenaphthylene	1.67	1.345		mg/Kg		81	38 - 120	
Anthracene	1.67	1.404		mg/Kg		84	46 - 124	
Benzo[a]anthracene	1.67	1.364		mg/Kg		82	45 - 120	
Benzo[a]pyrene	1.67	1.240		mg/Kg		74	45 - 120	
Benzo[b]fluoranthene	1.67	1.457		mg/Kg		87	42 - 120	
Benzo[g,h,i]perylene	1.67	1.347		mg/Kg		81	38 - 120	
Benzo[k]fluoranthene	1.67	1.295		mg/Kg		78	42 - 120	
1-Methylnaphthalene	1.67	1.379		mg/Kg		83	32 - 120	
Pyrene	1.67	1.504		mg/Kg		90	43 - 120	
Phenanthrene	1.67	1.367		mg/Kg		82	45 - 120	
Chrysene	1.67	1.505		mg/Kg		90	43 - 120	
Dibenz(a,h)anthracene	1.67	1.408		mg/Kg		84	32 - 128	
Fluoranthene	1.67	1.324		mg/Kg		79	46 - 120	
Fluorene	1.67	1.413		mg/Kg		85	42 - 120	
Indeno[1,2,3-cd]pyrene	1.67	1.320		mg/Kg		79	41 - 121	
Naphthalene	1.67	1.338		mg/Kg		80	32 - 120	
2-Methylnaphthalene	1.67	1.326		mg/Kg		80	28 - 120	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	79		29 - 120
Terphenyl-d14 (Surr)	84		13 - 120
Nitrobenzene-d5 (Surr)	74		27 - 120
Nitrobenzene-d5 (Surr)	/4		27 - 1

Lab Sample ID: 490-34035-2 MS

Matrix: Soil

Analysis Batch: 104641									Prep	Batch: 104447
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Acenaphthylene	ND		1.64	1.024		mg/Kg	Ω	62	25 - 120	
Anthracene	ND		1.64	1.076		mg/Kg	12	65	28 - 125	

TestAmerica Nashville

Prep Type: Total/NA

Client Sample ID: 1178 Bobwhite

Client Sample ID: 1178 Bobwhite

Prep Type: Total/NA

Prep Batch: 104447

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-34035-2 MS								Client Sa	ample ID: 1178 Bobwh	ite
Matrix: Soil									Prep Type: Total/I	NA
Analysis Batch: 104641									Prep Batch: 1044	47
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzo[a]anthracene	0.0439	J	1.64	1.212		mg/Kg	×	71	23 - 120	
Benzo[a]pyrene	ND		1.64	1.108		mg/Kg	×	67	15 - 128	
Benzo[b]fluoranthene	0.0413	J	1.64	1.171		mg/Kg	22	69	12 - 133	
Benzo[g,h,i]perylene	ND		1.64	0.9672		mg/Kg	12	59	22 - 120	
Benzo[k]fluoranthene	0.0186	J	1.64	1.208		mg/Kg	a	72	28 - 120	
1-Methylnaphthalene	ND		1.64	0.9634		mg/Kg	52	59	10 - 120	
Pyrene	0.0518	J	1.64	1.390		mg/Kg	\$	81	20 - 123	
Phenanthrene	ND		1.64	1.061		mg/Kg	Ø	65	21 - 122	
Chrysene	ND		1.64	1.302		mg/Kg	-	79	20 - 120	
Dibenz(a,h)anthracene	ND		1.64	1.063		mg/Kg	α	65	12 - 128	
Fluoranthene	0.0622	J	1.64	1.363		mg/Kg	n	79	10 - 143	
Fluorene	ND		1.64	1.119		mg/Kg	¤	68	20 - 120	
Indeno[1,2,3-cd]pyrene	ND		1.64	1.046		mg/Kg	a	64	22 - 121	
Naphthalene	ND		1.64	0.8728		mg/Kg	n	53	10 - 120	
2-Methylnaphthalene	ND		1.64	0.9401		mg/Kg	ü	57	13 - 120	
	MS	MS								
Surrogate	%Recovery	Qualifier	Limits							
2-Fluorobiphenyl (Surr)	56		29 - 120							
Terphenyl-d14 (Surr)	64		13 - 120							
Nitrobenzene-d5 (Surr)	51		27 - 120							

