SUMMARY REPORT 30 WEST CYPRESS STREET (FORMERLY 159 WEST CYPRESS 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 23511-30 West 95

and



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

JUNE 2021

SUMMARY REPORT 30 WEST CYPRESS STREET (FORMERLY 159 WEST CYPRESS STREET) LAUREL BAY MILITARY HOUSING AREA MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SC

Revision: 0 Prepared for:

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

and



Naval Facilities Engineering Command Atlantic

9324 Virginia Avenue Norfolk, Virginia 23511-3095

Prepared by:



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

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



Summary Report 30 West Cypress Street (Formerly 159 West Cypress Street) Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort June 2021

Table of Contents

1.0	INTRODUCTION	. 1
1.1 1.2	BACKGROUND INFORMATION UST REMOVAL AND ASSESSMENT PROCESS	
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 30 West Cypress Street (Formerly 159 West Cypress 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 30 Cypress Street (Formerly 159 West Cypress Street). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 159 Cypress Street* (MCAS Beaufort, 2011). 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 – February and March 2017* (Resolution Consultants, 2017). 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 September 2011, two 280 gallon heating oil USTs were removed at 30 West Cypress Street (Formerly 159 West Cypress Street). Tank 1 was removed on September 19, 2011 from the front landscaped bed area adjacent to the driveway. Tank 2 was removed on September 20, 2011 from the front grassed area adjacent to the driveway. The former UST locations are



indicated in Figures 2 and 3 of the UST Assessment Report (Appendix B). The USTs were removed, cleaned, and shipped offsite for recycling. There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depths to the bases of the USTs were 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 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 30 West Cypress Street (Formerly 159 West Cypress Street) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated August 24, 2016, SCDHEC requested an IGWA for 30 West Cypress Street (Formerly 159 West Cypress Street (Formerly 159 West Cypress 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 March 6, 2017, a temporary monitoring well was installed at 30 West Cypress Street (Formerly 159 West Cypress 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. 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 – February and March 2017* (Resolution Consultants, 2017).

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 – February and March 2017* (Resolution Consultants, 2017).

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 30 West Cypress Street (Formerly 159 West Cypress 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 USTs 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 30 West Cypress Street (Formerly 159 West Cypress Street). This NFA determination was obtained in a letter dated July 27, 2017. SCDHEC's NFA letter is provided in Appendix D.

4.0 **REFERENCES**

- Marine Corps Air Station Beaufort, 2011. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 159 Cypress Street, Laurel Bay Military Housing Area*, December 2011.
- Resolution Consultants, 2017. *Initial Groundwater Investigation Report February and March* 2017 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina, June 2017.



- 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 1Laboratory Analytical Results - Soil30 West Cypress St (Formerly 159 West Cypress St)Laurel Bay Military Housing AreaMarine Corps Air Station BeaufortBeaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Results Samples Collected 9/19/11 to 9/20/11		
		159 Cypress-1	159 Cypress-2	
Volatile Organic Compounds Analyzed	by EPA Method 8260B (mg/kg)			
Benzene	0.003	ND	ND	
Ethylbenzene	1.15	ND	ND	
Naphthalene	0.036	ND	ND	
Toluene	0.627	ND	ND	
Xylenes, Total	13.01	ND	ND	
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 2 Laboratory Analytical Results - Groundwater 30 West Cypress St (Formerly 159 West Cypress St) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Site-Specific Groundwater VISLs (µg/L) ⁽²⁾	Results Sample Collected 03/06/17
Volatile Organic Compounds Analyzed	l by EPA Method 8260B (µg/L)	
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	ND
Naphthalene	25	29.33	2.3
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	ND
Semivolatile Organic Compounds Ana	lyzed by EPA Method 822	70D (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		Submit Completed Form To: UST Program SCDHEC 2600 Bull Street Columbia, South Carolina 29201 Telephone (803) 896-7957
RECEIVED		
DEC 0 8 2011		
SC DHEC - Bureau of Land & Waste Management	I. OWNERSHIP OF	UST (S)
MCAS Beaufort, Commanding Owner Name (Corporation, Individual) (Craig Ehde)
P.O. Box 55001	, rublic Agency, Other)	
Mailing Address Beaufort ,		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	ary Housing Area, Marine Corps Air Station, Beaufort, SC
Facility Name or Compan	y Site Identifier
159 Cypress Stre	et, Laurel Bay Military Housing Area
Street Address or State Ro	ad (as applicable)
Beaufort,	Beaufort
City	County

Г

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. <u>This section must be completed.</u>

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

		159Cypres-1	159Cypres-2
A.	Product(ex. Gas, Kerosene)	Heating oil	Heating oil
B.	Capacity(ex. 1k, 2k)	280 gal	280 gal
C.	Age	Late 1950s	Late 1950s
D.	Construction Material(ex. Steel, FRP)	Steel	Steel
Е·	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
Н·	Overfill Prevention Equipment Y/N	No	No
I.	Method of Closure Removed/Filled	Removed	Removed
J.	Date Tanks Removed/Filled	9/19/2011	9/20/2011
K.	Visible Corrosion or Pitting Y/N	Yes	Yes
L.	Visible Holes Y/N	Yes	Yes

159Cymreg - 1 159Cymreg - 2

M. Method of disposal for any USTs removed from the ground (attach disposal manifests) UST 159Cypres-1 was removed from the ground, cleaned and recycled. UST 159Cypres-2 was removed from the ground and disposed at a Subtitle "D" landfill. See Attachment "A".

N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests) Contaminated water was pumped from 159Cypres-1 and disposed of by MCAS. UST 159Cypres-2 was previously filled with sand by others.

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

VII. PIPING INFORMATION

F

		159Cypres-1	159Cypres-2		
		Steel	Steel		
А.	Construction Material(ex. Steel, FRP)	& Copper	& Copper		
B.	Distance from UST to Dispenser	N/A	N/A		
C.	Number of Dispensers	N/A	N/A		
D.	Type of System Pressure or Suction	Suction	Suction		
E.	Was Piping Removed from the Ground? Y/N	Yes	Yes		
F.	Visible Corrosion or Pitting Y/N	Yes	Yes		
G.	Visible Holes Y/N	No	No		
H.	Age	Late 1950s	Late 1950s		
I.	If any corrosion, pitting, or holes were observed, describe the location and extent for each piping run.				
	Steel vent piping for both tanks were corroded and pitted. All				
	copper supply and return piping were sound.				

VIII. BRIEF SITE DESCRIPTION AND HISTORY

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

IX. S	ITE CO	ONDIT	IONS
-------	--------	-------	------

	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?		х	
If yes, indicate location on site map and describe the odor (strong, mild, etc.)			
C. Was water present in the UST excavation, soil borings, or trenches?		Х	
If yes, how far below land surface (indicate location and depth)?			
D. Did contaminated soils remain stockpiled on site after closure? 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?		х	
If yes, indicate location and thickness.			

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 #
159 Cvpres-1	Excav at fill end	Soil	Sandy	5'10"	9/19/11 1300 hrs 9/20/11	P. Shaw	
159	Excav at fill end		Sandy	4'4"	9/20/11 1115 hrs	P. Shaw	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

* = Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

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

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

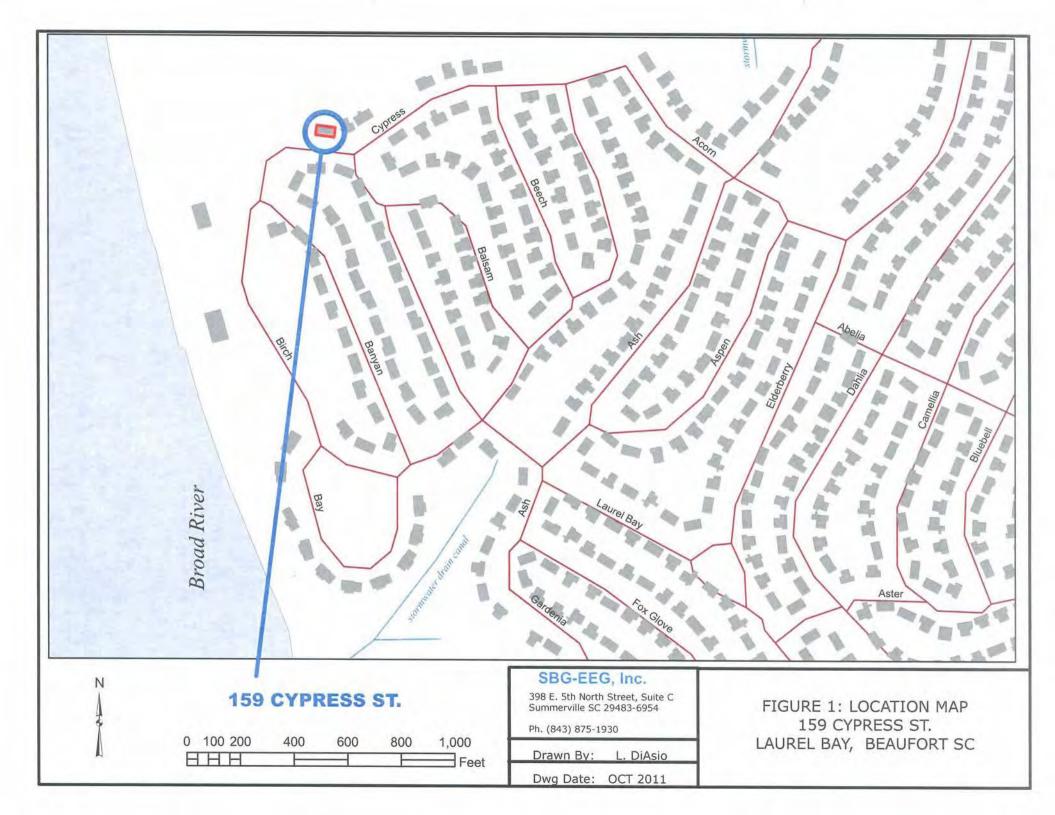
XII. RECEPTORS

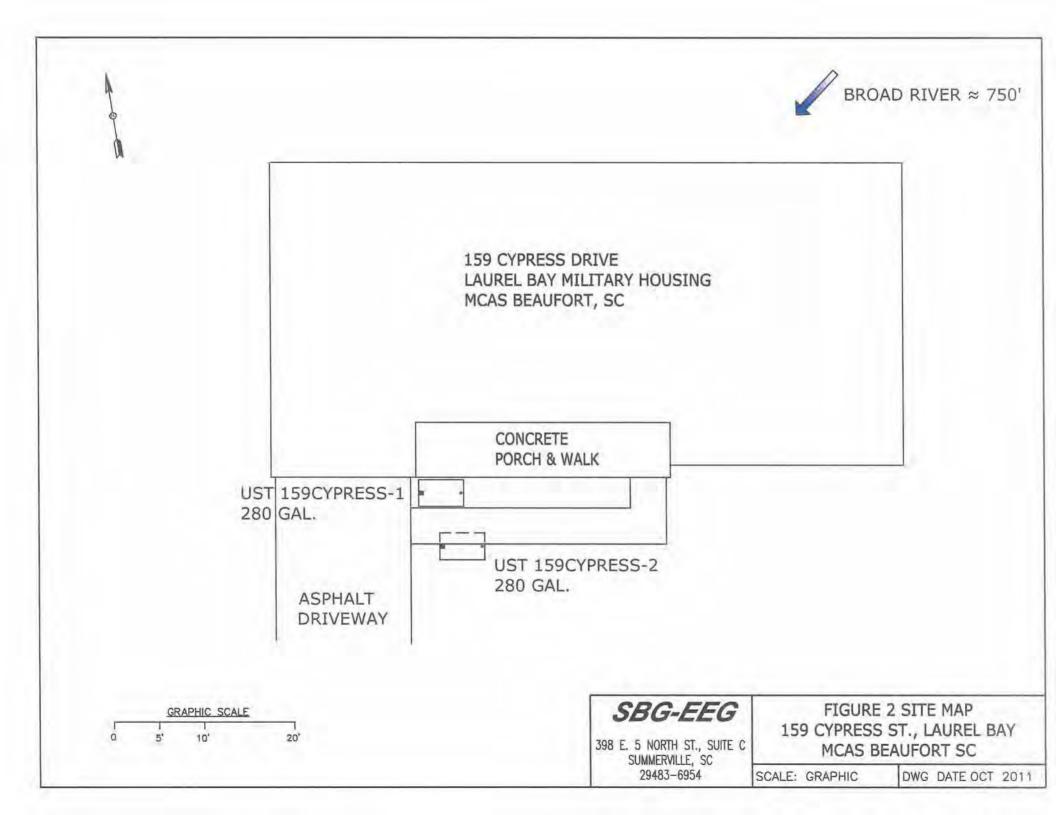
		Yes	No
А.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?	*X	
	*Approx 750' to stormwater drain If yes, indicate type of receptor, distance, and direction on site map.	nage	canal
В.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		X
	If yes, indicate type of well, distance, and direction on site map.		
C.	Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?		х
	If yes, indicate type of structure, distance, and direction on site map.		
D.	Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination? *Sewer, water, cab	*X le,	
	electricity & fibe If yes, indicate the type of utility, distance, and direction on the site map.	r opt	ic
Е.	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.		

