SUMMARY REPORT 160 ASH STREET (FORMERLY 315 ASH STREET) LAUREL BAY MILITARY HOUSING AREA MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SC

> Revision: 0 Prepared for:

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

and



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

JUNE 2021

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Prepared by:



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



Summary Report 160 Ash Street (Formerly 315 Ash Street) Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort June 2021

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List of Acronyms

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



1.0 INTRODUCTION

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

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

This report summarizes the results the environmental investigation activities associated with the storage of home heating oil and the potential release of petroleum constituents at the referenced property. Based on the results of the investigation, a No Further Action (NFA) determination has been made by the South Carolina Department of Health and Environmental Control (SCDHEC) for 160 Ash Street (Formerly 315 Ash Street). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

1.1 Background Information

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



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

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

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

1.2 UST Removal and Assessment Process

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

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

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



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

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

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 160 Ash Street (Formerly 315 Ash Street). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 315 Ash Street* (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 *Initial 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

In July 2013, two 280 gallon heating oil USTs were removed at 160 Ash Street (Formerly 314 Ash Street). Tank 1 was removed on July 9, 2013, from underneath the asphalt driveway, adjacent to the concrete porch. Tank 2 was removed on July 10, 2013, from underneath the edge of the front concrete walkway and front landscaped bed area adjacent to the driveway.



The former UST locations are indicated in Figures 2 and 3 of the UST Assessment Report (Appendix B). The USTs were removed and properly disposed of (i.e., shipped offsite for recycling or transported to a landfill). There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depths to the bases of the USTs were 5'10" (Tank 1) and 4'4" (Tank 2) bgs and a single soil sample was collected for each at that depth. The samples were collected from the fill port side of the former USTs to represent a worst case scenario.

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

2.2 Soil Analytical Results

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

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST locations (Tanks 1 and 2) were used by MCAS Beaufort, in consultation with SCDHEC, to determine a path forward (i.e., additional sampling or NFA) for the property. The soil results collected from 160 Ash Street (Formerly 315 Ash Street) during the removal of Tank 1 were less than the SCDHEC RBSLs, which indicated the subsurface was not impacted by COPCs associated with the former UST at concentrations that presented a potential risk to human health and the environment. The soil results collected from 160 Ash Street (Formerly 315 Ash Street) during the removal of Tank 2 were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated July 1, 2015, SCDHEC requested an IGWA be conducted at the former UST location (Tank 2) at 160 Ash Street (Formerly 315 Ash Street) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.



2.3 Groundwater Sampling

On November 9, 2015, a temporary monitoring well was installed at 160 Ash Street (Formerly 315 Ash Street), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST (Tank 2). The former UST locations are indicated in Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – 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 *Initial 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 160 Ash Street (Formerly 315 Ash Street) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated that the groundwater was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

3.0 **PROPERTY STATUS**

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 160 Ash Street (Formerly 315 Ash Street). 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 – 315 Ash Street, 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 160 Ash Street (Formerly 315 Ash Street) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Results Samples Collected 07/09/13 to 07/10/13		
		315 Ash-1 07/09/13	315 Ash-2 07/10/13	
Volatile Organic Compounds Analyze	d by EPA Method 8260B (mg/kg)			
Benzene	0.003	ND	0.000844	
Ethylbenzene	1.15	0.00109	0.196	
Naphthalene	0.036	0.00347	2.69	
Toluene	0.627	ND	ND	
Xylenes, Total	13.01	0.00119	0.00269	
Semivolatile Organic Compounds Ana	lyzed by EPA Method 8270D (mg/kg)			
Benzo(a)anthracene	0.66	ND	ND	
Benzo(b)fluoranthene	0.66	ND	ND	
Benzo(k)fluoranthene	0.66	ND	ND	
Chrysene	0.66	ND	ND	
Dibenz(a,h)anthracene	0.66	ND	ND	

Notes:

⁽¹⁾ South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 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 - Groundwater160 Ash Street (Formerly 315 Ash Street)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 11/10/15
Volatile Organic Compounds Analyze	d by EPA Method 8260B (µg	/L)	
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	ND
Naphthalene	25	29.33	ND
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	ND
Semivolatile Organic Compounds Ana	lyzed by EPA Method 8270	D (µg/L)	
Benzo(a)anthracene	10	NA	ND
Benzo(b)fluoranthene	10	NA	ND
Benzo(k)fluoranthene	10	NA	ND
Chrysene	10	NA	ND
Dibenz(a,h)anthracene	10	NA	ND

Notes:

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

⁽²⁾ Site-specific groundwater VISLs were calculated using the EPA JE Model Spreadsheets (Version 3.1, February 2004) and conservative modeling inputs representative of a small single-story house with an 8 foot ceiling. Site-specific groundwater VISLs were developed based on a target risk level of 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 Use Only	
R	
OCT 2 3 20143	
SC DHEC - Buresu of Land & Waste Management	
I.	OWNERS

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

OWNERSHIP OF UST (S)

	Commanding Officer Att	
Owner Name (Corpor	ration, Individual, Public Agency, O	ther)
P.O. Box 55003	1	
Mailing Address		
Beaufort,	South Carolin	
City	State	Zip Code
843	228-731	
Area Code	Telephone Numbe	r Contact Person

II. SITE IDENTIFICATION AND LOCATION

City	County	
Beaufort,	Beaufort	
Street Address or State Ro		
315 Ash Street	Laurel Bay Military Housing Area	
Facility Name or Company	y Site Identifier	
Permit I.D.# Laurel Bay Milita	ary Housing Area, Marine Corps Air Stat	tion, Beaufort, SC

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

1 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

		()	STREET IN E
A.	Product(ex. Gas, Kerosene)	Heating oil	Heating oil
В.	Capacity(ex. 1k, 2k)	280 gal	280 gal
C.	Age	Late 1950s	Late 1950s
D.	Construction Material(ex. Steel, FRP)	Steel	Steel
E٠	Month/Year of Last Use	Mid 80s	Mid 80s
F.	Depth (ft.) To Base of Tank	5'10"	4'4"
G.	Spill Prevention Equipment Y/N	No	No
H·	Overfill Prevention Equipment Y/N	No	No
r	Method of Closure Removed/Filled	Removed	Removed
Ĵ,	Date Tanks Removed/Filled	7/9/2013	7/10/2013
K.	Visible Corrosion or Pitting Y/N	Yes	Yes
L.	Visible Holes Y/N	Yes	Yes

315Ash-1

315Ash-2

Method of disposal for any USTs removed from the ground (attach disposal manifests) M. UST 315Ash-1 was removed from the ground and recycled. UST 315Ash-2 was removed from the ground and disposed in a Subtitle "D" landfill. See Attachment "A".

N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests) Contaminated water was pumped from UST 315Ash-1 and disposed by MCAS.

UST 315Ash-2 had been previously filled with sand by others.

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

VII. PIPING INFORMATION

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Т

		315Ash-1	315Ash-2
		Steel	Steel
i.	Construction Material(ex. Steel, FRP)	& Copper	& Copper
	Distance from UST to Dispenser	N/A	N/A
	Number of Dispensers	N/A	N/A
	Type of System Pressure or Suction	Suction	Suction
	Was Piping Removed from the Ground? Y/N	No	No
	Visible Corrosion or Pitting Y/N	Yes	Yes
	Visible Holes Y/N	No	No
	Age	Late 1950s	Late 1950s
	If any corrosion, pitting, or holes were observed,	describe the locatio	n and extent for each piping run

Steel vent piping for both tanks were corroded and pitted. All

copper supply and return piping were sound.

VIII. BRIEF SITE DESCRIPTION AND HISTORY

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

	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. 		x	
 B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells? If yes, indicate location on site map and describe the odor (strong, mild, etc.) 		х	
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. Name of DHEC representative authorizing soil removal: 		X	
 E. Was a petroleum sheen or free product detected on any excavation or boring waters? If yes, indicate location and thickness. 		x	

IX. SITE CONDITIONS

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
315Ash-1	Excav at fill end	Soil	Sandy	5'10"	7/9/13 1545 hrs	P. Shaw	
315Ash-2	Excav at fill end	Soil	Sandy	4'4"	7/10/13 1430 hrs	P. Shaw	
8							
9							
10	· · · · ·						
- 11	1.1					· · · · ·	
12					<u></u>		
13	c		1			1	
14							
15							
16							
17							
18						1	
19							1
20							-

* = Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

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

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

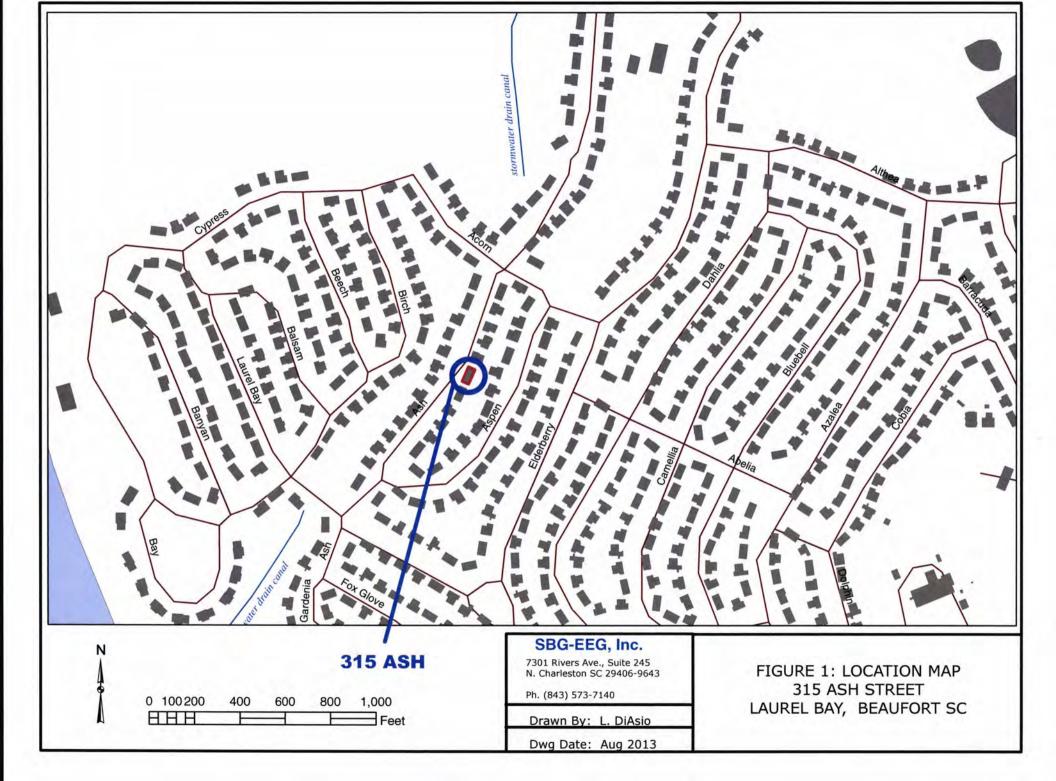
XII. RECEPTORS

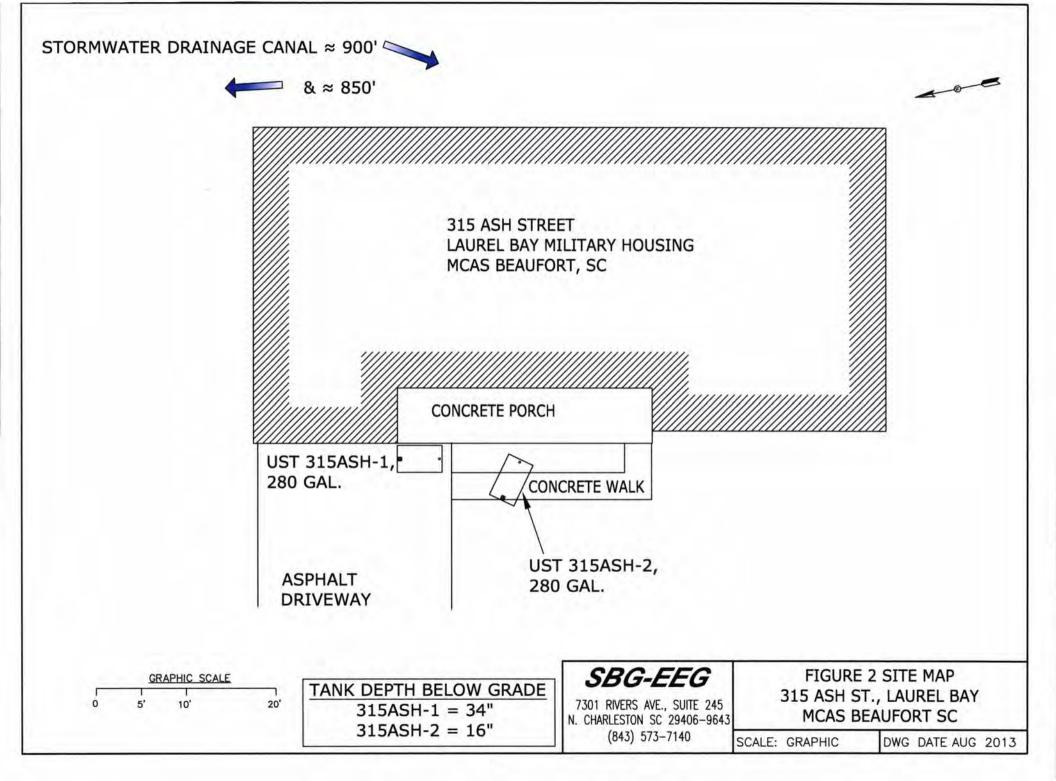
5		Yes	No
Α.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system? *Stormwater draina	*X ge ca	nal
	If yes, indicate type of receptor, distance, and direction on site map.		
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		x
	If yes, indicate type of well, distance, and direction on site map.		
C.	Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?		х
	If yes, indicate type of structure, distance, and direction on site map.		
D.	Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination? *Sewer, water, electr	C C 1 1 1	
	cable, fiber optic & If yes, indicate the type of utility, distance, and direction on the site map.	geoth	ermal
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.		

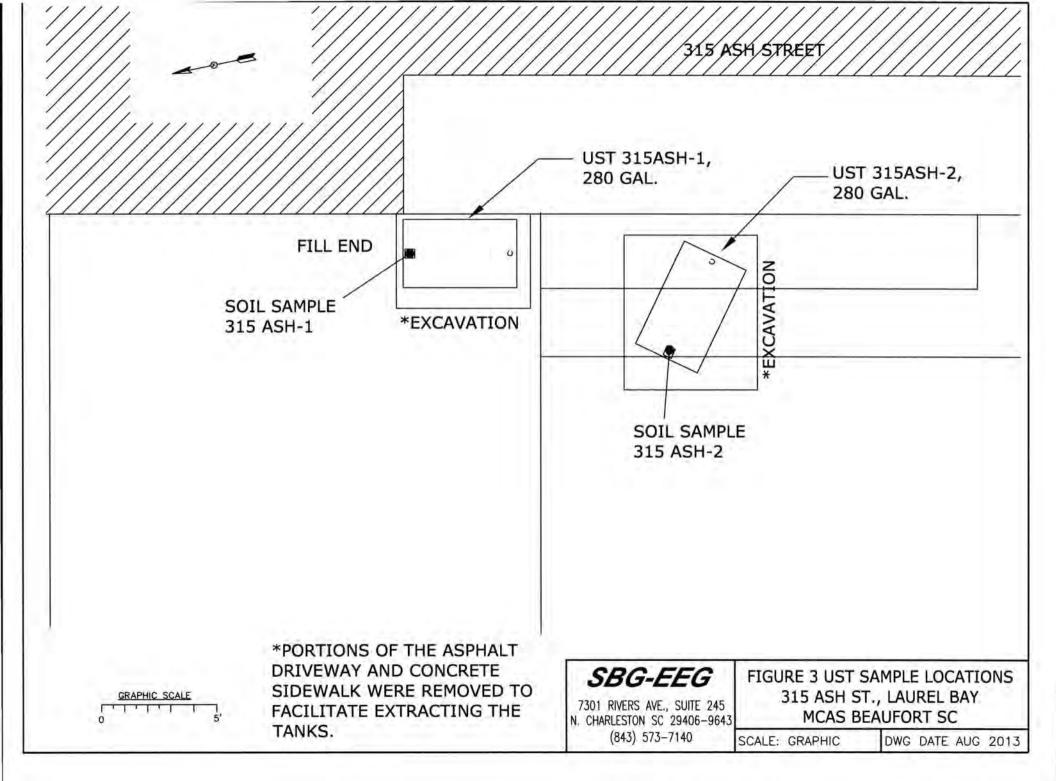
XIII. SITE MAP

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 tanks at 315 Ash Street.



Picture 2: UST 315Ash-1 excavation.



Picture 3: UST 315Ash-2 excavation.



Picture 4: 315 Ash Street site near completion of work.

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	315Ash-1		315As	sh-2			
Benzene	ND		0.000844 mg/		kg		
Toluene	ND			ND			-
Ethylbenzene	0.00109 mg/kg		0.196	0.196 mg/kg			
Xylenes	0.00119 mg/kg		0.00269 mg/k		a		
Naphthalene	0.00347 mg/kg		2.69 mg/kg				
Benzo (a) anthracene	ND		ND				
Benzo (b) fluoranthene	ND		ND		1		
Benzo (k) fluoranthene	ND		ND				
Chrysene	ND		ND				
Dibenz (a, h) anthracene	ND		ND			-	
TPH (EPA 3550)							
CoC		T	1				
Benzene			11.21				
Toluene						1.12	
Ethylbenzene							
Xylenes		-					
Naphthalene							
Benzo (a) anthracene		1					
Benzo (b) fluoranthene							
Benzo (k) fluoranthene							100
Chrysene				1		1	
Dibenz (a, h) anthracene	I	-				-	i i
TPH (EPA 3550)		1					

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	* 5 *			
Benzene	5			- 11	
Toluene	1,000				
Ethylbenzene	700				
Xylenes	10,000		-	1-1	
Total BTEX	N/A		1		
МТВЕ	40			- 1	
Naphthalene	25	_			
Benzo (a) anthracene	10				
Benzo (b) flouranthene	10				
Benzo (k) flouranthene	10				
Chrysene	10			2.0	
Dibenz (a, h) anthracene	10				
EDB	.05			6	
1,2-DCA	5		0 1		
Lead	Site specific			1	

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: 490-31022-1 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: 7/24/2013 1:21:16 PM

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

Review your project results through Total Access



www.testamericainc.com

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.