Lab Sample ID: 490-34035-2 MSD Matrix: Soil Analysis Batch: 104641

, and Join Lease	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte		Qualifier	Added	Result		Unit	D	%Rec	Limits	RPD	Limit
Acenaphthylene	ND	Quanner	1.63	0.8028	Quanner	mg/Kg	n	49	25 - 120	24	50
							a				
Anthracene	ND		1.63	0.8530		mg/Kg		52	28 - 125	23	49
Benzo[a]anthracene	0.0439	J	1.63	0.8809		mg/Kg	-	51	23 - 120	32	50
Benzo[a]pyrene	ND		1.63	0.8231		mg/Kg	-	50	15 - 128	30	50
Benzo[b]fluoranthene	0.0413	J	1.63	0.8605		mg/Kg	α	50	12 - 133	31	50
Benzo[g,h,i]perylene	ND		1.63	0.7600		mg/Kg	¤	47	22 - 120	24	50
Benzo[k]fluoranthene	0.0186	J	1.63	0.8348		mg/Kg	α	50	28 - 120	37	45
1-Methylnaphthalene	ND		1.63	0.7681		mg/Kg	α	47	10 - 120	23	50
Pyrene	0.0518	J	1.63	0.9842		mg/Kg	x	57	20 - 123	34	50
Phenanthrene	ND		1.63	0.8501		mg/Kg	3	52	21 - 122	22	50
Chrysene	ND		1.63	0.9361		mg/Kg	α	57	20 - 120	33	49
Dibenz(a,h)anthracene	ND		1.63	0.7670		mg/Kg	£	47	12 - 128	32	50
Fluoranthene	0.0622	J	1.63	0.8915		mg/Kg		51	10 - 143	42	50
Fluorene	ND		1.63	0.8647		mg/Kg	13	53	20 - 120	26	50
Indeno[1,2,3-cd]pyrene	ND		1.63	0.7353		mg/Kg	12	45	22 - 121	35	50
Naphthalene	ND		1.63	0.6947		mg/Kg	n	43	10 - 120	23	50
2-Methylnaphthalene	ND		1.63	0.7635		mg/Kg	α	47	13 - 120	21	50
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
2-Fluorobiphenyl (Surr)	42		29 - 120								
Terphenyl-d14 (Surr)	48		13 - 120								

TestAmerica Job ID: 490-34035-1

7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-3403	5-2 MSD			Client Sample ID: 1178 B	obwhite
Matrix: Soil				Prep Type: 1	otal/NA
Analysis Batch: 104641				Prep Batch:	104447
	MSD	MSD			
Surrogate	%Recovery	Qualifier	Limits		
Nitrobenzene-d5 (Surr)	37		27 - 120		
Method: Moisture - Pe	rcent Moisture				

Lab Sample ID: 490-34035-1 DU Client Sample ID: 1292 Eagle Matrix: Soil Prep Type: Total/NA Analysis Batch: 103009 Sample Sample DU DU RPD **Result Qualifier** Result Qualifier Analyte Unit D RPD Limit Percent Solids 94 92 % 2 20

QC Association Summary

Client: Small Business Group Inc. Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-34035-1