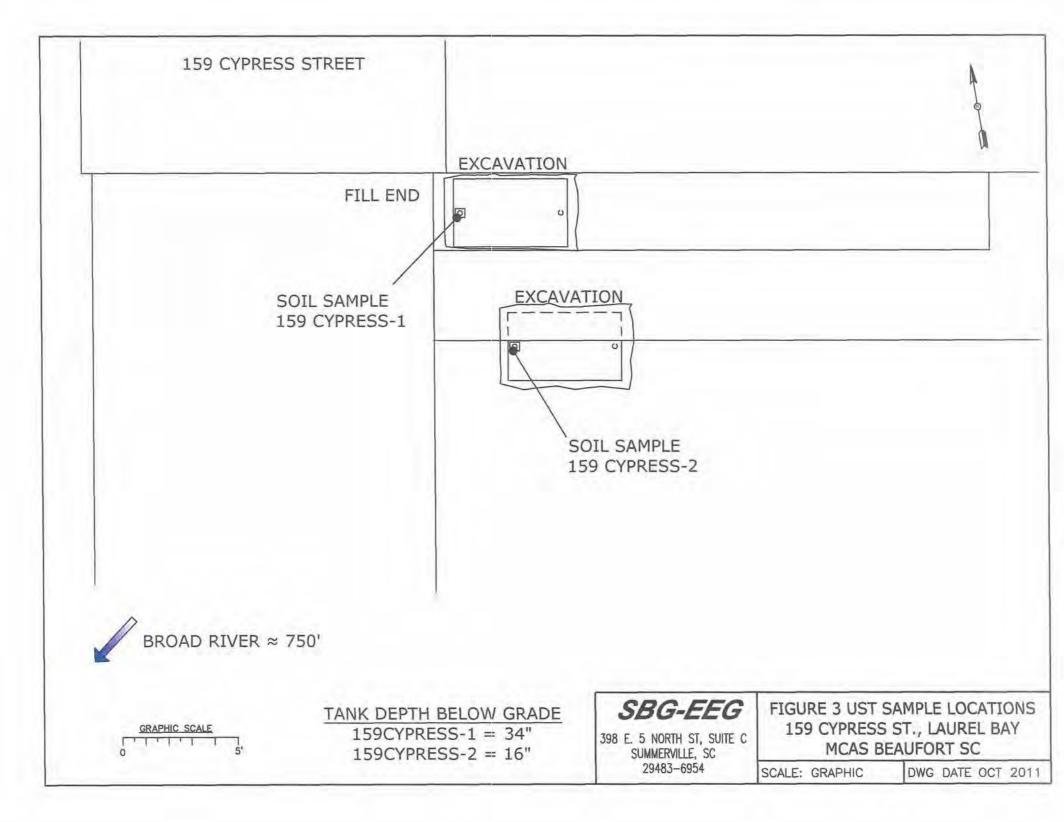
XIII. SITE MAP

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: UST 159Cypress-1 was under the shrubbery. Tank -2 was under the sidewalk.



Picture 2: UST 159Cypress-1 tank pit.



Picture 3: UST 159Cypress-2 excavation in progress.



Picture 4: 159 Cypress St. after 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	159Cypres-1		1590	ypres-2		
Benzene	ND			ND	 	
Toluene ND				ND	 	
Ethylbenzene	ND	-		ND		
Xylenes	ND		ND			
Naphthalene	ND		ND			
Benzo (a) anthracene	ND		ND			
Benzo (b) fluoranthene	ND		ND			
Benzo (k) fluoranthene	ND	ND				
Chrysene	ND		ND			
Dibenz (a, h) anthracene	ND	_	ND			
TPH (EPA 3550)						
CoC						
Benzene						
Toluene						
Ethylbenzene					 	
Xylenes					 	
Naphthalene						
Benzo (a) anthracene						
Benzo (b) fluoranthene						
Benzo (k) fluoranthene						
Chrysene						
Dibenz (a, h) anthracene						
TPH (EPA 3550)						

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

CoC	RBSL (µg/l)	W-1	W-2	W -3	W -4
Free Product Thickness	None				
Benzene	5				
Toluene	1,000				
Ethylbenzene	700				
Xylenes	10,000	te te transformer de plantes de			
Total BTEX	N/A				
МТВЕ	40				
Naphthalene	25				
Benzo (a) anthracene	10				
Benzo (b) flouranthene	10				
Benzo (k) flouranthene	10				
Chrysene	10				
Dibenz (a, h) anthracene	10				
EDB	.05				
1,2-DCA	5				
Lead	Site specific				

XV. ANALYTICAL RESULTS

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

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



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc. TestAmerica Nashville

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

TestAmerica Job ID: NUI3262

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

For:

LINKS

Review your project results through

Total Access

Have a Question?

www.testamericainc.com

Visit us at:

Ask. The

Expert

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

Attn: Tom McElwee

Lem Sta Hay

Authorized for release by: 10/10/2011 12:53:58 PM

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

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

Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions	4
Client Sample Results	5
QC Sample Results	11
QC Association	17
Chronicle	19
Method Summary	21
Certification Summary	22
Chain of Custody	23

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

TestAmerica	Job	ID:	NUI3262

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
NUI3262-01	159 Cypress-1	Soil	09/19/11 13:00	09/24/11 09:00	
NUI3262-02	159 Cypress-2	Soil	09/20/11 11:15	09/24/11 09:00	
NUI3262-03	400 Elderberry	Soil	09/21/11 13:45	09/24/11 09:00	
NUI3262-04	141 Laurel Bay-a	Soil	09/22/11 09:15	09/24/11 09:00	
NUI3262-05	153 Laurel Bay-a	Soil	09/22/11 09:45	09/24/11 09:00	
NUI3262-06	155 Laurel Bay-a	Soil	09/22/11 10:45	09/24/11 09:00	

TestAmerica Job ID: NUI3262

Qualifiers

GCMS Vola	tiles	4
Qualifier	Qualifier Description	Pa.c.
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.	
M1	The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).	
RL1	Reporting limit raised due to sample matrix effects.	
GCMS Sem	volatiles	
Qualifier	Qualifier Description	

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

Glossary

J

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

TestAmerica Job ID: NUI3262

Client Sample ID: 159 Cypress-1

Date Collected: 09/19/11 13:00 Date Received: 09/24/11 09:00

Lab Sample ID: NUI3262-01 Matrix: Soil Percent Solids: 83.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00188	0.00103	mg/kg dry	0	09/19/11 13:00	09/28/11 14:02	1,00
Ethylbenzene	ND		0.00188	0.00103	mg/kg dry	12	09/19/11 13:00	09/28/11 14:02	1.00
Naphthalene	ND		0.00470	0.00235	mg/kg dry	17	09/19/11 13:00	09/28/11 14:02	1.00
Toluene	ND		0.00188	0.00103	mg/kg dry	(A.	09/19/11 13:00	09/28/11 14:02	1.00
Xylenes, total	ND		0.00470	0.00235	mg/kg dry	17	09/19/11 13:00	09/28/11 14:02	1.00
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	98		70 - 130				09/19/11 13:00	09/28/11 14:02	1.00
Dibromofluoromethane	95		70 - 130				09/19/11 13:00	09/28/11 14:02	1.00
Toluene-d8	100		70 - 130				09/19/11 13:00	09/28/11 14:02	1.00
4-Bromofluorobenzene	97		70-130				09/19/11 13:00	09/28/11 14:02	1.00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0798	0.0405	mg/kg dry	Ū.	09/27/11 07:57	09/28/11 04:06	1.00
Acenaphthylene	ND		0.0798	0.0405	mg/kg dry	10	09/27/11 07:57	09/28/11 04:06	1.00
Anthracene	ND		0.0798	0.0405	mg/kg dry	D	09/27/11 07:57	09/28/11 04:06	1.00
Benzo (a) anthracene	ND		0.0798	0.0405	mg/kg dry	10	09/27/11 07:57	09/28/11 04:06	1.00
Benzo (a) pyrene	ND		0.0798	0.0405	mg/kg dry	σ	09/27/11 07:57	09/28/11 04:06	1.00
Benzo (b) fluoranthene	ND		0.0798	0.0405	mg/kg dry	0	09/27/11 07:57	09/28/11 04:06	1.00
Benzo (g,h,i) perylene	ND		0.0798	0.0405	mg/kg dry	0	09/27/11 07:57	09/28/11 04:06	1.00
Benzo (k) fluoranthene	ND		0.0798	0.0405	mg/kg dry	2	09/27/11 07:57	09/28/11 04:06	1.00
Chrysene	ND		0.0798	0.0405	mg/kg dry	17	09/27/11 07:57	09/28/11 04:06	1.00
Dibenz (a,h) anthracene	ND		0.0798	0.0405	mg/kg dry	म	09/27/11 07:57	09/28/11 04:06	1.00
Fluoranthene	ND		0.0798	0.0405	mg/kg dry	32	09/27/11 07:57	09/28/11 04:06	1.00
Fluorene	ND		0.0798	0.0405	mg/kg dry	33	09/27/11 07:57	09/28/11 04:06	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0798	0.0405	mg/kg dry		09/27/11 07:57	09/28/11 04:06	1.00
Naphthalene	ND		0.0798	0.0405	mg/kg dry	.0	09/27/11 07:57	09/28/11 04:06	1.00
Phenanthrene	ND		0.0798	0.0405	mg/kg dry	7	09/27/11 07:57	09/28/11 04:06	1.00
Pyrene	ND		0.0798	0.0405	mg/kg dry	-6	09/27/11 07:57	09/28/11 04:06	1.00
1-Methylnaphthalene	0.0433	1	0.0798	0.0405	mg/kg dry	φ.	09/27/11 07:57	09/28/11 04:06	1.00
2-Methylnaphthalene	ND		0.0798	0.0405	mg/kg dry	ø	09/27/11 07:57	09/28/11 04:06	1.00
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	71		18-120				09/27/11 07:57	09/28/11 04:06	1.00
2-Fluorobiphenyl	59		14 - 120				09/27/11 07:57	09/28/11 04:06	1.00
Nitrobenzene-d5	56		17 - 120				09/27/11 07:57	09/28/11 04:06	1.00
Method: SW-846 - General (Chemistry Paramete	rs							
Analyte	THE REAL PROPERTY OF THE PROPERTY OF THE REAL PROPE	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	83.5		0.500	0.500	%	-	09/28/11 10:28	09/29/11 11:06	1.00

TestAmerica Job ID: NUI3262

Lab Sample ID: NUI3262-02 Matrix: Soil Percent Solids: 95.9

Client Sample ID: 159 Cypress-2 Date Collected: 09/20/11 11:15 Date Received: 09/24/11 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00223	0.00123	mg/kg dry	a	09/20/11 11:15	09/30/11 14:18	1.00
Ethylbenzene	ND		0.00223	0.00123	mg/kg dry	Ċ.	09/20/11 11:15	09/30/11 14:18	1.00
Toluene	ND		0.00223	0.00123	mg/kg dry	Ξ.	09/20/11 11:15	09/30/11 14:18	1.00
Xylenes, total	ND		0.00557	0.00279	mg/kg dry	ė	09/20/11 11:15	09/30/11 14:18	1.00
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	106		70 - 130				09/20/11 11:15	09/30/11 14:18	1.00
Dibromofluoromethane	100		70 - 130				09/20/11 11:15	09/30/11 14:18	1.00
Toluene-d8	111		70 - 130				09/20/11 11:15	09/30/11 14:18	1.00
4-Bromofluorobenzene	147	ZX	70-130				09/20/11 11:15	09/30/11 14:18	1.00

-

ARCH

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B - RE2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND	RL1	0.323	0.161	mg/kg dry	ų.	09/20/11 11:15	09/30/11 14:49	50.0
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	99		70 - 130				09/20/11 11:15	09/30/11 14:49	50.0
Dibromofluoromethane	91		70 - 130				09/20/11 11:15	09/30/11 14:49	50.0
Toluene-d8	97		70 - 130				09/20/11 11:15	09/30/11 14:49	50.0
4-Bromofluorobenzene	98		70 - 130				09/20/11 11:15	09/30/11 14:49	50.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0685	0.0347	mg/kg dry	14	09/27/11 07:57	09/28/11 04:27	1.00
Acenaphthylene	ND		0.0685	0.0347	mg/kg dry	亡	09/27/11 07:57	09/28/11 04:27	1.00
Anthracene	ND		0.0685	0.0347	mg/kg dry	12	09/27/11 07:57	09/28/11 04:27	1.00
Benzo (a) anthracene	ND		0.0685	0.0347	mg/kg dry	Þ	09/27/11 07:57	09/28/11 04:27	1.00
Benzo (a) pyrene	0.0783		0.0685	0.0347	mg/kg dry	0	09/27/11 07:57	09/28/11 04:27	1.00
Benzo (b) fluoranthene	ND		0.0685	0.0347	mg/kg dry	0	09/27/11 07:57	09/28/11 04:27	1.00
Benzo (g.h.i) perylene	0.0695		0.0685	0.0347	mg/kg dry	0	09/27/11 07:57	09/28/11 04:27	1.00
Benzo (k) fluoranthene	ND		0.0685	0.0347	mg/kg dry	0	09/27/11 07:57	09/28/11 04:27	1.00
Chrysene	ND		0,0685	0.0347	mg/kg dry	9	09/27/11 07:57	09/28/11 04:27	1.00
Dibenz (a,h) anthracene	ND		0.0685	0.0347	mg/kg dry	a	09/27/11 07:57	09/28/11 04:27	1.00
Fluoranthene	ND		0.0685	0.0347	mg/kg dry	0	09/27/11 07:57	09/28/11 04:27	1.00
Fluorene	ND		0.0685	0.0347	mg/kg dry	0	09/27/11 07:57	09/28/11 04:27	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0685	0.0347	mg/kg dry	-0	09/27/11 07:57	09/28/11 04:27	1.00
Naphthalene	ND		0.0685	0.0347	mg/kg dry	ø	09/27/11 07:57	09/28/11 04:27	1.00
Phenanthrene	ND		0.0685	0.0347	mg/kg dry	O	09/27/11 07:57	09/28/11 04:27	1.00
Pyrene	ND		0.0685	0.0347	mg/kg dry	0	09/27/11 07:57	09/28/11 04:27	1.00
1-Methylnaphthalene	ND		0.0685	0.0347	mg/kg dry	-0-	09/27/11 07:57	09/28/11 04:27	1.00
2-Methylnaphthalene	ND		0.0685	0.0347	mg/kg dry	ø	09/27/11 07:57	09/28/11 04:27	1.00
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	66		18 - 120				09/27/11 07:57	09/28/11 04:27	1.00
2-Fluorobiphenyl	51		14 - 120				09/27/11 07:57	09/28/11 04:27	1.00
Nitrobenzene-d5	51		17 - 120				09/27/11 07:57	09/28/11 04:27	1.00
Method: SW-846 - General C	hemistry Paramete	irs							
Analyte	and the second	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Analyte	Result	Quanner		mile -	Dim	0	riepared	Analyzea	Diriuc
% Dry Solids	95.9	-	0.500	0.500	%		09/28/11 10:28	09/29/11 11:06	1,00