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.

2

5 6

9

10

12 13

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Sample Summary

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

TestAmerica Job ID: 490-31022-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-31022-1	315 Ash-1	Solid	07/09/13 15:45	07/16/13 08:15
190-31022-2	315 Ash-2	Solid	07/10/13 14:30	07/16/13 08:15
90-31022-3	342 Ash-1	Solid	07/11/13 13:15	07/16/13 08:15





TestAmerica Nashville

Job ID: 490-31022-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-31022-1

Comments

No additional comments.

Receipt

The samples were received on 7/16/2013 8:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.0° C.

GC/MS VOA

Method(s) 8260B: Internal standard responses were outside of acceptance limits for the following sample(s): SS-2 (490-30733-2). The sample(s) shows evidence of matrix interference.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 94012 was outside control limits. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision met acceptance criteria.

Method(s) 8260B: Internal standard responses were outside of acceptance limits for the following sample(s): SS-2 (490-30733-2). The sample(s) shows evidence of matrix interference.

No other analytical or quality issues were noted.

GC/MS Semi VOA

Method(s) 8270D: Matrix spikes for batch 93357 could not be recovered due to sample matrix interferences which required sample dilution. The associated laboratory control sample (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

Organic Prep

Method(s) Moisture: The sample duplicate precision for the following sample associated with batch 93335 was outside control limits: (490-30768-1 DU).

No other analytical or quality issues were noted.

VOA Prep

No analytical or quality issues were noted.

TestAmerica Job ID: 490-31022-1

Definitions/Glossary

Client: Small Business Group Inc. Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-31022-1

Qualifiers	
GC/MS VOA	
Qualifier	Qualifier Description
F	RPD of the MS and MSD exceeds the control limits
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 V	/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)
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

TEF Toxicity Equivalent Factor (Dioxin)

TEQ Toxicity Equivalent Quotient (Dioxin)

Client Sample ID: 315 Ash-1

Date Collected: 07/09/13 15:45 Date Received: 07/16/13 08:15

Lab Sample ID: 490-31022-1 Matrix: Solid

Percent Solids: 83.4

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Method: 8260B - Volatile Orga	nic Compounds (GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00244	0.000817	mg/Kg	a	07/17/13 10:57	07/22/13 13:42	1
Ethylbenzene	0.00109	J	0.00244	0.000817	mg/Kg	n	07/17/13 10:57	07/22/13 13:42	1
Naphthalene	0.00347	J	0.00610	0.00207	mg/Kg	12	07/17/13 10:57	07/22/13 13:42	1
Toluene	ND		0.00244	0.000903	mg/Kg	52	07/17/13 10:57	07/22/13 13:42	1
Xylenes, Total	0.00119	J	0.00610	0.000817	mg/Kg	12	07/17/13 10:57	07/22/13 13:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 130				07/17/13 10:57	07/22/13 13:42	1
4-Bromofluorobenzene (Surr)	91		70 - 130				07/17/13 10:57	07/22/13 13:42	1
Dibromofluoromethane (Surr)	107		70 - 130				07/17/13 10:57	07/22/13 13:42	1
Toluene-d8 (Surr)	98		70 - 130				07/17/13 10:57	07/22/13 13:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0790	0.0118	mg/Kg	ġ	07/16/13 15:59	07/18/13 19:44	1
Acenaphthylene	ND		0.0790	0.0106	mg/Kg	ä	07/16/13 15:59	07/18/13 19:44	1
Anthracene	ND		0.0790	0.0106	mg/Kg	12	07/16/13 15:59	07/18/13 19:44	1
Benzo[a]anthracene	ND		0.0790	0.0177	mg/Kg	Ø	07/16/13 15:59	07/18/13 19:44	1
Benzo[a]pyrene	ND		0.0790	0.0142	mg/Kg	12	07/16/13 15:59	07/18/13 19:44	1
Benzo[b]fluoranthene	ND		0.0790	0.0142	mg/Kg	12	07/16/13 15:59	07/18/13 19:44	1
Benzo[g,h,i]perylene	ND		0.0790	0.0106	mg/Kg	125	07/16/13 15:59	07/18/13 19:44	1
Benzo[k]fluoranthene	ND		0.0790	0.0165	mg/Kg	Ø	07/16/13 15:59	07/18/13 19:44	1
1-Methylnaphthalene	ND		0.0790	0.0165	mg/Kg	Ċ2	07/16/13 15:59	07/18/13 19:44	1
Pyrene	0.0432	J	0.0790	0.0142	mg/Kg	Ð	07/16/13 15:59	07/18/13 19:44	1
Phenanthrene	ND		0.0790	0.0106	mg/Kg	17	07/16/13 15:59	07/18/13 19:44	1
Chrysene	ND		0.0790	0.0106	mg/Kg	a	07/16/13 15:59	07/18/13 19:44	1
Dibenz(a,h)anthracene	ND		0.0790	0.00826	mg/Kg	a	07/16/13 15:59	07/18/13 19:44	1
Fluoranthene	0.0483	J	0.0790	0.0106	mg/Kg	12	07/16/13 15:59	07/18/13 19:44	1
Fluorene	ND		0.0790	0.0142	mg/Kg	17	07/16/13 15:59	07/18/13 19:44	1
Indeno[1,2,3-cd]pyrene	ND		0.0790	0.0118	mg/Kg	Ø	07/16/13 15:59	07/18/13 19:44	1
Naphthalene	ND		0.0790	0.0106	mg/Kg	12	07/16/13 15:59	07/18/13 19:44	1
2-Methylnaphthalene	ND		0.0790	0.0189	mg/Kg	n	07/16/13 15:59	07/18/13 19:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	56		29 - 120				07/16/13 15:59	07/18/13 19:44	1
Terphenyl-d14 (Surr)	57		13 - 120				07/16/13 15:59	07/18/13 19:44	1
Nitrobenzene-d5 (Surr)	54		27 - 120				07/16/13 15:59	07/18/13 19:44	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83		0.10	0.10	%			07/16/13 14:53	1