3 4 5

GC/MS VOA

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
490-34035-1	1292 Eagle	Total/NA	Soil	5035	
490-34035-2	1178 Bobwhite	Total/NA	Soil	5035	
490-34035-3	402 Elderberry	Total/NA	Soil	5035	
490-34035-4	1410 Eagle	Total/NA	Soil	5035	
Prep Batch: 103017					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
490-34035-1	1292 Eagle	Total/NA	Soil	5035	
Analysis Batch: 10382	5				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
490-34035-1	1292 Eagle	Total/NA	Soil	8260B	10301
490-34035-2	1178 Bobwhite	Total/NA	Soil	8260B	10301
490-34035-3	402 Elderberry	Total/NA	Soil	8260B	10301
490-34035-4	1410 Eagle	Total/NA	Soil	8260B	10301
LCS 490-103825/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-103825/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-103825/6	Method Blank	Total/NA	Solid	8260B	
Analysis Batch: 10452	5				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
490-34035-1	1292 Eagle	Total/NA	Soil	8260B	103017
LCS 490-104525/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-104525/5	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-104525/8	Method Blank	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 103822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-34035-1	1292 Eagle	Total/NA	Soil	3550C	
490-34035-3	402 Elderberry	Total/NA	Soil	3550C	
490-34035-4	1410 Eagle	Total/NA	Soil	3550C	
LCS 490-103822/2-A	Lab Control Sample	Total/NA	Solid	3550C	
LCSD 490-103822/3-A	Lab Control Sample Dup	Total/NA	Solid	3550C	
MB 490-103822/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 104317

490-34035-2 MS

1178 Bobwhite

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-34035-1	1292 Eagle	Total/NA	Soil	8270D	103822
490-34035-3	402 Elderberry	Total/NA	Soil	8270D	103822
490-34035-4	1410 Eagle	Total/NA	Soil	8270D	103822
LCS 490-103822/2-A	Lab Control Sample	Total/NA	Solid	8270D	103822
LCSD 490-103822/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	103822
MB 490-103822/1-A	Method Blank	Total/NA	Solid	8270D	103822
Prep Batch: 104447					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-34035-2	1178 Bobwhite	Total/NA	Soil	3550C	

TestAmerica Nashville

3550C

Total/NA

Soil

QC Association Summary

Client: Small Business Group Inc. Project/Site: Laurel Bay Housing Project

GC/MS Semi VOA (Continued)

Prep Batch: 104447 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-34035-2 MSD	1178 Bobwhite	Total/NA	Soil	3550C	
LCS 490-104447/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 490-104447/1-A	Method Blank	Total/NA	Solid	3550C	
Analysis Batch: 10464	1				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-34035-1	1292 Eagle	Total/NA	Soil	8270D	103822
490-34035-2	1178 Bobwhite	Total/NA	Soil	8270D	104447
490-34035-2 MS	1178 Bobwhite	Total/NA	Soil	8270D	104447
490-34035-2 MSD	1178 Bobwhite	Total/NA	Soil	8270D	104447
LCS 490-104447/2-A	Lab Control Sample	Total/NA	Solid	8270D	104447
MB 490-104447/1-A	Method Blank	Total/NA	Solid	8270D	104447

General Chemistry

Analysis Batch: 103009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-34035-1	1292 Eagle	Total/NA	Soil	Moisture	-
490-34035-1 DU	1292 Eagle	Total/NA	Soil	Moisture	
490-34035-2	1178 Bobwhite	Total/NA	Soil	Moisture	
490-34035-3	402 Elderberry	Total/NA	Soil	Moisture	
490-34035-4	1410 Eagle	Total/NA	Soil	Moisture	

TestAmerica Job ID: 490-34035-1

TestAmerica Nashville

Client Sample ID: 1292 Eagle

Date Collected: 08/19/13 14:45 Date Received: 08/27/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			103015	08/27/13 15:32	GLN	TAL NSH
Total/NA	Analysis	8260B		1	103825	08/30/13 18:29	ккк	TAL NSH
Total/NA	Prep	5035			103017	08/27/13 15:33	GLN	TAL NSH
Total/NA	Analysis	8260B		1	104525	09/04/13 13:28	KKK	TAL NSH
Total/NA	Prep	3550C			103822	08/30/13 09:37	JLP	TAL NSH
Total/NA	Analysis	8270D		1	104317	09/03/13 14:07	BES	TAL NSH
Total/NA	Analysis	8270D		10	104641	09/04/13 15:46	BES	TAL NSH
Total/NA	Analysis	Moisture		1	103009	08/27/13 15:07	RRS	TAL NSH