5

TestAmerica Job ID: NUI3262

Client Sample ID: 400 Elderberry

Date Collected: 09/21/11 13:45 Date Received: 09/24/11 09:00

Lab Sample ID: NUI3262-03 Matrix: Soil Percent Solids: 82.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00245	0.00135	mg/kg dry	17	09/21/11 13:45	09/28/11 15:04	1.00
Ethylbenzene	ND		0.00245	0.00135	mg/kg dry	南	09/21/11 13:45	09/28/11 15:04	1.00
Naphthalene	ND		0.00613	0.00306	mg/kg dry	3	09/21/11 13:45	09/28/11 15:04	1.00
Toluene	ND		0.00245	0.00135	mg/kg dry	4	09/21/11 13:45	09/28/11 15:04	1.00
Xylenes, total	ND		0.00613	0.00306	mg/kg dry	4	09/21/11 13:45	09/28/11 15:04	1.00
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	99		70 - 130				09/21/11 13:45	09/28/11 15:04	1.00
Dibromofluoromethane	98		70 - 130				09/21/11 13:45	09/28/11 15:04	1.00
Toluene-d8	105		70 - 130				09/21/11 13:45	09/28/11 15:04	1.00
4-Bromofluorobenzene	117		70 - 130				09/21/11 13:45	09/28/11 15:04	1.00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0788	0.0400	mg/kg dry	- F	09/27/11 07:57	09/28/11 04:47	1.00
Acenaphthylene	ND		0.0788	0.0400	mg/kg dry	3/8	09/27/11 07:57	09/28/11 04:47	1.00
Anthracene	0.322		0.0788	0.0400	mg/kg dry	225	09/27/11 07:57	09/28/11 04:47	1.00
Benzo (a) anthracene	2.04		0.0788	0.0400	mg/kg dry		09/27/11 07:57	09/28/11 04:47	1.00
Benzo (a) pyrene	0.940		0.0788	0.0400	mg/kg dry	Ø	09/27/11 07:57	09/28/11 04:47	1.00
Benzo (b) fluoranthene	1.53		0.0788	0.0400	mg/kg dry	10	09/27/11 07:57	09/28/11 04:47	1.00
Benzo (g,h,i) perylene	0.387		0.0788	0.0400	mg/kg dry	\$	09/27/11 07:57	09/28/11 04:47	1.00
Benzo (k) fluoranthene	0.959		0.0788	0.0400	mg/kg dry	-0	09/27/11 07:57	09/28/11 04:47	1.00
Chrysene	2.42		0.0788	0.0400	mg/kg dry	ŝ	09/27/11 07:57	09/28/11 04:47	1.00
Dibenz (a,h) anthracene	0.186		0.0788	0.0400	mg/kg dry	0	09/27/11 07:57	09/28/11 04:47	1.00
Fluoranthene	4.09		0.0788	0.0400	mg/kg dry	- 44	09/27/11 07:57	09/28/11 04:47	1.00
Fluorene	ND		0.0788	0.0400	mg/kg dry	12	09/27/11 07:57	09/28/11 04:47	1.00
Indeno (1,2,3-cd) pyrene	0.407		0.0788	0.0400	mg/kg dry	17	09/27/11 07:57	09/28/11 04:47	1.00
Naphthalene	ND		0.0788	0.0400	mg/kg dry	32	09/27/11 07:57	09/28/11 04:47	1.00
Phenanthrene	1.18		0.0788	0.0400	mg/kg dry	13	09/27/11 07:57	09/28/11 04:47	1.00
Pyrene	3.44		0.0788	0.0400	mg/kg dry		09/27/11 07:57	09/28/11 04:47	1.00
1-Methylnaphthalene	ND		0.0788	0.0400	mg/kg dry	-123	09/27/11 07:57	09/28/11 04:47	1.00
2-Methylnaphthalene	ND		0,0788	0.0400	mg/kg dry	Ø	09/27/11 07:57	09/28/11 04:47	1.00
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	72		18 - 120				09/27/11 07:57	09/28/11 04:47	1.00
2-Fluorobiphenyl	62		14 - 120				09/27/11 07:57	09/28/11 04:47	1.00
Nitrobenzene-d5	61		17 - 120				09/27/11 07:57	09/28/11 04:47	1.00
Method: SW-846 - General C	hemistry Paramete	rs							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	82.7		0.500	0.500	%		09/28/11 10:28	09/29/11 11:06	1.00

TestAmerica Job ID: NUI3262

Lab Sample ID: NUI3262-04 Matrix: Soil Percent Solids: 77.6

Client Sample ID: 141 Laurel Bay-a
Date Collected: 09/22/11 09:15
Date Received: 09/24/11 09:00

5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00195	0.00107	mg/kg dry	123	09/22/11 09:15	09/28/11 15:36	1.00
Ethylbenzene	0.0293		0.00195	0.00107	mg/kg dry	170	09/22/11 09:15	09/28/11 15:36	1.00
Toluene	ND		0.00195	0.00107	mg/kg dry	811	09/22/11 09:15	09/28/11 15:36	1.00
Xylenes, total	0.0391		0.00487	0.00243	mg/kg dry	13	09/22/11 09:15	09/28/11 15:36	1.00
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	97		70 - 130				09/22/11 09:15	09/28/11 15:36	1.00
Dibromofluoromethane	97		70 - 130				09/22/11 09:15	09/28/11 15:36	1.00
Toluene-d8	108		70 - 130				09/22/11 09:15	09/28/11 15:36	1.00
4-Bromofluorobenzene	141	7%	70 - 130				09/22/11 09:15	09/28/11 15:36	1.00

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

Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1.94		0.246	0.123	mg/kg dry	ō	09/22/11 09:15	09/30/11 17:56	50.0
% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
101		70 - 130				09/22/11 09:15	09/30/11 17:56	50.0
87		70 - 130				09/22/11 09:15	09/30/11 17:56	50.0
99		70 - 130				09/22/11 09:15	09/30/11 17:56	50.0
95		70 - 130				09/22/11 09:15	09/30/11 17:56	50.0
	1.94 % Recovery 101 87 99	1.94 % Recovery Qualifier 101 87 99	1.94 0.246 % Recovery Qualifier Limits 101 70 - 130 87 70 - 130 99 70 - 130	1.94 0.246 0.123 % Recovery Qualifier Limits 101 70 - 130 87 70 - 130 99 70 - 130	1.94 0.246 0.123 mg/kg dry % Recovery Qualifier Limits 101 70 - 130 87 70 - 130 99 70 - 130	1.94 0.246 0.123 mg/kg dry 0 % Recovery Qualifier Limits 100 70 - 130 130	No.246 0.246 0.123 mg/kg dry 09/22/11 09:15 % Recovery Qualifier Limits Prepared 101 70 - 130 09/22/11 09:15 87 70 - 130 09/22/11 09:15 99 70 - 130 09/22/11 09:15	1.94 0.246 0.123 mg/kg dry 09/22/11 09:15 09/30/11 17:56 % Recovery Qualifier Limits Prepared Analyzed 101 70 - 130 09/22/11 09:15 09/30/11 17:56 87 70 - 130 09/22/11 09:15 09/30/11 17:56 99 70 - 130 09/22/11 09:15 09/30/11 17:56

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.137		0.0855	0.0434	mg/kg dry	17	09/27/11 07:57	09/28/11 05:08	1.00
Acenaphthylene	ND		0,0855	0.0434	mg/kg dry	17	09/27/11 07:57	09/28/11 05:08	1.00
Anthracene	0.185		0.0855	0.0434	mg/kg dry	10	09/27/11 07:57	09/28/11 05:08	1.00
Benzo (a) anthracene	0.455		0.0855	0.0434	mg/kg dry	D.	09/27/11 07:57	09/28/11 05:08	1.00
Benzo (a) pyrene	0.220		0.0855	0.0434	mg/kg dry	12	09/27/11 07:57	09/28/11 05:08	1.00
Benzo (b) fluoranthene	0.262		0.0855	0.0434	mg/kg dry	¢1	09/27/11 07:57	09/28/11 05:08	1.00
Benzo (g,h,i) perylene	0.0634	.1	0.0855	0.0434	mg/kg dry	131	09/27/11 07:57	09/28/11 05:08	1.00
Benzo (k) fluoranthene	0.218		0.0855	0.0434	mg/kg dry	U.	09/27/11 07:57	09/28/11 05:08	1.00
Chrysene	0.366		0.0855	0.0434	mg/kg dry	12	09/27/11 07:57	09/28/11 05:08	1.00
Dibenz (a,h) anthracene	ND		0.0855	0.0434	mg/kg dry	¢	09/27/11 07:57	09/28/11 05:08	1.00
Fluoranthene	1.14		0.0855	0.0434	mg/kg dry	23	09/27/11 07:57	09/28/11 05:08	1.00
Fluorene	0.289		0.0855	0.0434	mg/kg dry	a	09/27/11 07:57	09/28/11 05:08	1.00
Indeno (1,2,3-cd) pyrene	0.0702	J	0.0855	0.0434	mg/kg dry	\$	09/27/11 07:57	09/28/11 05:08	1.00
Naphthalene	0.197		0.0855	0.0434	mg/kg dry	\$	09/27/11 07:57	09/28/11 05:08	1.00
Phenanthrene	1.04		0.0855	0.0434	mg/kg dry	¢	09/27/11 07:57	09/28/11 05:08	1,00
Pyrene	1.03		0.0855	0.0434	mg/kg dry	rit .	09/27/11 07:57	09/28/11 05:08	1.00
1-Methylnaphthalene	0.743		0.0855	0.0434	mg/kg dry	蒙	09/27/11 07:57	09/28/11 05:08	1.00
2-Methylnaphthalene	1.27		0.0855	0.0434	mg/kg dry	ą	09/27/11 07:57	09/28/11 05:08	1.00
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	78		18-120				09/27/11 07:57	09/28/11 05:08	1.00
2-Fluorobiphenyl	60		14-120				09/27/11 07:57	09/28/11 05:08	1.00
Nitrobenzene-d5	57		17 - 120				09/27/11 07:57	09/28/11 05:08	1.00
Method: SW-846 - General C	hemistry Paramete	rs							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	77.6		0.500	0.500	%		09/28/11 10:28	09/29/11 11:06	1.00

TestAmerica Job ID: NUI3262

5

Client Sample ID: 153 Laurel Bay-a

Date Collected: 09/22/11 09:45

Date Received: 09/24/11 09:00

Lab Sample ID: NUI3262-05 Matrix: Soil Percent Solids: 77.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	_	0.00222	0.00122	mg/kg dry	ž	09/22/11 09:45	09/28/11 16:07	1.00
Ethylbenzene	ND		0.00222	0,00122	mg/kg dry	10	09/22/11 09:45	09/28/11 16:07	1.00
Naphthalene	ND		0.00556	0.00278	mg/kg dry		09/22/11 09:45	09/28/11 16:07	1.00
Toluene	ND		0.00222	0,00122	mg/kg dry	57	09/22/11 09:45	09/28/11 16:07	1.00
Xylenes, total	ND		0.00556	0.00278	mg/kg dry	127	09/22/11 09:45	09/28/11 16:07	1.00
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	87		70-130				09/22/11 09:45	09/28/11 16:07	1.00
Dibromofluoromethane	91		70 - 130				09/22/11 09 45	09/28/11 16:07	1.00
Toluene-d8	104		70-130				09/22/11 09:45	09/28/11 16:07	1.00
4-Bromofluorobenzene	100		70 - 130				09/22/11 09:45	09/28/11 16:07	1.00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0847	0.0430	mg/kg dry	Q.	09/27/11 07:57	09/28/11 05:30	1.00
Acenaphthylene	ND		0.0847	0.0430	mg/kg dry	.a	09/27/11 07:57	09/28/11 05:30	1.00
Anthracene	ND		0.0847	0.0430	mg/kg dry	12	09/27/11 07:57	09/28/11 05:30	1.00
Benzo (a) anthracene	ND		0.0847	0.0430	mg/kg dry	1	09/27/11 07:57	09/28/11 05:30	1,00
Benzo (a) pyrene	ND		0.0847	0.0430	mg/kg dry	12	09/27/11 07:57	09/28/11 05:30	1.00
Benzo (b) fluoranthene	ND		0.0847	0.0430	mg/kg dry	43	09/27/11 07:57	09/28/11 05:30	1,00
Benzo (g,h,i) perylene	ND		0.0847	0,0430	mg/kg dry	12	09/27/11 07:57	09/28/11 05:30	1.00
Benzo (k) fluoranthene	ND		0.0847	0.0430	mg/kg dry	(7)	09/27/11 07:57	09/28/11 05:30	1.00
Chrysene	ND		0.0847	0.0430	mg/kg dry	6	09/27/11 07:57	09/28/11 05:30	1.00
Dibenz (a,h) anthracene	ND		0.0847	0.0430	mg/kg dry	10	09/27/11 07:57	09/28/11 05:30	1.00
Fluoranthene	ND		0.0847	0.0430	mg/kg dry	17	09/27/11 07:57	09/28/11 05:30	1.00
Fluorene	ND		0.0847	0.0430	mg/kg dry	σ	09/27/11 07:57	09/28/11 05:30	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0847	0.0430	mg/kg dry	0	09/27/11 07:57	09/28/11 05:30	1.00
Naphthalene	ND		0.0847	0.0430	mg/kg dry	ø	09/27/11 07:57	09/28/11 05:30	1.00
Phenanthrene	ND		0.0847	0.0430	mg/kg dry	2	09/27/11 07:57	09/28/11 05:30	1.00
Pyrene	ND		0.0847	0.0430	mg/kg dry	1	09/27/11 07:57	09/28/11 05:30	1.00
1-Methylnaphthalene	ND		0.0847	0.0430	mg/kg dry	0	09/27/11 07:57	09/28/11 05:30	1.00
2-Methylnaphthalene	ND		0.0847	0.0430	mg/kg dry	0	09/27/11 07:57	09/28/11 05:30	1.00
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	68		18 - 120				09/27/11 07:57	09/28/11 05:30	1.00
2-Fluorobiphenyl	52		14 - 120				09/27/11 07:57	09/28/11 05:30	7.00
Nitrobenzene-d5	52		17 - 120				09/27/11 07:57	09/28/11 05:30	1.00
Method: SW-846 - General (Chemistry Paramete	rs							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	77,9		0.500	0.500	%		09/28/11 10:28	09/29/11 11:06	1.00