Client Sample ID: 315 Ash-2

Date Collected: 07/10/13 14:30 Date Received: 07/16/13 08:15

Lab Sample ID: 490-31022-2

Matrix: Solid Percent Solids: 74.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000844	J	0.00219	0.000734	mg/Kg	12	07/17/13 10:57	07/19/13 19:39	1
Ethylbenzene	0.196		0.00219	0.000734	mg/Kg	53	07/17/13 10:57	07/19/13 19:39	1
Naphthalene	2.69		0.368	0.125	mg/Kg	12	07/17/13 10:53	07/22/13 16:43	1
Toluene	ND		0.00219	0.000810	mg/Kg	12	07/17/13 10:57	07/19/13 19:39	1
Kylenes, Total	0.00269	J	0.00548	0.000734	mg/Kg	8	07/17/13 10:57	07/19/13 19:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
,2-Dichloroethane-d4 (Surr)	86	1	70 - 130				07/17/13 10:57	07/19/13 19:39	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 130				07/17/13 10:53	07/22/13 16:43	1
-Bromofluorobenzene (Surr)	102		70 - 130				07/17/13 10:57	07/19/13 19:39	1
-Bromofluorobenzene (Surr)	88		70 - 130				07/17/13 10:53	07/22/13 16:43	1
Dibromofluoromethane (Surr)	94		70 - 130				07/17/13 10:57	07/19/13 19:39	1
Dibromofluoromethane (Surr)	94		70 - 130				07/17/13 10:53	07/22/13 16:43	1
Toluene-d8 (Surr)	109		70 - 130				07/17/13 10:57	07/19/13 19:39	1
Toluene-d8 (Surr)	97		70 - 130				07/17/13 10:53	07/22/13 16:43	1
Method: 8270D - Semivolatile (Organic Compou	nds (GC/MS	5)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cenaphthene	ND		0.0901	0.0134	mg/Kg	52	07/16/13 15:59	07/17/13 20:53	1
cenaphthylene	ND		0.0901	0.0121	mg/Kg	\$	07/16/13 15:59	07/17/13 20:53	1
Inthracene	ND		0.0901	0.0121	mg/Kg	n	07/16/13 15:59	07/17/13 20:53	1
enzo[a]anthracene	ND		0.0901	0.0202		p	07/16/13 15:59	07/17/13 20:53	1
Benzo[a]pyrene	ND		0.0901	0.0161		12	07/16/13 15:59	07/17/13 20:53	1
Benzo[b]fluoranthene	ND		0.0901	0.0161		53	07/16/13 15:59	07/17/13 20:53	1
Senzo[g,h,i]perylene	ND		0.0901	0.0121	mg/Kg	10	07/16/13 15:59	07/17/13 20:53	1
enzo[k]fluoranthene	ND		0.0901	0.0188	mg/Kg	12	07/16/13 15:59	07/17/13 20:53	1
-Methylnaphthalene	0.174		0.0901	0.0188	mg/Kg	12	07/16/13 15:59	07/17/13 20:53	1
Pyrene	ND		0.0901	0.0161	mg/Kg	13	07/16/13 15:59	07/17/13 20:53	1
henanthrene	0.115		0.0901	0.0121	mg/Kg	12	07/16/13 15:59	07/17/13 20:53	1
Chrysene	ND		0.0901	0.0121	mg/Kg	α	07/16/13 15:59	07/17/13 20:53	1
Dibenz(a,h)anthracene	ND		0.0901	0.00941	mg/Kg	ά	07/16/13 15:59	07/17/13 20:53	1
luoranthene	ND		0.0901		0.0	a	07/16/13 15:59	07/17/13 20:53	1
				0.0121		ā			
luorene	0.0504	J	0.0901	0.0161		12	07/16/13 15:59	07/17/13 20:53	1
ndeno[1,2,3-cd]pyrene	ND		0.0901	0.0134	mg/Kg		07/16/13 15:59	07/17/13 20:53	1
Naphthalene	ND		0.0901	0.0121	mg/Kg	12 12	07/16/13 15:59	07/17/13 20:53	1
-Methylnaphthalene	0.282		0.0901	0.0215	mg/Kg	2	07/16/13 15:59	07/17/13 20:53	1
urrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
-Fluorobiphenyl (Surr)	43		29 - 120				07/16/13 15:59	07/17/13 20:53	1
erphenyl-d14 (Surr)	68		13 - 120				07/16/13 15:59	07/17/13 20:53	1
litrobenzene-d5 (Surr)	40		27 - 120				07/16/13 15:59	07/17/13 20:53	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	74		0.10	0.10	%			07/16/13 14:53	1

Client Sample ID: 342 Ash-1

Date Collected: 07/11/13 13:15 Date Received: 07/16/13 08:15

Lab Sample ID: 490-31022-3

Matrix: Solid Percent Solids: 80.9

nalyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00250		0.00192	0.000642	mg/Kg	Ø	07/17/13 10:57	07/19/13 19:09	1
Ethylbenzene	0.109		0.00192	0.000642	mg/Kg	ä	07/17/13 10:57	07/19/13 19:09	1
Naphthalene	4.57		0.280	0.0950	mg/Kg		07/17/13 10:53	07/22/13 17:12	1
Toluene	0.00151	J	0.00192	0.000709	mg/Kg	11	07/17/13 10:57	07/19/13 19:09	1
Kylenes, Total	0.0598		0.00479	0.000642	mg/Kg	13	07/17/13 10:57	07/19/13 19:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 130				07/17/13 10:57	07/19/13 19:09	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 130				07/17/13 10:53	07/22/13 17:12	1
4-Bromofluorobenzene (Surr)	80		70 - 130				07/17/13 10:57	07/19/13 19:09	1
4-Bromofluorobenzene (Surr)	77		70 - 130				07/17/13 10:53	07/22/13 17:12	1
Dibromofluoromethane (Surr)	99		70 - 130				07/17/13 10:57	07/19/13 19:09	1
Dibromofluoromethane (Surr)	96		70 - 130				07/17/13 10:53	07/22/13 17:12	1
Toluene-d8 (Surr)	104		70 - 130				07/17/13 10:57	07/19/13 19:09	1
Toluene-d8 (Surr)	97		70 - 130				07/17/13 10:53	07/22/13 17:12	1
Method: 8270D - Semivolatile C									
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.110		0.0815	0.0122	mg/Kg	ü	07/16/13 15:59	07/18/13 20:07	1
Acenaphthylene	ND		0.0815	0.0109	mg/Kg	C	07/16/13 15:59	07/18/13 20:07	1
Anthracene	0.0497	J	0.0815		mg/Kg	Ţ.	07/16/13 15:59	07/18/13 20:07	1
3enzo[a]anthracene	ND		0.0815	0.0182		13	07/16/13 15:59	07/18/13 20:07	1
Benzo[a]pyrene	ND		0.0815	0.0146	mg/Kg	13	07/16/13 15:59	07/18/13 20:07	1
Benzo[b]fluoranthene	ND		0.0815	0.0146	mg/Kg		07/16/13 15:59	07/18/13 20:07	1
Benzo[g,h,i]perylene	ND		0.0815	0.0109	mg/Kg	12	07/16/13 15:59	07/18/13 20:07	1
Benzo[k]fluoranthene	ND		0.0815	0.0170	mg/Kg	a	07/16/13 15:59	07/18/13 20:07	1
1-Methylnaphthalene	0.688		0.0815	0.0170	mg/Kg	n	07/16/13 15:59	07/18/13 20:07	1
Pyrene	ND		0.0815	0.0146	mg/Kg	以	07/16/13 15:59	07/18/13 20:07	1
Phenanthrene	0.365		0.0815	0.0109	mg/Kg	12	07/16/13 15:59	07/18/13 20:07	1
Chrysene	ND		0.0815	0.0109	mg/Kg	12	07/16/13 15:59	07/18/13 20:07	1
Dibenz(a,h)anthracene	ND		0.0815	0.00852	mg/Kg	n	07/16/13 15:59	07/18/13 20:07	1
Fluoranthene	ND		0.0815	0.0109	mg/Kg	n	07/16/13 15:59	07/18/13 20:07	1
Fluorene	0.166		0.0815	0.0146	mg/Kg	ц	07/16/13 15:59	07/18/13 20:07	1
ndeno[1,2,3-cd]pyrene	ND		0.0815	0.0122	mg/Kg	XI.	07/16/13 15:59	07/18/13 20:07	1
Naphthalene	0.148		0.0815	0.0109	mg/Kg	n	07/16/13 15:59	07/18/13 20:07	1
aprillatorio									
2-Methylnaphthalene	0.702		0.0815	0.0195	mg/Kg	n	07/16/13 15:59	07/18/13 20:07	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	49		29 - 120				07/16/13 15:59	07/18/13 20:07	1
Terphenyl-d14 (Surr)	60		13 - 120				07/16/13 15:59	07/18/13 20:07	1
Nitrobenzene-d5 (Surr)	45		27 - 120				07/16/13 15:59	07/18/13 20:07	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	81		0.10	0.10	%			07/16/13 14:53	1

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

Lab Sample ID: 490-30733-A-2-E MS Matrix: Solid Analysis Batch: 94012

Analysis Batch: 94012										tch: 92654
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	ND	1	0.0785	0.08416		mg/Kg	ä	107	31 - 143	
Ethylbenzene	ND		0.0785	0.07819		mg/Kg	a.	100	23 - 161	
Naphthalene	0.00650		0.0785	0.05660		mg/Kg	21	64	10 - 176	
Toluene	0.00386		0.0785	0.09024		mg/Kg	n	110	30 - 155	
Xylenes, Total	0.00258		0.235	0.2250		mg/Kg	73	95	25 - 162	
	MS	MS								
Surrogate	%Recovery	Qualifier	Limits							
1,2-Dichloroethane-d4 (Surr)	88		70 - 130							
4-Bromofluorobenzene (Surr)	127		70 - 130							
Dibromofluoromethane (Surr)	94		70 - 130							
Toluene-d8 (Surr)	108		70 - 130							

Lab Sample ID: 490-30733-A-2-F MSD Matrix: Solid Analysis Batch: 94012

Analysis Batch: 94012										Batch:	92654
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		0.0778	0.07729		mg/Kg	â	99	31 - 143	9	50
Ethylbenzene	ND		0.0778	0.07124		mg/Kg	32	92	23 - 161	9	50
Naphthalene	0.00650		0.0778	0.02993	F	mg/Kg	ŭ	30	10 - 176	62	50
Toluene	0.00386		0.0778	0.08399		mg/Kg	12	103	30 - 155	7	50
Xylenes, Total	0.00258		0.233	0.2034		mg/Kg	ä	86	25 - 162	10	50
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	90		70 - 130								
4-Bromofluorobenzene (Surr)	125		70 - 130								
Dibromofluoromethane (Surr)	97		70 - 130								

70 - 130

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Lab Sample ID: MB 490-94012/6 Matrix: Solid

Analysis Batch: 94012

Toluene-d8 (Surr)