Client Sample ID: 1178 Bobwhite Date Collected: 08/20/13 14:15

Date Received: 08/27/13 08:00

Lab Sample ID: 490-34035-2 Matrix: Soil

Lab Sample ID: 490-34035-3

TestAmerica Job ID: 490-34035-1

Lab Sample ID: 490-34035-1

Percent Solids: 83.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			103015	08/27/13 15:32	GLN	TAL NSH
Total/NA	Analysis	8260B		1	103825	08/30/13 18:58	KKK	TAL NSH
Total/NA	Prep	3550C			104447	09/03/13 15:52	LP	TAL NSH
Total/NA	Analysis	8270D		1	104641	09/04/13 19:03	BES	TAL NSH
Total/NA	Analysis	Moisture		1	103009	08/27/13 15:07	RRS	TAL NSH

Client Sample ID: 402 Elderberry

Date Collected: 08/21/13 14:15

Date Received: 08/27/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			103015	08/27/13 15:32	GLN	TAL NSH
Total/NA	Analysis	8260B		1	103825	08/30/13 19:28	ккк	TAL NSH
Total/NA	Prep	3550C			103822	08/30/13 09:37	JLP	TAL NSH
Total/NA	Analysis	8270D		1	104317	09/03/13 14:35	BES	TAL NSH
Total/NA	Analysis	Moisture		1	103009	08/27/13 15:07	RRS	TAL NSH

Client Sample ID: 1410 Eagle

Date Collected: 08/22/13 14:45 Date Received: 08/27/13 08:00

Lab Sample ID: 490-34035-4

Matrix: Soil Percent Solids: 90.8

Matrix: Soil

Percent Solids: 93.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			103015	08/27/13 15:32	GLN	TAL NSH
Total/NA	Analysis	8260B		1	103825	08/30/13 19:57	ккк	TAL NSH
Total/NA	Prep	3550C			103822	08/30/13 09:37	JLP	TAL NSH
Total/NA	Analysis	8270D		1	104317	09/03/13 15:03	BES	TAL NSH
Total/NA	Analysis	Moisture		1	103009	08/27/13 15:07	RRS	TAL NSH

9/6/2013

Matrix: Soil

Percent Solids: 93.9

TestAmerica Job ID: 490-34035-1

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Small Business Group Inc. Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-34035-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NSH
Moisture	Percent Moisture	EPA	TAL NSH

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Small Business Group Inc. Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-34035-1

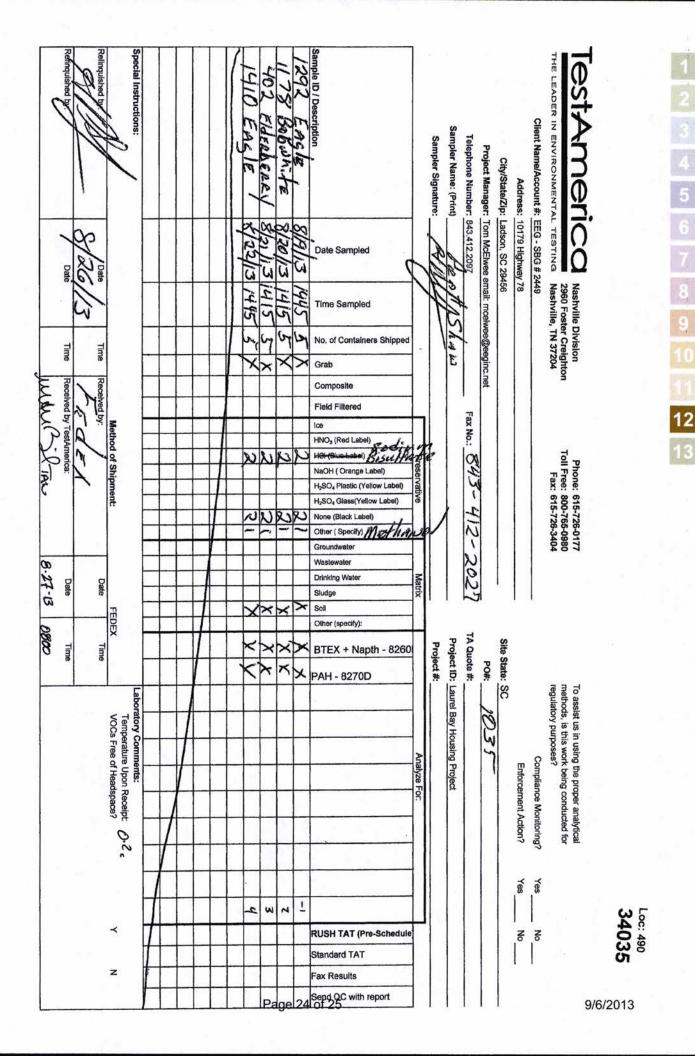
Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025	and the second sec	0453.07	12-31-13
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-13
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-13
Florida	NELAP	4	E87358	06-30-14
llinois	NELAP	5	200010	12-09-13
owa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-13
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-13
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-15
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	= 1	2963	10-10-13
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-13
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	01-19-14
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-13
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	11-02-13
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-13