TestAmerica Job ID: NUI3262

Client Sample ID: 155 Laurel Bay-a Date Collected: 09/22/11 10:45

Date Received: 09/24/11 09:00

Lab Sample ID: NUI3262-06 Matrix: Soil Percent Solids: 88.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00265	0.00146	mg/kg dry	T	09/22/11 10:45	09/28/11 16:38	1.00
Ethylbenzene	ND		0.00265	0.00146	mg/kg dry	30	09/22/11 10:45	09/28/11 16:38	1 00
Naphthalene	ND		0.00663	0.00332	mg/kg dry	10	09/22/11 10:45	09/28/11 16:38	1.00
Toluene	ND		0.00265	0.00146	mg/kg dry	12	09/22/11 10:45	09/28/11 16:38	1.00
Xylenes, total	ND		0.00663	0.00332	mg/kg dry	Ð	09/22/11 10:45	09/28/11 16:38	1.00
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	101		70 - 130				09/22/11 10:45	09/28/11 16:38	1.00
Dibromofluoromethane	97		70 - 130				09/22/11 10:45	09/28/11 16:38	1.00
Toluene-d8	100		70 - 130				09/22/11 10:45	09/28/11 16:38	1.00
4-Bromofluorobenzene	97		70 - 130				09/22/11 10:45	09/28/11 16:38	1.00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0751	0.0381	mg/kg dry	0	09/27/11 07:57	09/28/11 05:50	1.00
Acenaphthylene	ND		0.0751	0.0381	mg/kg dry	C	09/27/11 07:57	09/28/11 05:50	1.00
Anthracene	ND		0.0751	0.0381	mg/kg dry	0	09/27/11 07:57	09/28/11 05:50	1.00
Benzo (a) anthracene	ND		0.0751	0.0381	mg/kg dry	12	09/27/11 07:57	09/28/11 05:50	1.00
Benzo (a) pyrene	ND		0.0751	0.0381	mg/kg dry	0	09/27/11 07:57	09/28/11 05:50	1.00
Benzo (b) fluoranthene	ND		0.0751	0.0381	mg/kg dry	-	09/27/11 07:57	09/28/11 05:50	1.00
Benzo (g,h,i) perylene	ND		0.0751	0.0381	mg/kg dry	9	09/27/11 07:57	09/28/11 05:50	1.00
Benzo (k) fluoranthene	ND		0.0751	0.0381	mg/kg dry	12	09/27/11 07:57	09/28/11 05:50	1.00
Chrysene	ND		0.0751	0.0381	mg/kg dry	17	09/27/11 07:57	09/28/11 05:50	1.00
Dibenz (a,h) anthracene	ND		0.0751	0.0381	mg/kg dry	17	09/27/11 07:57	09/28/11 05:50	1.00
Fluoranthene	ND		0.0751	0.0381	mg/kg dry	¢.	09/27/11 07:57	09/28/11 05:50	1.00
Fluorene	ND		0.0751	0.0381	mg/kg dry	-12	09/27/11 07:57	09/28/11 05:50	1.00
Indeno (1.2,3-cd) pyrene	ND		0.0751	0.0381	mg/kg dry	,c	09/27/11 07:57	09/28/11 05:50	1.00
Naphthalene	ND		0.0751	0.0381	mg/kg dry	12	09/27/11 07:57	09/28/11 05:50	1.00
Phenanthrene	ND		0.0751	0.0381	mg/kg dry	150	09/27/11 07:57	09/28/11 05:50	1.00
Pyrene	ND		0.0751	0.0381	mg/kg dry	10.	09/27/11 07:57	09/28/11 05:50	1,00
1-Methylnaphthalene	ND		0.0751	0.0381	mg/kg dry	9	09/27/11 07:57	09/28/11 05:50	1.00
2-Methylnaphthalene	ND		0.0751	0.0381	mg/kg dry	<u>5</u> 2	09/27/11 07:57	09/28/11 05:50	1.00
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	77		18-120				09/27/11 07:57	09/28/11 05:50	1.00
2-Fluorobiphenyl	62		14-120				09/27/11 07:57	09/28/11 05:50	1.00
Nitrobenzene-d5	63		17 - 120				09/27/11 07:57	09/28/11 05:50	1.00
Method: SW-846 - General C	Chemistry Paramete	irs							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	88.1		0.500	0.500	%	-	09/28/11 10:28	09/29/11 11:06	1.00

Benzene

Toluene

Ethylbenzene

Naphthalene

Xylenes, total

Surrogate

Toluene-d8

1,2-Dichloroethane-d4

Dibromofluoromethane

4-Bromofluorobenzene

6

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

Lab Sample ID: 11I5281-BLK1							Client Sa	ample ID: Metho	d Blank
Matrix: Soil								Prep Typ	e: Tota
Analysis Batch: U017358								Prep Batch: 11	15281_F
	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet	_	09/28/11 09:51	09/28/11 11:56	1.00
Ethylbenzene	ND		0.00200	0.00110	mg/kg wet		09/28/11 09:51	09/28/11 11:56	1.00
Naphthalene	ND		0.00500	0.00250	mg/kg wet		09/28/11 09:51	09/28/11 11:56	1.00
Toluene	ND		0.00200	0.00110	mg/kg wet		09/28/11 09:51	09/28/11 11:56	1.00
Xylenes, total	ND		0.00500	0.00250	mg/kg wet		09/28/11 09:51	09/28/11 11:56	1.00
	Blank	Blank							
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloraethane-d4	99		70 - 130				09/28/11 09:51	09/28/11 11:56	1.00
Dibromofluoromethane	98		70 - 130				09/28/11 09:51	09/28/11 11:56	1.00
Toluene-d8	101		70 - 130				09/28/11 09:51	09/28/11 11:56	1.00
4-Bromofluorobenzene	97		70 - 130				09/28/11 09:51	09/28/11 11:56	1.00
Lab Sample ID: 11I5281-BLK2							Client Sa	mple ID: Metho	d Blank
Matrix: Soil								Prep Typ	e: Total
Analysis Batch: U017358								Prep Batch: 11	15281_P
	Blank	Blank							
	and the second s								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Benzene				MDL 0.0550	Unit mg/kg wet	D	Prepared 09/28/11 09:51	Analyzed 09/28/11 12:27	Dil Fac
the second s	Result				T	D	and the second se		44.1.2.2
Benzene Ethylbenzene	Result ND		0.100	0.0550 0.0550	mg/kg wet	D	09/28/11 09:51	09/28/11 12:27	50.0
Benzene Ethylbenzene Naphthalene	Result ND ND		0.100 0.100	0.0550 0.0550	mg/kg wet mg/kg wet	D	09/28/11 09:51 09/28/11 09:51	09/28/11 12:27 09/28/11 12:27	50.0 50.0
Benzene Ethylbenzene Naphthalene Toluene	Result ND ND ND		0.100 0.100 0.250	0.0550 0.0550 0.125 0.0550	mg/kg wet mg/kg wet mg/kg wet	D	09/28/11 09:51 09/28/11 09:51 09/28/11 09:51	09/28/11 12:27 09/28/11 12:27 09/28/11 12:27	50.0 50.0 50.0
Benzene Ethylbenzene Naphthalene Toluene	Result ND ND ND ND		0.100 0.100 0.250 0.100	0.0550 0.0550 0.125 0.0550	mg/kg wet mg/kg wet mg/kg wet mg/kg wet	D	09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51	09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27	50.0 50.0 50.0 50.0
Benzene Ethylbenzene Naphthalene Toluene Xylenes, total	Result ND ND ND ND ND	Qualifier	0.100 0.100 0.250 0.100	0.0550 0.0550 0.125 0.0550	mg/kg wet mg/kg wet mg/kg wet mg/kg wet	D	09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51	09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27	50.0 50.0 50.0 50.0
Benzene Ethylbenzene Naphthalene Toluene Xylenes, total Surrogate	Result ND ND ND ND ND ND	Qualifier Blank	0,100 0,100 0,250 0,100 0,250	0.0550 0.0550 0.125 0.0550	mg/kg wet mg/kg wet mg/kg wet mg/kg wet	D	09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51	09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27	50.0 50.0 50.0 50.0 50.0
Benzene Ethylbenzene Naphthalene Toluene Xylenes, total Surrogate 1,2-Dichloroethane-d4	Result ND ND ND ND ND ND <i>Blank</i> % Recovery	Qualifier Blank	0,100 0,100 0,250 0,100 0,250 Limits	0.0550 0.0550 0.125 0.0550	mg/kg wet mg/kg wet mg/kg wet mg/kg wet	D	09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 Prepared	09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 Analyzed	50.0 50.0 50.0 50.0 50.0
Benzene Ethylbenzene Naphthalene Toluene Xylenes, total Surrogate 1,2-Dichloroethane-d4 Dibromofluoromethane	Result ND ND ND ND ND Blank % Recovery 99	Qualifier Blank	0,100 0,100 0,250 0,100 0,250 <u>Limits</u> 70 - 130	0.0550 0.0550 0.125 0.0550	mg/kg wet mg/kg wet mg/kg wet mg/kg wet	D	09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 Prepared 09/28/11 09:51	09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 Analyzed 09/28/11 12:27	50.0 50.0 50.0 50.0 50.0 <i>Dil Fac</i> 50.0 50.0
	Result ND ND ND ND ND Blank % Recovery 99 99	Qualifier Blank	0,100 0,100 0,250 0,100 0,250 <u>Limits</u> 70 - 130 70 - 130	0.0550 0.0550 0.125 0.0550	mg/kg wet mg/kg wet mg/kg wet mg/kg wet	D	09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51	09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 Analyzed 09/28/11 12:27	50.0 50.0 50.0 50.0 50.0 <i>Dil Fac</i> 50.0
Benzene Ethylbenzene Naphthalene Toluene Xylenes, total Surrogate 1,2-Dichloroethane-d4 Dibromofluoromethane Toluene-d8 4-Bromofluorobenzene	Result ND ND ND ND ND Blank % Recovery 99 97 97 100	Qualifier Blank	0,100 0,100 0,250 0,100 0,250 <u>Limits</u> 70 - 130 70 - 130 70 - 130	0.0550 0.0550 0.125 0.0550	mg/kg wet mg/kg wet mg/kg wet mg/kg wet		09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51	09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27	50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.0
Benzene Ethylbenzene Naphthalene Toluene Xylenes, total Surrogate 1,2-Dichloroethane-d4 Dibromofluoromethane Toluene-d8 4-Bromofluorobenzene Lab Sample ID: 1115281-BS1	Result ND ND ND ND ND Blank % Recovery 99 97 97 100	Qualifier Blank	0,100 0,100 0,250 0,100 0,250 <u>Limits</u> 70 - 130 70 - 130 70 - 130	0.0550 0.0550 0.125 0.0550	mg/kg wet mg/kg wet mg/kg wet mg/kg wet		09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51	09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27	50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.0
Benzene Ethylbenzene Naphthalene Toluene Xylenes, total Surrogate 1,2-Dichloroethane-d4 Dibromofluoromethane Toluene-d8 4-Bromofluorobenzene Lab Sample ID: 1115281-BS1 Matrix: Soil	Result ND ND ND ND ND Blank % Recovery 99 97 97 100	Qualifier Blank	0,100 0,100 0,250 0,100 0,250 <u>Limits</u> 70 - 130 70 - 130 70 - 130	0.0550 0.0550 0.125 0.0550	mg/kg wet mg/kg wet mg/kg wet mg/kg wet		09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51	09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 D: Lab Control	50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.0
Benzene Ethylbenzene Naphthalene Toluene Xylenes, total Surrogate 1,2-Dichloroethane-d4 Dibromofluoromethane Toluene-d8	Result ND ND ND ND ND Blank % Recovery 99 97 97 100	Qualifier Blank	0,100 0,100 0,250 0,100 0,250 <u>Limits</u> 70 - 130 70 - 130 70 - 130	0.0550 0.0550 0.125 0.0550	mg/kg wet mg/kg wet mg/kg wet mg/kg wet		09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51 09/28/11 09:51	09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 09/28/11 12:27 D: Lab Control Prep Typ	50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.0

ug/kg

ug/kg

ug/kg

ug/kg

ug/kg

109

115

115

114

116

75 - 127

80 - 134

69 - 150

80 - 132 80 - 137

Page 11 of 24

50.0

50,0

50.0

50.0

150

Limits

70 - 130

70 - 130

70 - 130 70 - 130

LCS LCS

% Recovery Qualifier

98

99

101

96

54.4

57.4

57.3

56.8

174

Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Method Blank

Prep Type: Total Prep Batch: 1116327_P

Prep Type: Total

6

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

Lab Sample ID: 1115281-MS1 Matrix: Soil Analysis Batch: U017358								ClientS	Sample ID: Ma Prep T Prep Batch:	ype: Total
	Sample	Sample	Spike	Matrix Spike	Matrix Spil	ke			% Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Benzene	1.94		2.18	4.98	-	mg/kg wet		139	31 - 143	
Ethylbenzene	10.7		2.18	14.3	M1	mg/kg wet		165	23 - 161	
Naphthalene	6.46		2.18	10.6	M1	mg/kg wet		191	10 - 176	
Toluene	0.118		2.18	2.84		mg/kg wet		125	30 - 155	
Xylenes, total	1.20		6.54	9.57		mg/kg wet		128	25 - 162	

	Matrix Spike	Matrix Spike	
Surrogate	% Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	107	-	70 - 130
Dibromofluoromethane	96		70 - 130
Toluene-d8	177	ZX	70 - 130
4-Bromofluorobenzene	131	ZX	70 - 130

Lab Sample ID: 1115281-MSD1 Matrix: Soil Analysis Batch: U017358

Analysis Batch: U017358									Prep Bato	h: 1115	281_P
and the second se	Sample	Sample	Spike	Aatrix Spike Dup	Matrix Spi	ke Duj			% Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Benzene	1.94	-	2.18	4.77		mg/kg wet		130	31 - 143	4	50
Ethylbenzene	10.7		2.18	13,9		mg/kg wet		146	23 - 161	3	50
Naphthalene	6.46		2.18	10.7	M1	mg/kg wet		195	10 - 176	0.7	50
Toluene	0.118		2,18	2.66		mg/kg wet		116	30 - 155	7	50
Xylenes, total	1.20		6.54	9.25		mg/kg wet		123	25 - 162	3	50
Aylenes, total	1.20		0.54	9.25		mgrkg wet		123	23 - 102	3	

	Matrix Spike Dup	Matrix Spike	Dup
Surrogate	% Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	111		70 - 130
Dibromofluoromethane	99		70-130
Toluene-d8	171	ZX	70-130
d-Bromofluorobenzene	136	78	70 130