Client Sample ID: Method Blank Prep Type: Total/NA

Client Sample ID: Matrix Spike Duplicate

TestAmerica Job ID: 490-31022-1

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			07/19/13 11:20	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			07/19/13 11:20	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			07/19/13 11:20	1
Toluene	ND		0.00200	0.000740	mg/Kg			07/19/13 11:20	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			07/19/13 11:20	1
	мв	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		70 - 130					07/19/13 11:20	1
4-Bromofluorobenzene (Surr)	93		70 - 130					07/19/13 11:20	1
Dibromofluoromethane (Surr)	111		70 - 130					07/19/13 11:20	1
Toluene-d8 (Surr)	99		70 - 130					07/19/13 11:20	1

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

Lab Sample ID: MB 490-94012/7 Matrix: Solid

Clien	t Sample ID: Method Blank
	Prep Type: Total/NA

TestAmerica Job ID: 490-31022-1

Analysis Batch: 94012

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0335	mg/Kg			07/19/13 11:49	1
Ethylbenzene	ND		0.100	0.0335	mg/Kg			07/19/13 11:49	1
Naphthalene	ND		0.250	0.0850	mg/Kg			07/19/13 11:49	1
Toluene	ND		0.100	0.0370	mg/Kg			07/19/13 11:49	1
Xylenes, Total	ND		0.250	0.0335	mg/Kg			07/19/13 11:49	1
	MB	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		70 - 130					07/19/13 11:49	1
4-Bromofluorobenzene (Surr)	93		70 - 130					07/19/13 11:49	1
Dibromofluoromethane (Surr)	111		70 - 130					07/19/13 11:49	1
Toluene-d8 (Surr)	99		70 - 130					07/19/13 11:49	1

Lab Sample ID: LCS 490-94012/3 Matrix: Solid Analysis Batch: 94012

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.0500	0.05098		mg/Kg		102	75 - 127	
Ethylbenzene	0.0500	0.04578		mg/Kg		92	80 - 134	
Naphthalene	0.0500	0.04344		mg/Kg		87	69 - 150	
Toluene	0.0500	0.04725		mg/Kg		94	80 - 132	
Xylenes, Total	0.150	0.1413		mg/Kg		94	80 - 137	

LCS	LCS	
%Recovery	Qualifier	Limits
104		70 - 130
85		70 - 130
107		70 - 130
96		70 - 130
	%Recovery 104 85 107	104 85 107

Lab Sample ID: LCSD 490-94012/4 Matrix: Solid Analysis Batch: 94012

Spike LCSD LCSD %Rec. RPD Analyte Added **Result Qualifier** Unit D %Rec Limits RPD Limit Benzene 0.0500 0.05313 mg/Kg 106 75 - 127 4 50 Ethylbenzene 0.0500 0.04636 mg/Kg 93 80 - 134 1 50 0.0500 0.04470 89 69 - 150 50 Naphthalene mg/Kg 3 2 50 Toluene 0.0500 0.04810 mg/Kg 96 80 - 132 0.150 0.1434 96 80 - 137 2 50 Xylenes, Total mg/Kg LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108	-	70 - 130
4-Bromofluorobenzene (Surr)	83		70 - 130
Dibromofluoromethane (Surr)	108		70 - 130
Toluene-d8 (Surr)	95		70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

TestAmerica Nashville

Client Sample ID: Lab Control Sample Prep Type: Total/NA

TestAmerica Job ID: 490-31022-1

5

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

Lab Sample ID: MB 490-94405/6							Client S	ample ID: Metho	d Blank
Matrix: Solid								Prep Type: 1	Total/NA
Analysis Batch: 94405									
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg	_		07/22/13 11:47	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			07/22/13 11:47	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			07/22/13 11:47	1
Toluene	ND		0.00200	0.000740	mg/Kg			07/22/13 11:47	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			07/22/13 11:47	1
	MB	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 130					07/22/13 11:47	1
4-Bromofluorobenzene (Surr)	95		70 - 130					07/22/13 11:47	1
Dibromofluoromethane (Surr)	102		70 - 130					07/22/13 11:47	1
Toluene-d8 (Surr)	98		70 - 130					07/22/13 11:47	1
Lab Sample ID: MB 490-94405/7							Client S	ample ID: Metho	d Blank
Matrix: Solid								Prep Type: 1	
Analysis Batch: 94405									
	MB	мв							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0335	mg/Kg			07/22/13 12:15	1
Ethylbenzene	ND		0.100	0.0335	mg/Kg			07/22/13 12:15	1
Naphthalene	ND		0.250	0.0850	mg/Kg			07/22/13 12:15	1
Toluene	ND		0.100	0.0370	mg/Kg			07/22/13 12:15	1
Xylenes, Total	ND		0.250	0.0335	mg/Kg			07/22/13 12:15	1
	МВ	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94	1	70 - 130					07/22/13 12:15	1
4-Bromofluorobenzene (Surr)	94		70 - 130					07/22/13 12:15	1
Dibromofluoromethane (Surr)	101		70 - 130					07/22/13 12:15	1
Toluene-d8 (Surr)	99		70 - 130					07/22/13 12:15	1

Lab Sample ID: LCS 490-94405/3 Matrix: Solid

Analysis Batch: 94405

and the second se			Spike	LCS	LCS				%Rec.	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene			0.0500	0.05175		mg/Kg		104	75 - 127	
Ethylbenzene			0.0500	0.04811		mg/Kg		96	80 - 134	
Naphthalene			0.0500	0.05104		mg/Kg		102	69 - 150	
Toluene			0.0500	0.04909		mg/Kg		98	80 - 132	
Xylenes, Total			0.150	0.1456		mg/Kg		97	80 - 137	
	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							
1,2-Dichloroethane-d4 (Surr)	99		70 - 130							
Construction and the second second										

4-Bromofluorobenzene (Surr)	90	70 - 130
Dibromofluoromethane (Surr)	101	70 - 130
Toluene-d8 (Surr)	98	70 - 130

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 93357

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

Lab Sample ID: LCSD 490-9 Matrix: Solid	4405/4					Clie	nt Sam	ple ID: I	Lab Contro Prep T	J Sample ype: Tot		1
Analysis Batch: 94405			Spike	LCSD	LCSD				%Rec.		RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene			0.0500	0.04925	-	mg/Kg		98	75 - 127	5	50	
Ethylbenzene			0.0500	0.04624		mg/Kg		92	80 - 134	4	50	
Naphthalene			0.0500	0.04964		mg/Kg		99	69 - 150	3	50	
Toluene			0.0500	0.04747		mg/Kg		95	80 - 132	3	50	
Xylenes, Total			0.150	0.1395		mg/Kg		93	80 - 137	4	50	
	LCSD	LCSD										
Surrogate	%Recovery	Qualifier	Limits									
1,2-Dichloroethane-d4 (Surr)	97	0	70 - 130									
4-Bromofluorobenzene (Surr)	90		70 - 130									
Dibromofluoromethane (Surr)	102		70 - 130									
Toluene-d8 (Surr)	97		70 - 130									

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

Lab Sample ID: MB 490-93357/1-A Matrix: Solid Analysis Batch: 93583

Nitrobenzene-d5 (Surr)