* Expired certification is currently pending renewal and is considered valid.

TestAmerica		
THE LEADER IN ENVIRONMENTAL TESTING Nashville, TN	COOLER RECEIPT FORM	Charleston
Cooler Received/Opened On8/27/201	13 @0800	
1. Tracking #6485	(last 4 digits, FedEx)	490-34035 Chain of Custody
Courier:Fedex IR Gun ID	18290455	
2. Temperature of rep. sample or temp b	lank when opened: D. D. Degrees Celsius	
3. If Item #2 temperature is 0°C or less, w	as the representative sample or temp blank froze	n? YES NO. NA
4. Were custody seals on outside of cool	er?	ESNONA
If yes, how many and where:	2 front + back	2
5. Were the seals intact, signed, and date	ed correctly?	ESNONA
6. Were custody papers inside cooler?	2 2	ESNONA
I certify that I opened the cooler and answ	vered questions 1-6 (intial)	
7. Were custody seals on containers:	YES NO and Intact	YESNO.
Were these signed and dated correctly	?	YESNO.
8. Packing mat'l used? Bubblewrap Pla	stic bag Peanuts Vermiculite Foam Insert Pa	per Other None
9. Cooling process:	Ce lce-pack Ice (direct contact) Dry	ice Other None
10. Did all containers arrive in good cond	lition (unbroken)?	ES. NONA
11. Were all container labels complete (#	, date, signed, pres., etc)?	ES.NONA
12. Did all container labels and tags agre	e with custody papers?	ESNONA
13a. Were VOA vials received?		ES.NONA
b. Was there any observable headspace	e present in any VOA vial?	YESNO
14. Was there a Trip Blank in this cooler?	YES(NO).NA If multiple coolers, sequ	ence #
I certify that I unloaded the cooler and an	swered guestions 7-14 (intial)	men
15a. On pres'd bottles, did pH test strips	suggest preservation reached the correct pH leve	el? YESNO:
b. Did the bottle labels indicate that th	e correct preservatives were used	TESNONA
16. Was residual chlorine present?		YESNO.
I certify that I checked for chlorine and ph	as per SOP and answered guestions 15-16 (intia	1)
17. Were custody papers properly filled of	out (ink, signed, etc)?	ES.NONA
18. Did you sign the custody papers in th	e appropriate place?	ES.NONA
19. Were correct containers used for the	analysis requested?	ESNONA
20. Was sufficient amount of sample sen	t in each container?	ESNONA
I certify that I entered this project into LIN	IS and answered questions 17-20 (intial)	mom
I certify that I attached a label with the un	ique LIMS number to each container (intial)	mom
21. Were there Non-Conformance issues	at login? YES. NO Was a NCM generated? YES	3. NO.#



Login Sample Receipt Checklist

Client: Small Business Group Inc.