Lab Sample ID: 11)6327-BLK1 Matrix: Soil

Analysis Batch: U017446

Blank							
Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	0.00200	0.00110	mg/kg wet		09/30/11 10:09	09/30/11 12:14	1.00
	0.00200	0.00110	mg/kg wet		09/30/11 10:09	09/30/11 12:14	1.00
	0,00500	0.00250	mg/kg wet		09/30/11 10:09	09/30/11 12:14	1.00
	0.00200	0.00110	mg/kg wet		09/30/11 10:09	09/30/11 12:14	1.00
	0.00500	0.00250	mg/kg wet		09/30/11 10:09	09/30/11 12:14	1.00
Blank							
Qualifier	Limits				Prepared	Analyzed	Dil Fac
	70 - 130				09/30/11 10:09	09/30/11 12:14	1.00
	70-130				09/30/11 10:09	09/30/11 12:14	1.00
	70-130				09/30/11 10:09	09/30/11 12:14	1.00
	70 - 130				09/30/11 10:09	09/30/11 12:14	1.00
	Qualifier Blank	Qualifier RL 0.00200 0.00200 0.00500 0.00500 0.00200 0.00500 Blank	Qualifier RL MDL 0.00200 0.00110 0.00200 0.00110 0.00500 0.00250 0.00200 0.00110 0.00200 0.00110 0.00200 0.00110 0.00500 0.00250 Blank 200 Qualifier Limits 70 - 130 70 - 130 70 - 130 70 - 130	Qualifier RL MDL Unit 0.00200 0.00110 mg/kg wet 0.00500 0.00250 mg/kg wet 0.00500 0.00250 mg/kg wet Blank 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	Qualifier RL MDL Unit D 0.00200 0.00110 mg/kg wet 0 0 0.00200 0.00110 mg/kg wet 0	Qualifier RL MDL Unit D Prepared 0.00200 0.00110 mg/kg wet 09/30/11 10:09 0.00200 0.00110 mg/kg wet 09/30/11 10:09 0.00200 0.00250 mg/kg wet 09/30/11 10:09 0.00200 0.00110 mg/kg wet 09/30/11 10:09 0.00200 0.00110 mg/kg wet 09/30/11 10:09 0.00500 0.00250 mg/kg wet 09/30/11 10:09 0.00500 0.00250 mg/kg wet 09/30/11 10:09 0.00500 0.00250 mg/kg wet 09/30/11 10:09 Blank Prepared 09/30/11 10:09 70 - 130 09/30/11 10:09 09/30/11 10:09 70 - 130 09/30/11 10:09 09/30/11 10:09 70 - 130 09/30/11 10:09 09/30/11 10:09	Qualifier RL MDL Unit D Prepared Analyzed 0.00200 0.00110 mg/kg wet 09/30/11 10:09 09/30/11 12:14 0.00200 0.00110 mg/kg wet 09/30/11 10:09 09/30/11 12:14 0.00200 0.00250 mg/kg wet 09/30/11 10:09 09/30/11 12:14 0.00200 0.00110 mg/kg wet 09/30/11 10:09 09/30/11 12:14 0.00200 0.00110 mg/kg wet 09/30/11 10:09 09/30/11 12:14 0.00200 0.00110 mg/kg wet 09/30/11 10:09 09/30/11 12:14 0.00200 0.00250 mg/kg wet 09/30/11 10:09 09/30/11 12:14 Blank Prepared Analyzed 70 - 130 70 - 130 09/30/11 10:09 09/30/11 12:14 09/30/11 10:09 09/30/11 12:14 09/30/11 10:09 09/30/11 12:14 70 - 130 09/30/11 10:09 09/30/11 12:14 09/30/11 12:14

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

Lab Sample ID: 1116327-BLK2							Client Sa	mple ID: Metho	d Blank
Matrix: Soil								Prep Typ	e: Total
Analysis Batch: U017446								Prep Batch: 11	16327_P
	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0550	mg/kg wet		09/30/11 10:09	09/30/11 12:45	50.0
Ethylbenzene	ND		0.100	0.0550	mg/kg wet		09/30/11 10:09	09/30/11 12:45	50.0
Naphthalene	ND		0.250	0.125	mg/kg wet		09/30/11 10:09	09/30/11 12:45	50.0
Toluene	ND		0.100	0.0550	mg/kg wel		09/30/11 10:09	09/30/11 12:45	50.0
Xylenes, total	ND		0.250	0.125	mg/kg wet		09/30/11 10:09	09/30/11 12:45	50.0
	Blank	Blank							
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	98		70 - 130				09/30/11 10:09	09/30/11 12:45	50.0
Dibromofluoromethane	98		70 - 130				09/30/11 10:09	09/30/11 12:45	50.0
Toluene-d8	100		70 - 130				09/30/11 10:09	09/30/11 12:45	50.0
4-Bromofluorobenzene	97		70 - 130				09/30/11 10:09	09/30/11 12:45	50.0

Lab Sample ID: 1116327-BS1 Matrix: Soil Analysis Batch: U017446

Analyte

Benzene

Toluene

Ethylbenzene

Naphthalene

Spike LCS LCS % Rec. Result Qualifier Added D % Rec Unit Limits 50.0 56.1 112 75 - 127 ug/kg 50.0 59.0 ug/kg 118 80 - 134 50.0 64.8 ug/kg 130 69 - 150 50.0 58.0 ug/kg 116 80 - 132

178

ug/kg

Xylenes, total			150
Surrogate	LCS % Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4	101		70 - 130
Dibromofluoromethane	98		70 - 130
Toluene-d8	100		70 - 130
4-Bromofluorobenzene	97		70 - 130

Lab Sample ID: 1116327-MS1 Matrix: Soil

Analysis Batch: 1017446

Analysis Batch: 001/446									Prep Batch: 11	16327_P
	Sample	Sample	Spike	Matrix Spike	Matrix Spi	ke			% Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Benzene	ND	-	52.1	76.1	M1	mg/kg wet		146	31 - 143	
Ethylbenzene	ND		52.1	70.9		mg/kg wet		136	23 - 161	
Naphthalene	ND		52.1	95.0	MT	mg/kg wet		182	10 - 176	
Toluene	ND		52.1	72.6		mg/kg wet		139	30 - 155	
Xylenes, total	ND		156	216		mg/kg wet		138	25 - 162	

	Matrix Spike	Matrix Spike	
Surrogate	% Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	100	-	70 - 130
Dibromofluoromethane	101		70 - 130
Toluene-d8	100		70-130
4-Bromofluorobenzene	84		70 - 130

Client Sample ID: Lab Control Sample

80 - 137

119

Prep Type: Total

6

Prep	Batch:	11	6327	P
% P	00			

Client Sample ID: Matrix Spike Prep Type: Total Batch: 116327 P

		10 110.01	
D	% Rec	Limits	
	146	31 - 143	
	136	23 - 161	
	182	10 - 176	
	130	30 155	

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

Lab Sample ID: 1116327-MSD1						Clien	t Sar	nple ID:	Matrix Sp	ike Dup	licate	
Matrix: Soil									Pre	p Type:	Total	
Analysis Batch: U017446									Prep Batc	h: 1116	327_P	
and a construction share over	Sample	Sample	Spike	Aatrix Spike Dup	Matrix Spil	ke Dup			% Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit	G
Benzene	ND		52.1	92.6	M1	mg/kg wet	_	178	31 - 143	20	50	
Ethylbenzene	ND		52.1	86.6	M1	mg/kg wet		166	23 - 161	20	50	
Naphthalene	ND		52.1	105	M1	mg/kg wet		201	10 - 176	10	50	
Toluene	ND		52.1	88.3	M1	mg/kg wet		170	30 - 155	20	50	
Xylenes, total	ND		156	262	M1	mg/kg wet		168	25 - 162	19	50	

	Matrix Spike Dup	Matrix Spike Dup				
Surrogate	% Recovery	Qualifier	Limits			
1,2-Dichloroethane-d4	97		70-130			
Dibromofluoromethane	101		70 - 130			
Toluene-d8	100		70 - 130			
4-Bromofluorobenzene	86		70-130			

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

Lab Sample ID: 11I5238-BLK1 Matrix: Soil

Analysis Batch: 1115238

2-Fluorobiphenyl

Nitrobenzene-d5

Client Sample ID: Method Blank Prep Type: Total Prep Batch: 1115238_P

	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0340	mg/kg wet		09/27/11 07:57	09/28/11 01:19	1.00
Acenaphthylene	ND		0.0670	0.0340	mg/kg wet		09/27/11 07:57	09/28/11 01:19	1.00
Anthracene	ND		0.0670	0.0340	mg/kg wet		09/27/11 07:57	09/28/11 01:19	1.00
Benzo (a) anthracene	ND		0.0670	0.0340	mg/kg wet		09/27/11 07:57	09/28/11 01:19	1.00
Benzo (a) pyrene	ND		0.0670	0.0340	mg/kg wet		09/27/11 07:57	09/28/11 01:19	1.00
Benzo (b) fluoranthene	ND		0.0670	0.0340	mg/kg wet		09/27/11 07:57	09/28/11 01:19	1.00
Benzo (g,h,i) perylene	ND		0.0670	0.0340	mg/kg wet		09/27/11 07:57	09/28/11 01:19	1.00
Benzo (k) fluoranthene	ND		0.0670	0.0340	mg/kg wet		09/27/11 07:57	09/28/11 01:19	1.00
Chrysene	ND		0.0670	0.0340	mg/kg wet		09/27/11 07:57	09/28/11 01:19	1.00
Dibenz (a,h) anthracene	ND		0.0670	0.0340	mg/kg wet		09/27/11 07:57	09/28/11 01:19	1,00
Fluoranthene	ND		0.0670	0.0340	mg/kg wet		09/27/11 07:57	09/28/11 01:19	1.00
Fluorene	ND		0.0670	0.0340	mg/kg wet		09/27/11 07:57	09/28/11 01:19	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0670	0.0340	mg/kg wet		09/27/11 07:57	09/28/11 01:19	1.00
Naphthalene	ND		0.0670	0.0340	mg/kg wet		09/27/11 07:57	09/28/11 01:19	1.00
Phenanthrene	ND		0.0670	0.0340	mg/kg wet		09/27/11 07:57	09/28/11 01:19	1.00
Pyrene	ND		0.0670	0.0340	mg/kg wet		09/27/11 07:57	09/28/11 01:19	1.00
1-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		09/27/11 07:57	09/28/11 01:19	1.00
2-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		09/27/11 07:57	09/28/11 01:19	1.00
	Blank	Blank							
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	61		18-120				09/27/11 07:57	09/28/11 01 19	1.00

Lab Sample ID: 1115238-BS1				CI	ient	Sample	ID: Lab Control Sample
Matrix: Soil							Prep Type: Total
Analysis Batch: 11/5238							Prep Batch: 11I5238_P
	Spike	LCS	LCS				% Rec.
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits
Acenaphthene	1.67	1.11		mg/kg wet		66	36 - 120

14-120

17-120

48

49

09/28/11 01:19

09/28/11 01:19

09/27/11 07:57

09/27/11 07:57

1.00

1.00

6

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

Lab Sample ID: 1115238-BS1				CI	ent	sample	ID: Lab Control Sample Prep Type: Total
Matrix: Soil							Prep Batch: 1115238_P
Analysis Batch: 1115238	Spike	LCS	LCS				% Rec.
Analyte	Added		Qualifier	Unit	D	% Rec	Limits
Acenaphthylene	1.67	1.04	a contract	mg/kg wet	-	62	38 - 120
Anthracene	1.67	1.17		mg/kg wet		70	46 - 124
Benzo (a) anthracene	1.67	1.12		mg/kg wet		67	45 - 120
Benzo (a) pyrene	1.67	1.23		mg/kg wet		74	45 - 120
Benzo (b) fluoranthene	1.67	1.10		mg/kg wet		66	42 - 120
Benzo (g,h,i) perylene	1.67	1.12		mg/kg wet		67	38 - 120
Benzo (k) fluoranthene	1.67	1.27		mg/kg wet		76	42 - 120
Chrysene	1.67	1.08		mg/kg wet		65	43 - 120
Dibenz (a,h) anthracene	1.67	1.13		mg/kg wet		68	32 - 128
Fluoranthene	1.67	1.18		mg/kg wet		71	46 - 120
Fluorene	1.67	1.14		mg/kg wet		69	42 - 120
Indeno (1,2,3-cd) pyrene	1.67	1.14		mg/kg wet		68	41 - 121
Naphthalene	1.67	1.11		mg/kg wet		67	32 - 120
Phenanthrene	1.67	1.16		mg/kg wet		69	45 - 120
Pyrene	1.67	1.11		mg/kg wet		67	43 - 120
1-Methylnaphthalene	1.67	0.842		mg/kg wet		51	32 - 120
2-Methylnaphthalene	1.67	0.987		mg/kg wet		59	28 - 120
LCS	LCS						

	LUS	LUS	
Surrogate	% Recovery	Qualifier	Limits
Terphenyl-d14	69	_	18_120
2-Fluorobiphenyl	57		14 - 120
Nitrobenzene-d5	52		17 - 120

Lab Sample ID: 1115238-MS1 Matrix: Soil Analysis Batch: 1115238

Analysis Batch: 1115236									Fiep Daten. Those F
	Sample	Sample	Spike	Matrix Spike	Matrix Spi	ke			% Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits
Acenaphthene	0.0756		1.94	1.25		mg/kg dry	0.	60	19 - 120
Acenaphthylene	0.0853		1.94	1.17		mg/kg dry	a.	56	25 - 120
Anthracene	0,180		1,94	1.33		mg/kg dry	ġ.	59	28 - 125
Benzo (a) anthracene	0.611		1.94	1.63		mg/kg dry	11	52	23 - 120
Benzo (a) pyrene	0 691		1.94	1.91		mg/kg dry	÷	63	15 - 128
Benzo (b) fluoranthene	0.637		1.94	1.76		mg/kg dry	Ċ,	58	12 - 133
Benzo (g,h,i) perylene	0.558		1.94	1.55		mg/kg dry	4	51	22 - 120
Benzo (k) fluoranthene	0.604		1.94	1.91		mg/kg dry	ġ.	67	28 - 120
Chrysene	0,626		1,94	1.71		mg/kg dry	0	56	20 - 120
Dibenz (a,h) anthracene	0.162		1.94	1,30		mg/kg dry	察	59	12 - 128
Fluoranthene	1.32		1.94	2.69		mg/kg dry	\$	70	10 - 143
Fluorene	0.0787		1.94	1.27		mg/kg dry	9	61	20 - 120
Indeno (1,2,3-cd) pyrene	0.434		1.94	1.49		mg/kg dry	0	54	22 - 121
Naphthalene	0.145		1.94	1.34		mg/kg dry	0	61	10 - 120
Phenanthrene	0.897		1.94	2.26		mg/kg dry	0	70	21 - 122
Pyrene	1.14		1.94	2.29		mg/kg dry	¢	59	20 - 123
1-Methylnaphthalene	ND		1.94	0.972		mg/kg dry		50	10 - 120
2-Methylnaphthalene	0.0522		1.94	1.14		mg/kg dry	0	56	13 - 120
	Matrix Spike	Matrix Spike							
Surrogate	% Recovery	Qualifier	Limits						

18-120

Client Sample ID: Matrix Spike Prep Type: Total Prep Batch: 1115238 P

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

Lab Sample ID: 1115238-MS1 Matrix: Soil Analysis Batch: 1115238

	Matrix Spike	Matrix Spike	
Surrogate	% Recovery	Qualifier	Limits
2-Fluorobiphenyl	49		14 - 120
Nitrobenzene-d5	48		17-120