MR								
	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		0.0670	0.0100	mg/Kg		07/16/13 15:58	07/17/13 18:14	1
ND		0.0670	0.00900	mg/Kg		07/16/13 15:58	07/17/13 18:14	1
ND		0.0670	0.00900	mg/Kg		07/16/13 15:58	07/17/13 18:14	1
ND		0.0670	0.0150	mg/Kg		07/16/13 15:58	07/17/13 18:14	1
ND		0.0670	0.0120	mg/Kg		07/16/13 15:58	07/17/13 18:14	1
ND		0.0670	0.0120	mg/Kg		07/16/13 15:58	07/17/13 18:14	1
ND		0.0670	0.00900	mg/Kg		07/16/13 15:58	07/17/13 18:14	1
ND		0.0670	0.0140	mg/Kg		07/16/13 15:58	07/17/13 18:14	1
ND		0.0670	0.0140	mg/Kg		07/16/13 15:58	07/17/13 18:14	1
ND		0.0670	0.0120	mg/Kg		07/16/13 15:58	07/17/13 18:14	1
ND		0.0670	0.00900	mg/Kg		07/16/13 15:58	07/17/13 18:14	1
ND		0.0670	0.00900	mg/Kg		07/16/13 15:58	07/17/13 18:14	1
ND		0.0670	0.00700	mg/Kg		07/16/13 15:58	07/17/13 18:14	1
ND		0.0670	0.00900	mg/Kg		07/16/13 15:58	07/17/13 18:14	1
ND		0.0670	0.0120	mg/Kg		07/16/13 15:58	07/17/13 18:14	1
ND		0.0670	0.0100	mg/Kg		07/16/13 15:58	07/17/13 18:14	1
ND		0.0670	0.00900	mg/Kg		07/16/13 15:58	07/17/13 18:14	1
ND		0.0670	0.0160	mg/Kg		07/16/13 15:58	07/17/13 18:14	1
МВ	MB							
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
49		29 - 120				07/16/13 15:58	07/17/13 18:14	1
60		13 - 120				07/16/13 15:58	07/17/13 18:14	1
	ND ND ND ND ND ND ND ND ND ND ND ND ND N	Result Qualifier ND ND ND Qualifier <td< td=""><td>Result Qualifier RL ND 0.0670 ND 0.0670</td><td>Result Qualifier RL MDL ND 0.0670 0.0100 ND 0.0670 0.00900 ND 0.0670 0.00900 ND 0.0670 0.0100 ND 0.0670 0.01900 ND 0.0670 0.0150 ND 0.0670 0.0120 ND 0.0670 0.0120 ND 0.0670 0.0140 ND 0.0670 0.0140 ND 0.0670 0.0140 ND 0.0670 0.0120 ND 0.0670 0.0140 ND 0.0670 0.0120 ND 0.0670 0.00900 ND 0.0670 0.00900 ND 0.0670 0.0120 ND 0.0670 0.0120 ND 0.0670 0.0100 ND 0.0670 0.0100 ND 0.0670 0.0100 ND 0.0670 0.01600</td><td>Result Qualifier RL MDL Unit ND 0.0670 0.0100 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.0100 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0140 mg/Kg ND 0.0670 0.0140 mg/Kg ND 0.0670 0.0140 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.00900 mg/Kg ND</td><td>Result Qualifier RL MDL Unit D ND 0.0670 0.0100 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.0150 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0140 mg/Kg ND 0.0670 0.0140 mg/Kg ND 0.0670 0.0140 mg/Kg ND 0.0670 0.0140 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.0100 mg/Kg ND 0.0670 0.0100 mg/Kg ND 0.0670 0.0100 mg/Kg <</td><td>Result Qualifier RL MDL Unit D Prepared ND 0.0670 0.0100 mg/Kg 07/16/13 15:58 ND 0.0670 0.00900 mg/Kg 07/16/13 15:58 ND 0.0670 0.00900 mg/Kg 07/16/13 15:58 ND 0.0670 0.0150 mg/Kg 07/16/13 15:58 ND 0.0670 0.0120 mg/Kg 07/16/13 15:58 ND 0.0670 0.0140 mg/Kg 07/16/13 15:58 ND 0.0670 0.0120 mg/Kg 07/16/13 15:58 ND 0.0670 0.0140 mg/Kg 07/16/13 15:58 ND 0.0670 0.00900 mg/Kg 07/16/13 15:58 ND 0.0670 0.00900 mg/Kg 07/16/13 15:58</td><td>Result Qualifier RL MDL Unit D Prepared Analyzed ND 0.0670 0.0000 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.00900 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.0190 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.0120 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.0120 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.0120 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.0140 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.0140 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.0120 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.00900 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.00900 mg/Kg</td></td<>	Result Qualifier RL ND 0.0670 ND 0.0670	Result Qualifier RL MDL ND 0.0670 0.0100 ND 0.0670 0.00900 ND 0.0670 0.00900 ND 0.0670 0.0100 ND 0.0670 0.01900 ND 0.0670 0.0150 ND 0.0670 0.0120 ND 0.0670 0.0120 ND 0.0670 0.0140 ND 0.0670 0.0140 ND 0.0670 0.0140 ND 0.0670 0.0120 ND 0.0670 0.0140 ND 0.0670 0.0120 ND 0.0670 0.00900 ND 0.0670 0.00900 ND 0.0670 0.0120 ND 0.0670 0.0120 ND 0.0670 0.0100 ND 0.0670 0.0100 ND 0.0670 0.0100 ND 0.0670 0.01600	Result Qualifier RL MDL Unit ND 0.0670 0.0100 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.0100 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0140 mg/Kg ND 0.0670 0.0140 mg/Kg ND 0.0670 0.0140 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.00900 mg/Kg ND	Result Qualifier RL MDL Unit D ND 0.0670 0.0100 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.0150 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0140 mg/Kg ND 0.0670 0.0140 mg/Kg ND 0.0670 0.0140 mg/Kg ND 0.0670 0.0140 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.0100 mg/Kg ND 0.0670 0.0100 mg/Kg ND 0.0670 0.0100 mg/Kg <	Result Qualifier RL MDL Unit D Prepared ND 0.0670 0.0100 mg/Kg 07/16/13 15:58 ND 0.0670 0.00900 mg/Kg 07/16/13 15:58 ND 0.0670 0.00900 mg/Kg 07/16/13 15:58 ND 0.0670 0.0150 mg/Kg 07/16/13 15:58 ND 0.0670 0.0120 mg/Kg 07/16/13 15:58 ND 0.0670 0.0140 mg/Kg 07/16/13 15:58 ND 0.0670 0.0120 mg/Kg 07/16/13 15:58 ND 0.0670 0.0140 mg/Kg 07/16/13 15:58 ND 0.0670 0.00900 mg/Kg 07/16/13 15:58 ND 0.0670 0.00900 mg/Kg 07/16/13 15:58	Result Qualifier RL MDL Unit D Prepared Analyzed ND 0.0670 0.0000 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.00900 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.0190 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.0120 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.0120 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.0120 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.0140 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.0140 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.0120 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.00900 mg/Kg 07/16/13 15:58 07/17/13 18:14 ND 0.0670 0.00900 mg/Kg

07/16/13 15:58 07/17/13 18:14

27 - 120

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

Lab Sample ID: LCS 490-93357/2	A						Client	Sample		ntrol Sample
Matrix: Solid										pe: Total/NA
Analysis Batch: 93583			Calles	1.00	LCS				%Rec.	Batch: 93357
Analyte			Spike Added		Qualifier	Unit	D	%Rec	%Rec.	
Acenaphthylene			1.67	1.146	Quanner	mg/Kg		69	38 - 120	
Anthracene			1.67	1.140		mg/Kg		68	46 - 124	
Benzo[a]anthracene			1.67	1.096		mg/Kg		66	45 - 120	
Benzo[a]pyrene			1.67	1.065		mg/Kg		64	45 - 120	
Benzo[b]fluoranthene			1.67	1.083		mg/Kg		65	42 - 120	
Benzo[g,h,i]perylene			1.67	1.114		mg/Kg		67	38 - 120	
Benzo[k]fluoranthene			1.67	1.103		mg/Kg		66	42 - 120	
1-Methylnaphthalene			1.67	1.024		mg/Kg		61	32 - 120	
Pyrene			1.67	1.242		mg/Kg		75	43 - 120	
Phenanthrene			1.67	1.142		mg/Kg		69	45 - 120	
Chrysene			1.67	1.186		mg/Kg		71	43 - 120	
Dibenz(a,h)anthracene			1.67	1.084		mg/Kg		65	32 - 128	
Fluoranthene			1.67	1.079		mg/Kg		65	46 - 120	
Fluorene			1.67	1.122		mg/Kg		67	42 - 120	
Indeno[1,2,3-cd]pyrene			1.67	1.087		mg/Kg		65	41 - 121	
Naphthalene			1.67	0.9781		mg/Kg		59	32 - 120	
2-Methylnaphthalene			1.67	1.016		mg/Kg		61	28 - 120	
	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							

%Recovery	Qualifier	Limits
50		29 - 120
57		13 - 120
48		27 - 120
	50 57	57

Method: Moisture - Percent Moisture

Lab Sample ID: 490-30768-D	-1 DU						Client Sample ID: Dup	olicate
Matrix: Solid	Matrix: Solid						Prep Type: Tot	tal/NA
Analysis Batch: 93335								
Contraction of Contract	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Percent Solids	92		88		%		5	20

QC Association Summary

Client: Small Business Group Inc. Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-31022-1

5

GC/MS VOA

Prep Batch: 92654

Prep Batch: 92654					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-30733-A-2-E MS	Matrix Spike	Total/NA	Solid	5030B	
490-30733-A-2-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	
Prep Batch: 93523					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-31022-2	315 Ash-2	Total/NA	Solid	5035	
490-31022-3	342 Ash-1	Total/NA	Solid	5035	
Prep Batch: 93525					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-31022-1	315 Ash-1	Total/NA	Solid	5035	
490-31022-2	315 Ash-2	Total/NA	Solid	5035	
490-31022-3	342 Ash-1	Total/NA	Solid	5035	
Analysis Batch: 94012					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-30733-A-2-E MS	Matrix Spike	Total/NA	Solid	8260B	92654
490-30733-A-2-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	92654
490-31022-2	315 Ash-2	Total/NA	Solid	8260B	93525
490-31022-3	342 Ash-1	Total/NA	Solid	8260B	93525
LCS 490-94012/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-94012/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-94012/6	Method Blank	Total/NA	Solid	8260B	
MB 490-94012/7	Method Blank	Total/NA	Solid	8260B	
Analysis Batch: 94405					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-31022-1	315 Ash-1	Total/NA	Solid	8260B	93525
400 24022 2	DAE Ask D	Tetel/bla	Calle	00000	02502