Login Number: 34035 List Number: 1

Creator: McBride, Mike

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a<br survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Job Number: 490-34035-1

List Source: TestAmerica Nashville

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 1292Eagle; 1292 Eagle Lane, 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>Name</u>, 9/18/13 (Name) (Date)

Appendix C Laboratory Analytical Report - Groundwater



Volatile Organic Compounds by GC/MS

Client: AECOM - Resoluti Description: BEALB1292TW01 Date Sampled:12/04/2015 1020 Date Received: 12/04/2015 Run Prep Method	WG20151204 Analytical Method	Dilution	-	sis Date Analyst	Prep	Date	Batch	QL04022 Aqueous			
1 5030B	8260B		12/09/2	2015 1747 ALL			91718				
Parameter			CAS nber	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		100-4	41-4	8260B	0.51	U	5.0	0.51	0.21	ug/L	1
Naphthalene		91-	20-3	8260B	0.96	U	5.0	0.96	0.14	ug/L	1
Toluene		108-	88-3	8260B	0.48	U	5.0	0.48	0.24	ug/L	1
Xylenes (total)		1330-	20-7	8260B	0.57	U	5.0	0.57	0.32	ug/L	1
Surrogate	Q %	Run 1 Recovery	Accepta Lim								
Bromofluorobenzene		100	75-12	20							
1,2-Dichloroethane-d4		103	70-12	20							
Toluene-d8		104	85-12	20							
Dibromofluoromethane		98	85-1	15							

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 failureS = MS/MSD failure

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

Semivolatile	Organic	Compounds by	y GC/MS ((SIM)
--------------	---------	--------------	-----------	-------

Description: BEALB1292TW01WG20151204

Laboratory ID: QL04022-013

Date Sampled:12/04/2015 1020

Matrix: Aqueous

Date Received: 12/04/2015

RunPrep Method13520C	Analytical Method D 8270D (SIM)		y sis Date Analyst /2015 2240 DRB1	•	ate Batch 5 0918 91795			
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		in 1 Accept covery Lir	ance nits					
2-Methylnaphthalene-d10		70 15-1	139					
Fluoranthene-d10	1	05 23-2	154					

Q = Surrogate failure PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time $\mathsf{ND}=\mathsf{Not}$ 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 Appendix D 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: 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 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 <u>et seq.</u>, 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,

that M. They

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: IGWA Dated 7/1/2015

Laurel Bay Underground Storage Tank Assessment Reports for: (97 addresses/110 tanks)

118 Banyan	343 Ash Tank 2
126 Banyan	344 Ash Tank 2
127 Banyan	347 Ash Tank 2
130 Banyan Tank 1	378 Aspen Tank 2
141 Laurel Bay	379 Aspen
151 Laurel Bay	382 Aspen Tank 1
224 Cypress	382 Aspen Tank 2
227 Cypress	394 Acorn Tank 2
256 Beech Tank 2	400 Elderberry
257 Beech Tank 1	432 Elderberry
257 Beech Tank 2	436 Elderberry
264 Beech	473 Dogwood Tank 2
265 Beech Tank 2	482 Laurel Bay
265 Beech Tank 3	517 Laurel Bay
275 Birch	586 Aster
277 Birch Tank 1	632 Dahlia
285 Birch	639 Dahlia Tank 2
292 Birch Tank 3	643 Dahlia Tank 1
297 Birch	644 Dahlia Tank 1
301 Ash	644 Dahlia Tank 2
306 Ash	646 Dahlia Tank 1
310 Ash Tank 1	646 Dahlia Tank 2
313 Ash	665 Camellia
315 Ash Tank 2	699 Abelia
316 Ash	744 Blue Bell
319 Ash	745 Blue Bell Tank 1
320 Ash	747 Blue Bell Tank 1
321 Ash	747 Blue Bell Tank 2
329 Ash	747 Blue Bell Tank 3
330 Ash Tank 2	749 Blue Bell Tank 1
331 Ash	749 Blue Bell Tank 2
332 Ash	751 Blue Bell
333 Ash	762 Althea
335 Ash Tank 1	765 Althea Tank 2
335 Ash Tank 2	766 Althea Tank 4
341 Ash	767 Althea Tank 1
342 Ash Tank 1	768 Althea Tank 2
342 Ash Tank 2	768 Althea Tank 3

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: (98 addresses/110 tanks) cont.