Lab Sample ID: 11I5238-MSD1 Matrix: Soil

Analysis Batch: 1115238

Analysis Batch: 1115238									Prep Bato	:h: 1115	238_P
	Sample	Sample	Spike	Aatrix Spike Dup	Matrix Spi	ke Dut			% Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Acenaphthene	0.0756		1.94	1.28		mg/kg dry	C.	62	19 - 120	3	50
Acenaphthylene	0.0853		1.94	1.15		mg/kg dry	¢.	55	25 - 120	1	50
Anthracene	0.180		1.94	1.39		mg/kg dry	Q.	62	28 - 125	4	49
Benzo (a) anthracene	0.611		1.94	1.99		mg/kg dry	a.	71	23 - 120	20	50
Benzo (a) pyrene	0.691		1.94	2.31		mg/kg dry	¢	83	15 - 128	19	50
Benzo (b) fluoranthene	0.637		1.94	2,15		mg/kg dry	\overline{a}	78	12 - 133	20	50
Benzo (g,h,i) perylene	0.558		1.94	1.82		mg/kg dry	\$2	65	22 - 120	16	50
Benzo (k) fluoranthene	0.604		1.94	2.21		mg/kg dry	.81	83	28 - 120	15	45
Chrysene	0.626		1.94	2.08		mg/kg dry	13.	75	20 - 120	20	49
Dibenz (a,h) anthracene	0.162		1.94	1.38		mg/kg dry	17	63	12 - 128	6	50
Fluoranthene	1.32		1.94	3.45		mg/kg dry	\$2	109	10 - 143	25	50
Fluorene	0.0787		1.94	1.31		mg/kg dry	ø	63	20 - 120	3	50
Indeno (1,2,3-cd) pyrene	0.434		1.94	1.72		mg/kg dry	÷	66	22 - 121	14	50
Naphthalene	0.145		1.94	1.42		mg/kg dry	53	66	10 - 120	6	50
Phenanthrene	0.897		1.94	2.87		mg/kg dry	71	102	21 - 122	24	50
Pyrene	1.14		1.94	2.98		mg/kg dry	3,8	95	20 - 123	26	50
1-Methylnaphthalene	ND		1.94	0.928		mg/kg dry	331	48	10 - 120	5	50
2-Methylnaphthalene	0.0522		1.94	1,12		mg/kg dry	17	55	13 - 120	1	50
	Matrix Spike Dup	Matrix Spike D	up								

Surrogate	% Recovery	Qualifier	Limits
Terphenyl-d14	59		18 - 120
2-Fluorobiphenyl	49		14 - 120
Nitrobenzene-d5	47		17 - 120

Method: SW-846 - General Chemistry Parameters

Lab Sample ID: 1115650-DUP1 Matrix: Soil Analysis Batch: 1115650							Client Sample ID: Dup Prep Type: Prep Batch: 1115	Total
	Sample	Sample	Duplicate	Duplicate			1728.000000000000	RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
% Dry Solids	81,7		81.9		%		0.2	20