490-31022-1	315 Ash-1	Total/NA	Solid	8260B	93525
490-31022-2	315 Ash-2	Total/NA	Solid	8260B	93523
490-31022-3	342 Ash-1	Total/NA	Solid	8260B	93523
LCS 490-94405/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-94405/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-94405/6	Method Blank	Total/NA	Solid	8260B	
MB 490-94405/7	Method Blank	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 93357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-31022-1	315 Ash-1	Total/NA	Solid	3550C	
490-31022-2	315 Ash-2	Total/NA	Solid	3550C	
490-31022-3	342 Ash-1	Total/NA	Solid	3550C	
LCS 490-93357/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 490-93357/1-A	Method Blank	Total/NA	Solid	3550C	
Analysis Batch: 93583					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-31022-2	315 Ash-2	Total/NA	Solid	8270D	93357
LCS 490-93357/2-A	Lab Control Sample	Total/NA	Solid	8270D	93357
MB 490-93357/1-A	Method Blank	Total/NA	Solid	8270D	93357

QC Association Summary

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

GC/MS Semi VOA (Continued)

Analysis Batch: 93858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-31022-1	315 Ash-1	Total/NA	Solid	8270D	93357
490-31022-3	342 Ash-1	Total/NA	Solid	8270D	93357

General Chemistry

Analysis Batch: 93335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-30768-D-1 DU	Duplicate	Total/NA	Solid	Moisture	
490-31022-1	315 Ash-1	Total/NA	Solid	Moisture	
490-31022-2	315 Ash-2	Total/NA	Solid	Moisture	
490-31022-3	342 Ash-1	Total/NA	Solid	Moisture	

TestAmerica Job ID: 490-31022-1

Client Sample ID: 315 Ash-1

Date Collected: 07/09/13 15:45

Lab Sample ID: 490-31022-1 Matrix: Solid

Percent Solids: 83.4

Date Received: 07/16/13 08:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			93525	07/17/13 10:57	RRS	TAL NSH
Total/NA	Analysis	8260B		1	94405	07/22/13 13:42	KKK	TAL NSH
Total/NA	Prep	3550C			93357	07/16/13 15:59	CEC	TAL NSH
Total/NA	Analysis	8270D		1	93858	07/18/13 19:44	BES	TAL NSH
Total/NA	Analysis	Moisture		1	93335	07/16/13 14:53	RRS	TAL NSH

Client Sample ID: 315 Ash-2 Date Collected: 07/10/13 14:30 Date Received: 07/16/13 08:15

Lab Sample ID: 490-31022-2 Matrix: Solid

Percent Solids: 74.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			93525	07/17/13 10:57	RRS	TAL NSH
Total/NA	Analysis	8260B		1	94012	07/19/13 19:39	GLN	TAL NSH
Total/NA	Prep	5035			93523	07/17/13 10:53	RRS	TAL NSH
Total/NA	Analysis	8260B		1	94405	07/22/13 16:43	ККК	TAL NSH
Total/NA	Prep	3550C			93357	07/16/13 15:59	CEC	TAL NSH
Total/NA	Analysis	8270D		1	93583	07/17/13 20:53	BES	TAL NSH
Total/NA	Analysis	Moisture		1	93335	07/16/13 14:53	RRS	TAL NSH

Client Sample ID: 342 Ash-1 Date Collected: 07/11/13 13:15

Date Received: 07/16/13 08:15

Lab Sample ID: 490-31022-3 Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
rep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
otal/NA	Prep	5035			93525	07/17/13 10:57	RRS	TAL NSH
otal/NA	Analysis	8260B		1	94012	07/19/13 19:09	GLN	TAL NSH
otal/NA	Prep	5035			93523	07/17/13 10:53	RRS	TAL NSH
otal/NA	Analysis	8260B		1	94405	07/22/13 17:12	ККК	TAL NSH
otal/NA	Prep	3550C			93357	07/16/13 15:59	CEC	TAL NSH
otal/NA	Analysis	8270D		1	93858	07/18/13 20:07	BES	TAL NSH
otal/NA	Analysis	Moisture		1	93335	07/16/13 14:53	RRS	TAL NSH

Laboratory References:

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

9

TestAmerica Job ID: 490-31022-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
3270D	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: 490-31022-1

Laboratory: TestAmerica Nashville

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

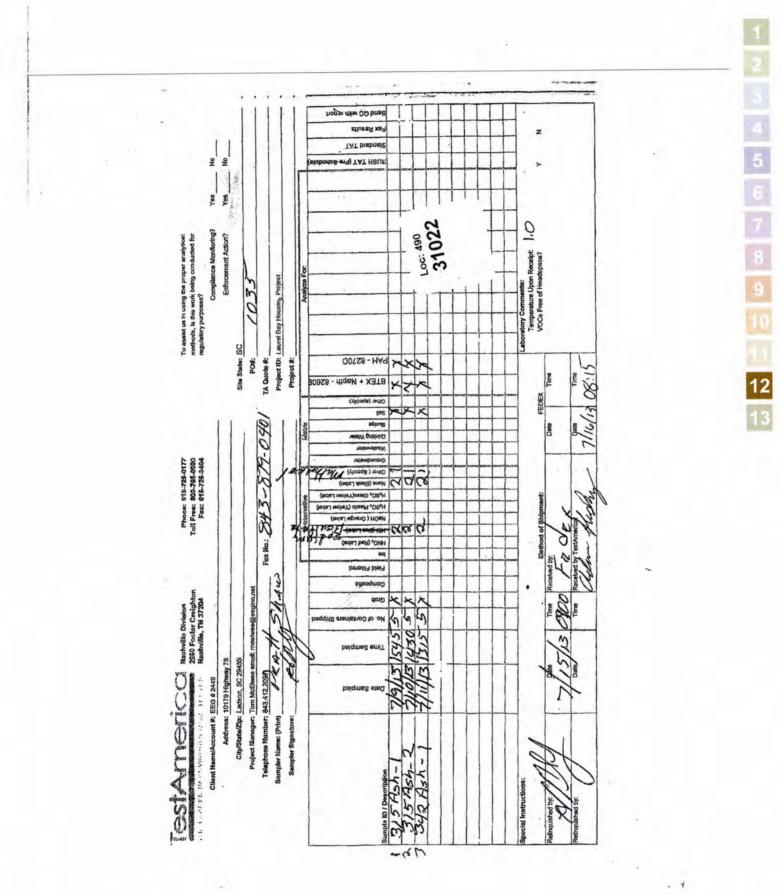
Authority	Program	EPA Region	Certification ID	Expiration Date
	ACIL		393	10-30-13
A2LA	ISO/IEC 17025		0453.07	12-31-13
Alaska (UST)	State Program	10	UST-087	07-24-13 *
Arizona	State Program	9	AZ0473	05-05-14
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-13
Connecticut	State Program	1	PH-0220	12-31-13
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-13
Iowa	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	07-31-13 *
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	08-31-13
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
South Carolina	State Program	4	84009 (002)	02-23-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-13
USDA	Federal		S-48469	11-02-13
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-13 *
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-13
Wyoming (UST)	A2LA	8	453.07	12-31-13