768 Althea Tank 4	1067 Gardenia
769 Althea Tank 1	1077 Heather
769 Althea Tank 2	1081 Heather
775 Althea	1101 Iris Tank 2
819 Azalea	1104 Iris
840 Azalea	1105 Iris Tank 2
878 Cobia	1124 Iris Tank 2
891 Cobia	1142 Iris Tank 2
913 Barracuda	1146 Iris Tank 2
916 Barracuda	1218 Cardinal
923 Albacore	1240 Dove
1004 Bobwhite	1266 Dove
1022 Foxglove	1292 Eagle
1031 Foxglove	1299 Eagle Tank 1
1034 Foxglove Tank 2	1302 Eagle
1061 Gardenia Tank 3	1336 Albatross
1064 Gardenia	1351 Cardinal



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

June 8, 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-November and December 2015 Laurel Bay Military Housing Area Multiple Properties Dated April 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 attached addresses on May 2, 2016. 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 15 stated addresses. For the remaining 80 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,

LISTS

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-November and December 2015 Specific Property Recommendations Dated June 8, 2016

Draft Final Initial Groundwater Investigation Report for (95 addresses)

Permanent Monitoring Well Investigation recommendation (15 addresses)		
130 Banyan Drive	473 Dogwood Drive	
256 Beech Street	747 Blue Bell Lane	
285 Birch Drive	749 Blue Bell Lane	
292 Birch Drive	775 Althea Street	
330 Ash Street	1034 Foxglove Street	
331 Ash Street	1104 Iris Lane	
335 Ash Street	1124 Iris Lane	
342 Ash Street		
2 - 14-14		

118 Banyan Drive	644 Dahlia Drive	
126 Banyan Drive	646 Dahlia Drive	
127 Banyan Drive	665 Camellia Drive	
141 Laurel Bay Blvd	699 Abelia Street	
151 Laurel Bay Blvd	744 Blue Bell Lane	10
224 Cypress Street	745 Blue Bell Lane	
227 Cypress Street	751 Blue Bell Lane	
257 Beech Street	762 Althea Street	
264 Beech Street	765 Althea Street	
265 Beech Street	766 Althea Street	
275 Birch Drive	767 Althea Street	
277 Birch Drive	768 Althea Street	
297 Birch Drive	769 Althea Street	
301 Ash Street	819 Azalea Drive	
306 Ash Street	840 Azalea Drive	
310 Ash Street	878 Cobia Drive	
313 Ash Street	891 Cobia Drive	
315 Ash Street	913 Barracuda Drive	
316 Ash Street	916 Barracuda Drive	
319 Ash Street	923 Wren Lane	
320 Ash Street	1004 Bobwhite Drive	
321 Ash Street	1022 Foxglove Street	
329 Ash Street	1031 Foxglove Street	
332 Ash Street	1061 Gardenia Drive	
333 Ash Street	1064 Gardenia Drive	
341 Ash Street	1067 Gardenia Drive	
347 Ash Street	1077 Heather Street	
378 Aspen Street	1081 Heather Street	
379 Aspen Street	1101 Iris Lane	
382 Aspen Street	1105 Iris Lane	
394 Acorn Street	1142 Iris Lane	
400 Elderberry Drive	1146 Iris Lane	
432 Elderberry Drive	1218 Cardinal Lane	
436 Elderberry Drive	1240 Dove Lane	
482 Laurel Bay Blvd	1266 Dove Lane	
517 Laurel Bay Blvd	1292 Eagle Lane	
586 Aster Street	1299 Eagle Lane	
632 Dahlia Drive	1302 Eagle Lane	
639 Dahlia Drive	1336 Albatross Drive	
643 Dahlia Drive	1351 Cardinal Lane	

Attachment to: Petrus to Drawdy Subject: Draft Final Initial Groundwater Investigation Report-November and December 2015 Specific Property Recommendations Dated June 8, 2016, Page 2