Client Sample ID: Matrix Spike Prep Type: Total Prep Batch: 1115238_P

Prep Type: Total

Client Sample ID: Matrix Spike Duplicate

TestAmerica Job ID: NUI3262

GCMS Volatiles

111222-1.4.L2 Mehod Blank Total Soil SW466 82008 111 1115281-MS1 Mairx Spike Total Soil SW466 82008 111 1115281-MS1 Mairx Spike Total Soil SW466 82008 111 1115281-MS1 Mairx Spike Duplicate Total Soil SW466 82008 111 1113282-MS1 Mairx Spike Duplicate Total Soil SW466 82008 111 1113282-MS1 Matrix Spike Duplicate Total Soil SW466 82008 111 1113282-MS1 Matrix Spike Duplicate Total Soil SW466 82008 111 1113282-MS1 Matrix Baya Total Soil SW466 82008 111 1113282-MS1 Matrix Baya Total Soil SW466 82008 111 111327-MS1 Matrix Spike Outlot Sample Total Soil SW466 82008 111 111327-MS1 Matrix Spike Outlot Sample Total Soil SW466 82008 111 111327-MS1 Matrix Spike Outlot Sample	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
115281-BS1 Lab Control Sample Total Soil SW46 82008 111 1115281-MS1 Markix Spike Duplicate Total Soil SW46 82008 111 NU3282.01 195 Cypress-1 Total Soil SW46 82008 111 NU3282.01 195 Cypress-1 Total Soil SW46 82008 111 NU3282.02 101 Soil SW46 82008 111 NU3282.03 400 Ederberry Total Soil SW46 82008 111 NU3282.04 151 Laurel Bay-a Total Soil SW46 82008 111 NU3282.05 153 Laurel Bay-a Total Soil SW46 82008 111 NU3282.05 153 Laurel Bay-a Total Soil SW46 82008 111 NU3282.05 153 Laurel Bay-a Total Soil SW46 82008 111 I16327-MS1 Marchod Blank Total Soil SW46 82008 111 116327-MS1 Marck Spike Duplicate Total Soil SW46 82008 111 116327-MS1 Marck Spike Duplicate Total Soil SW46 82008 111 116327-MS1 Marck Spike Duplicate Total Soil SW46 82008 111 <td< th=""><th>1115281-BLK1</th><th>Method Blank</th><th>Total</th><th>Soil</th><th>SW846 8260B</th><th>1115281_P</th></td<>	1115281-BLK1	Method Blank	Total	Soil	SW846 8260B	1115281_P
1110231-MS1 Matrix Spike Duplicate Total Soil SW466 82006 111 1110232-01 150 Cypress-1 Total Soil SW466 82006 111 NU13282-01 140 Eldrhemy Total Soil SW466 82006 111 NU13282-03 400 Eldrhemy Total Soil SW466 82006 111 NU13282-04 141 Luurd Bay-a Total Soil SW466 82006 111 NU13282-05 153 Laurel Bay-a Total Soil SW466 82006 111 NU13282-04 153 Laurel Bay-a Total Soil SW466 82006 111 NU13282-04 153 Laurel Bay-a Total Soil SW466 82006 111 NU13282-01 Method Blank Total Soil SW466 82006 111 I118327-BLK1 Method Blank Total Soil SW466 82006 111 I118327-BLK2 Method Blank Total Soil SW466 82008 111 I118327-BLK2 Method Blank Total Soil SW466 82008 111 I118327-BLK2 Method Blank Total<	1115281-BLK2	Method Blank	Total	Soil	SW846 8260B	1115281_F
1115231 Matrix Spike Duplicate Total Soil SVM46 8200B 111 NU13282-01 159 Cyrtes-1 Total Soil SVM46 8200B 111 NU13282-03 400 Elderberry Total Soil SVM46 8200B 111 NU13282-04 141 Laurel Bay-a Total Soil SVM46 8200B 111 NU13282-05 153 Laurel Bay-a Total Soil SVM46 8200B 111 NU13282-06 155 Laurel Bay-a Total Soil SVM46 8200B 111 NU13282-07 Giert Sample IO Prep Type Matrix Mefod Prep Type I116327-BLX1 Method Blank Total Soil SVM46 8200B 111 1116327-BS1 Lab Control Sample Total Soil SVM46 8200B 111 1116327-MS11 Matrix Spike Duplicate Total Soil SVM46 8200B 111 NU13282-02 - RE1 159 Cyress-2 Total Soil SVM46 8200B 111 NU13282-04 - RE1 141 Laurel Bay-a Total Soil SVM46 8200B 111 NU13282-02 - RE2	1115281-BS1	Lab Control Sample	Total	Soll	SW846 8260B	1115281_P
NU13282-01 159 Cypress-1 Total Soil SW46 8200B 111 NU13282-03 400 Eldsbury Total Soil SW464 8200B 111 NU13282-04 151 Laurel Bay-a Total Soil SW646 8200B 111 NU13282-05 155 Laurel Bay-a Total Soil SW646 8200B 111 NU13282-05 155 Laurel Bay-a Total Soil SW646 8200B 111 nu13282-05 155 Laurel Bay-a Total Soil SW646 8200B 111 nu13282-02 Matrix Method Blank Total Soil SW646 8200B 111 116327-BLK2 Method Blank Total Soil SW646 8200B 111 116327-MS1 Matrix Spike Duplicate Total Soil SW646 8200B 111 116327-MS1 Matrix Spike Duplicate Total Soil SW646 8200B 111 1116327-BLK2 Method Blank Total Soil SW646 8200B 111 1116327-BLK2 Ep Cypresa-2 Total <td>1115281-MS1</td> <td>Matrix Spike</td> <td>Total</td> <td>Soil</td> <td>SW846 8260B</td> <td>1115281_F</td>	1115281-MS1	Matrix Spike	Total	Soil	SW846 8260B	1115281_F
NU13282-03 400 Elderberry Total Soil SW446 8200B 111 NU13282-04 14 Laurel Bay-a Total Soil SW446 8200B 111 NU13282-05 155 Laurel Bay-a Total Soil SW446 8200B 111 NU13282-05 155 Laurel Bay-a Total Soil SW446 8200B 111 nalysis Batch: U017445 Matrix Method Method Bink Total Soil SW446 8200B 111 I116327-BLX1 Method Blank Total Soil SW446 8200B 111 I111 I116327-BLX2 Method Blank Total Soil SW446 8200B 111 I111 I116327-BLX2 Method Sample Total Soil SW446 8200B 111 I111 I116327-BLX2 Method Sample Total Soil SW446 8200B 111 I111 I1110327-BLX2 Method Sample Total Soil SW446 8200B 111 I111 I111111111111111111111111111111111111	1115281-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8260B	1115281_F
NU13282-03 400 Elderberry Total Soil SW446 8200B 111 NU13282-04 141 Laurel Bay-a Total Soil SW446 8200B 111 NU13282-05 155 Laurel Bay-a Total Soil SW446 8200B 111 NU13282-06 155 Laurel Bay-a Total Soil SW446 8200B 111 nu13282-06 155 Laurel Bay-a Total Soil SW446 8200B 111 nu13282-05 155 Laurel Bay-a Total Soil SW446 8200B 111 i18327-BLK1 Method Blank Total Soil SW446 8200B 111 i18327-MS1 Lab Control Sample Total Soil SW446 8200B 111 i18327-MS1 Matrix Spike Opticate Total Soil SW446 8200B 111 i18327-MS1 Matrix Spike Opticate Total Soil SW446 8200B 111 i19327-MS1 Matrix Spike Opticate Total Soil SW446 8200B 111 i19327-MLK2 Method Blank Total	NUI3262-01	159 Cypress-1	Total	Soil	SVV846 8260B	1115281 F
NU13282-05 153 Laurel Bay-a Total Soil SW146 82508 111 NU13282-06 155 Laurel Bay-a Total Soil SW146 82508 111 natysis Batch: U017445 Soil SW146 82508 111 natysis Batch: U017445 Client Sample ID Prep Type Matrix Method Prep Type I118327-BLK1 Method Blank Total Soil SW466 82608 111 118327-BLK2 Method Blank Total Soil SW466 82608 111 118327-MSD1 Lab Centol Sample Total Soil SW466 82608 111 118327-BLK2 Method Blank Total Soil SW466 82608 111 118327-BLK2 Method Blank Total Soil SW466 82608 111 118328-BLK1 Method Blank Total Soil SW466 82608 111 11828-BLK1 Method Blank Total Soil EPA 5035 111 11828-BLK1 Method Blank Total Soil	NUI3262-03		Total	Soil	SW846 8260B	1115281_F
NU13282-05 153 Laurel Bay-a Total Soil SWI46 82508 111 NU13282-06 155 Laurel Bay-a Total Soil SWI46 82508 111 nalyzis Batch: U017445 Soil SWI46 82508 111 nalyzis Batch: U017445 Client Sample ID Prep Type Matrix Method Prep Type Il6327-BLK1 Method Blank Total Soil SWI46 82608 111 Il6327-BLK2 Method Blank Total Soil SWI46 82608 111 Il6327-MSD1 Matrix Spike Duplicate Total Soil SWI46 82608 111 Il03282-02 - RE1 159 Cypress-2 Total Soil SWI46 82608 111 Il03282-02 - RE1 141 Laurel Bay-a Total Soil SWI46 82608 111 Il03282-02 - RE1 141 Laurel Bay-a Total Soil SWI46 82608 111 Il18281-BLK1 Method Blank Total Soil EPA 5035 111 Il18281-BLK2 Method Blank Total<	NUI3262-04	141 Laurel Bay-a	Total	Soil	SW846 8260B	1115281_F
NU13282-05 155 Laurel Bay-a Total Soil SW464 8280B 111 nalysis Batch: U017445 Lab Sample ID Client Sample ID Prep Type Matrix Method Prep Type I118327-BLK1 Method Blank Total Soil SW464 8280B 111 I118327-BLK2 Method Blank Total Soil SW464 8280B 111 I118327-BS1 Lab Control Sample Total Soil SW464 8280B 111 I118327-BS1 Matrix Spike Ouplicate Total Soil SW464 8280B 111 I118327-BLX1 Matrix Spike Ouplicate Total Soil SW466 8260B 111 I118327-BLX1 Matrix Spike Ouplicate Total Soil SW466 8260B 111 IU13282-02 - RE2 156 Cypress-2 Total Soil SW466 8260B 111 IU13282-04 - RE1 141 Laurel Bay-a Total Soil EPA 5035 111 I15821-MS1 Method Blank Total Soil EPA 5035 111 <	NUI3262-05			Soil		1115281_F
Ab Sample ID Client Sample ID Prop Type Matrix Method Prop Type 116327-BLK1 Method Blank Total Soil SW486 8260B 111 118327-BLK2 Method Blank Total Soil SW486 8260B 111 118327-BL Lab Control Sample Total Soil SW846 8260B 111 118327-BL Matrix Spike Total Soil SW846 8260B 111 118327-MSD1 Matrix Spike Duplicate Total Soil SW846 8260B 111 118326-02 - RE1 158 Cypress-2 Total Soil SW846 8260B 111 110328-02 - RE1 141 Laurel Bay-a Total Soil SW846 8260B 111 110328-02 - RE1 141 Laurel Bay-a Total Soil SW846 8260B 111 110328-02 - RE1 141 Laurel Bay-a Total Soil EPA 6035 116 1118281-BLK1 Method Blank Total Soil EPA 6035 116 118281-BLK2 Method Blank Total	UI3262-06	155 Laurel Bay-a	Total	Soil	SVV846 8260B	1115281_F
TH6327-BLK1 Method Blank Total Soil SW846 8260B 111 116327-BLK2 Method Blank Total Soil SW846 8260B 111 116327-BLK2 Method Blank Total Soil SW846 8260B 111 116327-BLK2 Matrix Spike Total Soil SW846 8260B 111 116327-MS1 Matrix Spike Total Soil SW846 8260B 111 1113262-02 - RE1 159 Cypress-2 Total Soil SW846 8260B 111 1103262-02 - RE2 159 Cypress-2 Total Soil SW846 8260B 111 103262-02 - RE1 141 Laurel Bay-a Total Soil SW846 8260B 111 103262-02 - RE1 141 Laurel Bay-a Total Soil SW846 8260B 111 103262-02 - RE1 141 Laurel Bay-a Total Soil EPA 5035 116 115281-BLK1 Method Blank Total Soil EPA 5035 116281-BK Method Sink EPA 5035 116281-BK Method Blank	nalysis Batch: U017	446				
T16327-BLK2 Method Blank Total Soil SW46 8260B 111 116327-BS1 Lab Control Sample Total Soil SW46 8260B 111 116327-MS1 Matrix Spike Dupicate Total Soil SW46 8260B 111 116327-MS1 Matrix Spike Dupicate Total Soil SW46 8260B 111 116327-MS1 Matrix Spike Dupicate Total Soil SW46 8260B 111 116327-MS1 Matrix Spike Dupicate Total Soil SW46 8260B 111 116327-MS1 Matrix Spike Dupicate Total Soil SW46 8260B 111 1103262-02 - RE2 156 Cypress-2 Total Soil SW46 8260B 111 1103262-02 - RE2 141 Laurel Bay-a Total Soil EPA 5035 111 115281-BLK1 Method Blank Total Soil EPA 5035 115 115281-BLK2 Method Blank Total Soil EPA 5035 115 115281-BLK2 Method Blank Total	.ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
In16327-BS1 Lab Control Sample Total Soil SW846 82608 1114 1116327-MS1 Matrix Spike Total Soil SW846 82608 1114 1116327-MS01 Matrix Spike Total Soil SW846 82608 1114 1113262-02 - RE1 159 Cypress-2 Total Soil SW846 82608 1114 1103262-02 - RE1 141 Laurel Bay-a Total Soil SW846 82608 1114 1103262-02 - RE1 141 Laurel Bay-a Total Soil SW846 82608 1114 1103262-04 - RE1 141 Laurel Bay-a Total Soil SW846 82608 1114 1103262-02 - RE2 159 Cypress-1 Total Soil EPA 5035 1144 1115281-MS1 Method Blank Total Soil EPA 5035 115281-MS1 Matrix Spike Duplicate Total Soil EPA 5035 115281-MS1 Matrix Spike Duplicate Total Soil EPA 5035 1103262-01 159 Cypress-1 Total Soil EPA 5035 1103262-01 159 Cypress-1	116327-BLK1	Method Blank	Total	Soil	SW846 8260B	1116327_F
116327-MS1 Matrix Spike Total Soil SW846 8260B 1111 1116327-MSD1 Matrix Spike Duplicate Total Soil SW846 8260B 1111 111163220-2 - RE2 159 Cypress-2 Total Soil SW846 8260B 1111 11013282-02 - RE2 159 Cypress-2 Total Soil SW846 8260B 1111 11013282-04 - RE1 141 Laurel Bay-a Total Soil SW846 8260B 1111 11013282-04 - RE1 141 Laurel Bay-a Total Soil SW846 8260B 1111 11013282-04 - RE1 141 Laurel Bay-a Total Soil SW846 8260B 1111 ep Batch: 1115281-ML Method Blank Total Soil EPA 5035 1111 115281-MLX2 Method Blank Total Soil EPA 5035 1111 115281-MS1 Matrix Spike Total Soil EPA 5035 1111 11013262-01 159 Cypress-1 Total Soil EPA 5035 1111 11013262-03 400 Elderberry <	1/6327-BLK2	Method Blank	Total	Soil	SW846 8260B	1116327_F
116327-MSD1 Matrix Spike Duplicate Total Soil SVM846 8260B 1111 IUI3262-02 - RE1 159 Cypress-2 Total Soil SVM846 8260B 1111 IUI3262-02 - RE2 159 Cypress-2 Total Soil SVM846 8260B 1111 IUI3262-02 - RE2 141 Laurel Bay-a Total Soil SVM846 8260B 1111 ep Batch: 1115281-BL Client Sample ID Prep Type Matrix Method Prep ab Sample ID Client Sample ID Prep Type Matrix Method Prep 115281-BLK1 Method Blank Total Soil EPA 5035 1111 115281-BLK2 Method Blank Total Soil EPA 5035 1111 115281-MS1 Matrix Spike Total Soil EPA 5035 1111 115281-MS1 Matrix Spike Duplicate Total Soil EPA 5035 1111 115282-MS1 Matrix Spike Duplicate Total Soil EPA 5035 1111 115262-03 400 Elderberry Total Soil EPA 5035 1111 11	116327-BS1	Lab Control Sample	Total	Soil	SW846 8260B	1116327_F
Ul3262-02 - RE1 159 Cypress-2 Total Soil SW846 82608 1110 Ul3262-02 - RE2 159 Cypress-2 Total Soil SW846 82608 1110 Ul3262-04 - RE1 141 Laurel Bay-a Total Soil SW846 82608 1110 ep Batch: 1115281_P	116327-MS1	Matrix Spike	Total	Soil	SW846 8260B	1116327_F
Ull3262-02 - RE2 159 Cypress-2 Total Soil SW846 8260B 1110 ull3262-04 - RE1 141 Laurel Bay-a Total Soil SW846 8260B 1110 ap Batch: 1115281_P Soil SW846 8260B 1110 ap Batch: 1115281-BLK1 Method Blank Total Soil EPA 5035 Prep 115281-BLK2 Method Blank Total Soil EPA 5035 Prep 115281-BLK2 Method Blank Total Soil EPA 5035 Prep 115281-BLK1 Lab Control Sample Total Soil EPA 5035 Prep 115281-BLK1 Matrix Spike Duplicate Total Soil EPA 5035 Prep 115281-MS1 Matrix Spike Duplicate Total Soil EPA 5035 Prep 113262-03 400 Elderberry Total Soil EPA 5035 Prep 113262-04 141 Laurel Bay-a Total Soil EPA 5035 Prep 113262-05 153 Laurel Bay-a Total Soil<	116327-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8260B	1116327_F
NU3282-04 - RE1 141 Laurel Bay-a Total Soil SW846 8260B 111 ep Batch: 1115281_P Soil Swilt Method Preg ab Sample ID Client Sample ID Method Blank Total Soil EPA 5035 Preg 115281-BLK1 Method Blank Total Soil EPA 5035 Preg 115281-BLK2 Method Blank Total Soil EPA 5035 Preg 115281-BLK2 Method Blank Total Soil EPA 5035 Preg 115281-MS1 Matrix Spike Total Soil EPA 5035 Preg 115281-MS1 Matrix Spike Duplicate Total Soil EPA 5035 Preg 115282-MS1 Matrix Spike Duplicate Total Soil EPA 5035 Preg 113262-01 159 Cypres-1 Total Soil EPA 5035 Preg 113262-03 400 Elderberry Total Soil EPA 5035 Preg 113262-05 153 Laurel Bay-a Total Soil	UI3262-02 - RE1	159 Cypress-2	Total	Soil	SW846 8260B	1116327_F
ab Sample IDClient Sample IDPrep TypeMatrixMethodPrep Type115281-BLK1Method BlankTotalSoilEPA 5035115281-BLK2Method BlankTotalSoilEPA 5035115281-BLK2Method BlankTotalSoilEPA 5035115281-BLK1Lab Control SampleTotalSoilEPA 5035115281-MS1Matrix SpikeTotalSoilEPA 5035115281-MSD1Matrix Spike DuplicateTotalSoilEPA 5035115281-MSD1Matrix Spike DuplicateTotalSoilEPA 5035113262-01159 Cypress-1TotalSoilEPA 5035113262-03400 ElderberryTotalSoilEPA 5035113262-04141 Laurel Bay-aTotalSoilEPA 5035113262-05153 Laurel Bay-aTotalSoilEPA 5035113262-06155 Laurel Bay-aTotalSoilEPA 5035116327-PEEEEEab Sample IDClient Sample IDPrep TypeMatrixMethod116327-BLK2Method BlankTotalSoilEPA 5035116327-BLK2Method BlankTotalSoilEPA 5035116327-BLK2Method BlankTotalSoilEPA 5035116327-MS1Lab Control SampleTotalSoilEPA 5035116327-MS1Matrix SpikeTotalSoilEPA 5035116327-MS1Matrix Spike DuplicateTotalSoilEPA 5035<	UI3262-02 - RE2	159 Cypress-2	Total	Soil	SW846 8260B	1116327_P
ab sample ID Client Sample ID Prep Type Matrix Method Prep 115281-BLK1 115281-BLK2 Method Blank Total Soil EPA 5035 EPA 5035 115281-BLK2 Method Blank Total Soil EPA 5035 EPA 5035 115281-BLK2 Matrix Spike Total Soil EPA 5035 EPA 5035 115281-MS1 Matrix Spike Duplicate Total Soil EPA 5035 EPA 5035 115281-MSD1 Matrix Spike Duplicate Total Soil EPA 5035 EPA 5035 113262-01 159 Cypress-1 Total Soil EPA 5035 EPA 5035 113262-03 400 Elderberry Total Soil EPA 5035 EPA 5035 113262-04 141 Laurel Bay-a Total Soil EPA 5035 EPA 5035 113262-05 155 Laurel Bay-a Total Soil EPA 5035 EPA 5035 116327-P EpB Elch: 1116327_P EpA 5035 EPA 5035 EPA 5035 EPA 5035 116327-BLK1 Method Blank	UI3262-04 - RE1	141 Laurel Bay-a	Total	Soil	SW846 8260B	11/6327_P
115281-BLK2 Method Blank Total Soil EPA 5035 115281-BS1 Lab Control Sample Total Soil EPA 5035 115281-MS1 Matrix Spike Total Soil EPA 5035 115281-MSD1 Matrix Spike Duplicate Total Soil EPA 5035 1013262-01 159 Cypress-1 Total Soil EPA 5035 1013262-03 400 Elderberry Total Soil EPA 5035 1013262-04 141 Laurel Bay-a Total Soil EPA 5035 1013262-05 153 Laurel Bay-a Total Soil EPA 5035 1013262-06 155 Laurel Bay-a Total Soil EPA 5035 1013262-06 155 Laurel Bay-a Total Soil EPA 5035 1013262-06 155 Laurel Bay-a Total Soil EPA 5035 1013262-06 161 Sample ID Method Blank Foral Soil EPA 5035 116327-BLK1 Method Blank Total Soil EPA 5035 FPA 5035 116327-MS1 Method Blank Total Soil EPA 5035	ab Sample ID	Client Sample ID				Prep Batch
115281-BS1 Lab Control Sample Total Soil EPA 5035 115281-MS1 Matrix Spike Duplicate Total Soil EPA 5035 115281-MSD1 Matrix Spike Duplicate Total Soil EPA 5035 1013262-01 159 Cypress-1 Total Soil EPA 5035 1013262-03 400 Elderberry Total Soil EPA 5035 1013262-04 141 Laurel Bay-a Total Soil EPA 5035 1013262-05 155 Laurel Bay-a Total Soil EPA 5035 1013262-06 156 Laurel Bay-a Total Soil EPA 5035 116327-BLK1 Method Blank Total Soil EPA 5035 116327-BLK2 Method Blank Total Soil EPA 5035 116327-MS1 Matrix Spike Total Soil EPA 5035 116327-MS1 M						
Nission Matrix Spike Total Soil EPA 5035 115281-MSD1 Matrix Spike Duplicate Total Soil EPA 5035 103262-01 159 Cypress-1 Total Soil EPA 5035 1013262-03 400 Elderberry Total Soil EPA 5035 1013262-04 141 Laurel Bay-a Total Soil EPA 5035 1013262-05 153 Laurel Bay-a Total Soil EPA 5035 1013262-06 155 Laurel Bay-a Total Soil EPA 5035 1013262-06 155 Laurel Bay-a Total Soil EPA 5035 1013262-06 155 Laurel Bay-a Total Soil EPA 5035 1013262-06 16et Sample ID Prep Type Matrix Method Prep Type 116327-BLK1 Method Blank Total Soil EPA 5035 1635 116327-BLK2 Method Blank Total Soil EPA 5035 1635 116327-MS1 Matrix Spike Lab Control Sample Total Soil <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
I15281-MSD1 Matrix Spike Duplicate Total Soil EPA 5035 U13262-01 159 Cypress-1 Total Soil EPA 5035 U13262-03 400 Elderberry Total Soil EPA 5035 U13262-04 141 Laurel Bay-a Total Soil EPA 5035 U13262-05 153 Laurel Bay-a Total Soil EPA 5035 U13262-06 155 Laurel Bay-a Total Soil EPA 5035 U13262-06 155 Laurel Bay-a Total Soil EPA 5035 U13262-06 155 Laurel Bay-a Total Soil EPA 5035 U13262-06 161 Soil EPA 5035 EPA 5035 U13262-07 Perp Matrix Method Blank Total Soil EPA 5035 116327-BLK2 Method Blank Total Soil EPA 5035 EPA 5035 116327-MS1 Lab Control Sample Total Soil EPA 5035 116327-MS1 Matrix Spike Duplicate Total Soil EPA 5035 <						
Ul3262-01 159 Cypress-1 Total Soil EPA 5035 Ul3262-03 400 Elderberry Total Soil EPA 5035 Ul3262-04 141 Laurel Bay-a Total Soil EPA 5035 Ul3262-05 153 Laurel Bay-a Total Soil EPA 5035 Ul3262-06 155 Laurel Bay-a Total Soil EPA 5035 ep Batch: 1116327_P Soil EPA 5035 EPA 5035 ep Batch: 200 Client Sample ID Prep Type Matrix Method Prep Type ti8327-BLK1 Method Blank Total Soil EPA 5035 EPA 5035 116327-BLK2 Method Blank Total Soil EPA 5035 EPA 5035 116327-BS1 Lab Control Sample Total Soil EPA 5035 EPA 5035 116327-MS1 Matrix Spike Total Soil EPA 5035 EPA 5035 116327-MS1 Matrix Spike Duplicate Total Soil EPA 5035 EPA 5035 116327-MSD1 Matrix Spike Duplicate						
Ul3262-03400 ElderberryTotalSoilEPA 5035Ul3262-04141 Laurel Bay-aTotalSoilEPA 5035Ul3262-05153 Laurel Bay-aTotalSoilEPA 5035Ul3262-06155 Laurel Bay-aTotalSoilEPA 5035Ep Batch: 1116327_PEpa 5035Epa 5035Epa 5035ab Sample IDClient Sample IDPrep TypeMatrixMethodMethod BlankTotalSoilEPA 5035116327-BLK1Method BlankTotalSoilEPA 5035116327-BS1Lab Control SampleTotalSoilEPA 5035116327-MS1Matrix SpikeTotalSoilEPA 5035116327-MS11Matrix Spike DuplicateTotalSoilEPA 5035116327-MS21159 Cypress-2TotalSoilEPA 50351103262-02 - RE2159 Cypress-2TotalSoilEPA 5035						
Ul3262-04141 Laurel Bay-aTotalSoilEPA 5035Ul3262-05153 Laurel Bay-aTotalSoilEPA 5035Ul3262-06155 Laurel Bay-aTotalSoilEPA 5035ep Batch: 1116327_PElent Sample IDPrep TypeMatrixMethod16327-BLK1Method BlankTotalSoilEPA 503516327-BLK2Method BlankTotalSoilEPA 503516327-BS1Lab Control SampleTotalSoilEPA 503516327-MS1Matrix SpikeTotalSoilEPA 5035116327-MSD1Matrix Spike DuplicateTotalSoilEPA 5035Ul3262-02 - RE2159 Cypres-2TotalSoilEPA 5035Ul3262-02 - RE2159 Cypres-2TotalSoilEPA 5035						
Ul3262-05153 Laurel Bay-aTotalSoilEPA 5035Ul3262-06155 Laurel Bay-aTotalSoilEPA 5035ep Batch: 1116327_PEpa Sample IDPrep TypeMatrixMethodPrep116327-BLK1Method BlankTotalSoilEPA 5035116327-BLK2Method BlankTotalSoilEPA 5035116327-BS1Lab Control SampleTotalSoilEPA 5035116327-MS1Matrix SpikeTotalSoilEPA 5035116327-MSD1Matrix Spike DuplicateTotalSoilEPA 5035Ul3262-02 - RE1159 Cypress-2TotalSoilEPA 5035Ul3262-02 - RE2159 Cypress-2TotalSoilEPA 5035	IUI3262-03	400 Elderberry	Total			
IUI 3262-06155 Laurel Bay-aTotalSoilEPA 5035ep Batch: 1116327_PClient Sample IDPrep TypeMatrixMethodPrep116327-BLK1Method BlankTotalSoilEPA 5035116327-BLK2Method BlankTotalSoilEPA 5035116327-BS1Lab Control SampleTotalSoilEPA 5035116327-MS1Matrix SpikeTotalSoilEPA 5035116327-MSD1Matrix Spike DuplicateTotalSoilEPA 5035U13262-02 - RE1159 Cypress-2TotalSoilEPA 5035U13262-02 - RE2159 Cypress-2TotalSoilEPA 5035						
ab Sample IDClient Sample IDPrep TypeMatrixMethodPrep116327-BLK1Method BlankTotalSoilEPA 5035116327-BLK2Method BlankTotalSoilEPA 5035116327-BS1Lab Control SampleTotalSoilEPA 5035116327-MS1Matrix SpikeTotalSoilEPA 5035116327-MSD1Matrix Spike DuplicateTotalSoilEPA 5035U13262-02 - RE1159 Cypress-2TotalSoilEPA 5035U13262-02 - RE2159 Cypress-2TotalSoilEPA 5035						
Ab Sample IDClient Sample IDPrep TypeMatrixMethodPrep116327-BLK1Method BlankTotalSoilEPA 5035116327-BLK2Method BlankTotalSoilEPA 5035116327-BS1Lab Control SampleTotalSoilEPA 5035116327-MS1Matrix SpikeTotalSoilEPA 5035116327-MSD1Matrix Spike DuplicateTotalSoilEPA 5035UI3262-02 - RE1159 Cypress-2TotalSoilEPA 5035UI3262-02 - RE2159 Cypress-2TotalSoilEPA 5035	UI3262-06	155 Laurel Bay-a	Total	Soil	EPA 5035	
Til6327-BLK1 Method Blank Total Soil EPA 5035 116327-BLK2 Method Blank Total Soil EPA 5035 116327-BLK2 Method Blank Total Soil EPA 5035 116327-BLK2 Lab Control Sample Total Soil EPA 5035 116327-BS1 Lab Control Sample Total Soil EPA 5035 116327-MS1 Matrix Spike Total Soil EPA 5035 116327-MSD1 Matrix Spike Duplicate Total Soil EPA 5035 Ul3262-02 - RE1 159 Cypress-2 Total Soil EPA 5035 Ul3262-02 - RE2 159 Cypress-2 Total Soil EPA 5035	ep Batch: 1116327_1	P				
Method Blank Total Soil EPA 5035 116327-BS1 Lab Control Sample Total Soil EPA 5035 116327-MS1 Matrix Spike Total Soil EPA 5035 116327-MS1 Matrix Spike Duplicate Total Soil EPA 5035 116327-MSD1 Matrix Spike Duplicate Total Soil EPA 5035 1013262-02 - RE1 159 Cypress-2 Total Soil EPA 5035 1013262-02 - RE2 159 Cypress-2 Total Soil EPA 5035						Prep Batch
116327-BS1 Lab Control Sample Total Soil EPA 5035 116327-MS1 Matrix Spike Total Soil EPA 5035 116327-MSD1 Matrix Spike Duplicate Total Soil EPA 5035 1U3262-02 - RE1 159 Cypress-2 Total Soil EPA 5035 1U3262-02 - RE2 159 Cypress-2 Total Soil EPA 5035						
116327-MS1 Matrix Spike Total Soil EPA 5035 116327-MSD1 Matrix Spike Duplicate Total Soil EPA 5035 1///3262-02 - RE1 159 Cypress-2 Total Soil EPA 5035 1///3262-02 - RE2 159 Cypress-2 Total Soil EPA 5035	116327-BLK2		Total	Soil		
116327-MSD1 Matrix Spike Duplicate Total Soil EPA 5035 UI3262-02 - RE1 159 Cypress-2 Total Soil EPA 5035 UI3262-02 - RE2 159 Cypress-2 Total Soil EPA 5035	1/6327-BS1	Lab Control Sample	Total	Soil		
UI3262-02 - RE1 159 Cypress-2 Total Soil EPA 5035 UI3262-02 - RE2 159 Cypress-2 Total Soil EPA 5035	116327-MS1	Matrix Spike	Total	Soil	EPA 5035	
UI3262-02 - RE2 159 Cypress-2 Total Soil EPA 5035	116327-MSD1	Matrix Spike Duplicate	Total	Soll	EPA 5035	
	UI3262-02 - RE1	159 Cypress-2	Total	Soll	EPA 5035	
Ul3262-04 - RE1 141 Laurel Bay-a Total Soil EPA 5035	UI3262-02 - RE2	159 Cypress-2	Total	Soil	EPA 5035	
	UI3262-04 - RE1	141 Laurel Bay-a	Total	Soil	EPA 5035	
CMS Semivolatiles	CMS Semivolatil	es				