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

THE LEADER IN ENVIRONMENTAL TESTING Vashville, TN COOLER RECEIPT FORM	
Cooler Received/Opened On : 07/16/13 @ 0815	
RERA	490-31022 Chain o
racking # (last 4 digits, FedEx)	
Courier: Fed-ex IR Gun : 17960357 / / /	
. Temperature of rep. sample or temp blank when opened: <u><i>LvO</i></u> Degrees Celsius	~
. If Item #2 temperature Is 0°C or less, was the representative sample or temp blank fro	ozen? YES NO. (NA)
. Were custody seals on outside of cooler?	YESNONA
If yes, how many and where:	
. Were the seals intact, signed, and dated correctly?	YES. NONA
. Were custody papers inside cooler?	(YES NO NA
certify that I opened the cooler and answered questions 1-6 (intial)	ho
. Were custody seals on containers: YES NO and Intact	YES NO ONA
Were these signed and dated correctly?	YESNO.
Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert	Paper Other None
. Cooling process: (Ice) Ice-pack Ice (direct contact) D	ry Ice Other None
	YESNONA
D. Did all containers arrive in good condition (unbroken)?	6
 Did all containers arrive in good condition (unbroken)? Were all container labels complete (#, date, signed, pres., etc)? 	VES.NONA
 Did all containers arrive in good condition (unbroken)? Were all container labels complete (#, date, signed, pres., etc)? Did all container labels and tags agree with custody papers? 	YES. NONA
 0. Did all containers arrive in good condition (unbroken)? 1. Were all container labels complete (#, date, signed, pres., etc)? 2. Did all container labels and tags agree with custody papers? 	YESNONA YESNONA YESNONA
 Did all containers arrive in good condition (unbroken)? Were all container labels complete (#, date, signed, pres., etc)? Did all container labels and tags agree with custody papers? Were VOA vials received? 	YESNONA YESNONA YESNONA YESNONA YESNONA
 Did all containers arrive in good condition (unbroken)? Were all container labels complete (#, date, signed, pres., etc)? Did all container labels and tags agree with custody papers? Were VOA vials received? Was there any observable headspace present in any VOA vial? Was there a Trip Blank in this cooler? YES(O)NA If multiple coolers, second se	YESNONA YESNONA YESNONA YESNONA YESNONA
 Did all containers arrive in good condition (unbroken)? Were all container labels complete (#, date, signed, pres., etc)? Did all container labels and tags agree with custody papers? Were VOA vials received? Was there any observable headspace present in any VOA vial? Was there a Trip Blank in this cooler? YES(O)NA If multiple coolers, securify that I unloaded the cooler and answered questions 7-14 (intial) 	YESNONA YESNONA YESNONA YESNONA YESNONA
 0. Did all containers arrive in good condition (unbroken)? 1. Were all container labels complete (#, date, signed, pres., etc)? 2. Did all container labels and tags agree with custody papers? 3a. Were VOA vials received? b. Was there any observable headspace present in any VOA vial? 	YESNONA YESNONA YESNONA YESNONA YESNONA
 b). Did all containers arrive in good condition (unbroken)? a). Were all container labels complete (#, date, signed, pres., etc)? b). Did all container labels and tags agree with custody papers? c). Did all container labels and tags agree with custody papers? c). Was there any observable headspace present in any VOA vial? c). Was there a Trip Blank in this cooler? YES(o)NA If multiple coolers, sectrify that I unloaded the cooler and answered questions 7-14 (intial) c). Did the bottle, did pH test strips suggest preservation reached the correct pH I b). Did the bottle labels indicate that the correct preservatives were used 	YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA
 Did all containers arrive in good condition (unbroken)? Were all container labels complete (#, date, signed, pres., etc)? Did all container labels and tags agree with custody papers? Were VOA vials received? Was there any observable headspace present in any VOA vial? Was there a Trip Blank in this cooler? YES(O)NA If multiple coolers, sectify that I unloaded the cooler and answered questions 7-14 (intial) On pres'd bottles, did pH test strips suggest preservation reached the correct pH I Did the bottle labels indicate that the correct preservatives were used Was residual chlorine present? 	YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA
 Did all containers arrive in good condition (unbroken)? Were all container labels complete (#, date, signed, pres., etc)? Did all container labels and tags agree with custody papers? Were VOA vials received? Was there any observable headspace present in any VOA vial? Was there a Trip Blank in this cooler? YES(O)NA If multiple coolers, sectify that I unloaded the cooler and answered questions 7-14 (Intial) On pres'd bottles, did pH test strips suggest preservation reached the correct pH I Did the bottle labels indicate that the correct preservatives were used Was residual chlorine present? 	YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA
 Did all containers arrive in good condition (unbroken)? Were all container labels complete (#, date, signed, pres., etc)? Did all container labels and tags agree with custody papers? Was there any observable headspace present in any VOA vial? Was there a Trip Blank in this cooler? YES(O)NA If multiple coolers, sectify that I unloaded the cooler and answered questions 7-14 (Intial) a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH I Did the bottle labels indicate that the correct preservatives were used Was residual chlorine present? were custody papers properly filled out (ink, signed, etc)? 	YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA
 Did all containers arrive in good condition (unbroken)? Were all container labels complete (#, date, signed, pres., etc)? Did all container labels and tags agree with custody papers? Was there any observable headspace present in any VOA vial? Was there a Trip Blank in this cooler? YES(O)NA If multiple coolers, sectify that I unloaded the cooler and answered questions 7-14 (intial) On pres'd bottles, did pH test strips suggest preservation reached the correct pH I Did the bottle labels indicate that the correct preservatives were used Was residual chlorine present? Were custody papers properly filled out (ink, signed, etc)? Did you sign the custody papers in the appropriate place? 	YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA
 Did all containers arrive in good condition (unbroken)? Were all container labels complete (#, date, signed, pres., etc)? Did all container labels and tags agree with custody papers? Were VOA vials received? Was there any observable headspace present in any VOA vial? Was there a Trip Blank in this cooler? YES(O)NA If multiple coolers, sectorify that I unloaded the cooler and answered questions 7-14 (Intial) On pres'd bottles, did pH test strips suggest preservation reached the correct pH I 	YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA
 Did all containers arrive in good condition (unbroken)? Were all container labels complete (#, date, signed, pres., etc)? Did all container labels and tags agree with custody papers? Were VOA vials received? Was there any observable headspace present in any VOA vial? Was there a Trip Blank in this cooler? YES(O)NA If multiple coolers, sectify that I unloaded the cooler and answered questions 7-14 (Intial) On pres'd bottles, did pH test strips suggest preservation reached the correct pH I Did the bottle labels indicate that the correct preservatives were used Was residual chlorine present? Were custody papers properly filled out (ink, signed, etc)? Did you sign the custody papers in the appropriate place? Were correct containers used for the analysis requested? 	YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA YESNONA

BIS = Broken in shipment Cooler Receipt Form.doc

LF-1 End of Form



Login Sample Receipt Checklist

Client: Small Business Group Inc.

Login Number: 31022 List Number: 1 Creator: Huskey, Adam

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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: 490-31022-1

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 315Ash-1; 315 Ash Street, Laurel Bay Housing Area, MCAS Beaufort, S.C.

DISPOSAL LOCATION

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

TYPE OF TANK SIZE (GAL)

Steel

280

CLEANING/DISPOSAL METHOD

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

DISPOSAL CERTIFICATION

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

T.C. Lillee (Name)

NON-HAZARDOUS MANIFEST	US EPA ID No.	Manifest Doc	No.	2. Page 1				
. Generator's Mailing Address: ICAS BEAUFORT AUREL BAY HOUSING	Generator's Site Ad	dress (If different than r	mailing):		st Number	01519		
EAUFORT, SC 29904 Generator's Phone 843-879-0411					B. State	Generator's	טו	
Transporter 1 Company Name EEG Int 10179 May 78 (adson Sc +9438	6. 1	JS EPA ID Number			ransporter's ID orter's Phone (843) 879 - 64			
Transporter 2 Company Name	8. 1	JS EPA ID Number		D. Transporter's Phone 843/879-040 E. State Transporter's ID				
Designated Facility Name and Site Address ICKORY HILL LANDFILL	10.	LO. US EPA ID Number			F. Transporter's Phone G. State Facility ID			
621 LOW COUNTRY DRIVE IDGELAND, SC 29936	-				acility Phone	843-9	87-4643	
L Description of Waste Materials		12. C No.	ontainers Type	13. Total Quantity	14. Unit Wt./Vol.	i. Mi	isc. Comment:	
HEATING OIL TANK FILLED WITH SAND WM Profile # 1026555	c	1	day	9.10	TON	71	505	
		-			-			
WM Profile #								
WM Profile #		<u> </u>	12.		227			
WM Profile #		-						
Additional Descriptions for Materials Listed Above	5	K. Dispo	osal Location		1	Level		
i. Special Handling Instructions and Additional Inform	ation	Grid	01-3	TAA	h-7	(d)	451	
UST'S FROM : 1419 Albatross Irchase Order #	2)227	CYPRESS CYPRESS ENCY CONTACT / PH	55 5) 342	Ash-	1 1	B	
 GENERATOR'S CERTIFICATE: ereby certify that the above-described materials are 	not hazardous wastes	as defined by 40 C	CFR Part 261			w, have beer	n fully and	
inted Name	Signature "	On behalf of	and to ap	g W.	lations.	Month	Day 14	
Printed Name RAHSha	Signature	Alle	10		0	Month	Day 14	
. Transporter 2 Acknowledgement of Receipt of Mat Printed Name JAMES Baldwin	Signature	0	0.0.			Month	Day	
. Certificate of Final Treatment/Disposal ertify, on behalf of the above listed treatment facility plicable laws, regulations, permits and licenses on th	e dates listed above.				as managed i	in complianc	e with all	
Printed Name	t of non-hazardous ma	aterials covered by t		uld		Month	Day 14/	

Appendix C Laboratory Analytical Report - Groundwater



Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Description: BEALB315TW02WG20151110

Laboratory ID: QK11025-007 Matrix: Aqueous

Date Sampled:11/10/2015 1135

Date Received: 11/11/2015											
Run Prep Method 1 5030B	Analytical Method 8260E			s Date Analyst 015 1420 PAP	Prep	Date	Batch 89908				
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-	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	Acceptar Limit								
Bromofluorobenzene		83	75-120)							
1,2-Dichloroethane-d4		97	70-120)							
Toluene-d8		103	85-120)							
Dibromofluoromethane		100	85-115	5							

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 GC/MS (SIM)

Client: AECOM - Resolution Consultants

Description: BEALB315TW02WG20151110

Laboratory ID: QK11025-007

Date Sampled:11/10/2015 1135

Matrix: Aqueous

Date Received: 11/11/2015

RunPrep Method13520C	Analytical Method Di 8270D (SIM)		/sis Date Analyst /2015 1227 RBH			Batch 6 89585				
Parameter		CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units F	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	Ru Q % Rec		ance nits							
2-Methylnaphthalene-d10	6	68 15 -1	39							
Fluoranthene-d10	8	31 23-1	54							

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

Shealy Environmental Services, Inc. 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com 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 - 10-1		

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