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1115238-BLK1	Method Blank	Total	Soil	SW846 8270D	1115238_P
1115238-BS1	Lab Control Sample	Total	Soil	SW846 8270D	1115238_P

QC Association Summary

Client: EEG - Small Business Group, Inc. (2449) Project/Site: [none] TestAmerica Job ID: NUI3262

7

GCMS Semivolatiles (Continued)

Analysis Batch: 1115238 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1115238-MS1	Matrix Spike	Total	Soil	SW846 8270D	1115238_P
1115238-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8270D	1115238_P
NUI3262-01	159 Cypress-1	Total	Soil	SW846 8270D	1115238_P
VUI3262-02	159 Cypress-2	Total	Soil	SW846 8270D	1115238_P
NUI3262-03	400 Elderberry	Total	Soil	SW846 8270D	1115238_P
NU13262-04	141 Laurel Bay-a	Total	Soil	SW846 8270D	1115238_P
NUI3262-05	153 Laurel Bay-a	Total	Soll	SW846 8270D	1115238_P
NUI3262-06	155 Laurel Bay-a	Total	Soll	SVV846 8270D	1115238_P

Prep Batch: 11/5238_P

A					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
1115238-BLK1	Method Blank	Total	Soil	EPA 3550B	
1115238-BS1	Lab Control Sample	Total	Soil	EPA 3550B	
1115238-MS1	Matrix Spike	Total	Soil	EPA 3550B	
1115238-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 3550B	
NUI3262-01	159 Cypress-1	Total	Soil	EPA 3550B	
NUI3262-02	159 Cypress-2	Total	Soil	EPA 3550B	
NUI3262-03	400 Elderberry	Total	Soil	EPA 3550B	
NUI3262-04	141 Laurel Bay-a	Total	Soil	EPA 3550B	
NUI3262-05	153 Laurel Bay-a	Total	Soil	EPA 3550B	
NUI3262-06	155 Laurel Bay-a	Total	Soil	EPA 3550B	

Extractions

Analysis Batch: 1115650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1115650-DUP1	Duplicate	Total	Soil	SW-846	1115650_P
NUI3262-01	159 Cypress-1	Total	Soil	SVV-846	1115650_P
NUI3262-02	159 Cypress-2	Total	Soil	SW-846	1115650_P
NUI3262-03	400 Elderberry	Total	Soll	SW-846	1115650_P
NUI3262-04	141 Laurel Bay-a	Total	Soil	SW-846	1115650_P
NUI3262-05	153 Laurel Bay-a	Total	Soll	SVV-846	1115650_P
NUI3262-06	155 Laurel Bay-a	Total	Soll	SVV-846	1115650_P

Prep Batch: 1115650_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1115650-DUP1	Duplicate	Total	Soil	% Solids	
NUI3262-01	159 Cypress-1	Total	Soil	% Solids	
NUI3262-02	159 Cypress-2	Total	Soil	% Solids	
NUI3262-03	400 Elderberry	Total	Soil	% Solids	
NUI3262-04	141 Laurel Bay-a	Total	Soll	% Solids	
NUI3262-05	153 Laurel Bay-a	Total	Soil	% Solids	
NUI3262-06	155 Laurel Bay-a	Total	Soil	% Solids	

Client Sample ID: 159 Cypress-1 Lab Sample ID: NUI3262-01 Matrix: Soil Date Collected: 09/19/11 13:00 Percent Solids: 83.5 Date Received: 09/24/11 09:00 Dilution Batch Prepared Batch Batch Or Analyzed Analyst Lab Number Prep Type Туре Method Run Factor TSP TAL NSH 09/19/11 13:00 EPA 5035 0.785 1115281 P Total Prep 09/28/11 14:02 KKK H TAL NSH SW846 8260B 1.00 U017358 Total Analysis 09/27/11 07:57 JJR TAL NSH Prep **FPA 3550B** 0.994 1115238 P Total 09/28/11 04:06 KJP TAL NSH 1115238 Total Analysis SW846 8270D 1.00 TAL NSH % Solids 1.00 1115650 P 09/28/11 10:28 RRS Total Prep SW-846 1.00 1115650 09/29/11 11:06 RRS TAL NSH Analysis Total

Client Sample ID: 159 Cypress-2

Date Collected: 09/20/11 11:15 Date Received: 09/24/11 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total	Prep	EPA 5035	RE1	1.07	1116327_P	09/20/11 11:15	TSP	TAL NSH
Total	Analysis	SW846 8260B	RE1	1.00	U017446	09/30/11 14:18	KKK H	TAL NSH
Total	Prep	EPA 5035	RE2	1.24	1116327_P	09/20/11 11:15	TSP	TAL NSH
Total	Analysis	SW846 8260B	RE2	50.0	U017446	09/30/11 14:49	ККК Н	TAL NSH
Total	Prep	EPA 3550B		0.980	1115238_P	09/27/11 07:57	JJR	TAL NSH
Total	Analysis	SW846 8270D		1.00	1115238	09/28/11 04:27	KJP	TAL NSH
Total	Prep	% Solids		1.00	1115650_P	09/28/11 10:28	RRS	TAL NSH
Total	Analysis	SW-846		1.00	1115650	09/29/11 11:06	RRS	TAL NSH

Client Sample ID: 400 Elderberry

Date Collected: 09/21/11 13:45 Date Received: 09/24/11 09:00

Dilution Batch Prepared Batch Batch Number Or Analyzed Analyst Lab Prep Type Type Method Run Factor TAL NSH 09/21/11 13:45 TSP 1115281_P Total Prep EPA 5035 1.01 TAL NSH KKK H Total Analysis SW846 8260B 1,00 U017358 09/28/11 15:04 EPA 3550B 0.972 1115238 P 09/27/11 07:57 JJR TAL NSH Prep Total 1115238 09/28/11 04:47 KJP TAL NSH 1.00 SW846 8270D Total Analysis TAL NSH 1115650 P 09/28/11 10:28 RRS Prep % Solids 1.00 Total 1115650 09/29/11 11:06 RRS TAL NSH SW-846 1.00 Total Analysis

Client Sample ID: 141 Laurel Bay-a Date Collected: 09/22/11 09:15 Date Received: 09/24/11 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.755	1115281_P	09/22/11 09:15	TSP	TAL NSH
Total	Analysis	SW846 8260B		1.00	U017358	09/28/11 15:36	ККК Н	TAL NSH
Total	Prep	EPA 5035	RE1	0.762	1116327_P	09/22/11 09:15	TSP	TAL NSH
Total	Analysis	SW846 8260B	RE1	50,0	U017446	09/30/11 17:56	ККК Н	TAL NSH
Total	Prep	EPA 3550B		0.991	1115238_P	09/27/11 07:57	JJR	TAL NSH
Total	Analysis	SW846 8270D		1.00	1115238	09/28/11 05:08	KJP	TAL NSH

Lab Sample ID: NUI3262-02 Matrix: Soil Percent Solids: 95.9

Lab Sample ID: NUI3262-03

Lab Sample ID: NUI3262-04

Matrix: Soil Percent Solids: 82.7

Matrix: Soil Percent Solids: 77.6

Lab Sample ID: NUI3262-05

Lab Sample ID: NUI3262-06

Client Samp	le ID: 141 L	aurel Bay-a					Lab Sample	ID: NUI3262-04
Date Collected	: 09/22/11 09:	15						Matrix: Soil
Date Received	: 09/24/11 09:0	00					P	ercent Solids: 77.6
	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total	Prep	% Solids		1.00	1115650_P	09/28/11 10:28	RRS	TAL NSH
Total	Analysis	SW-846		1.00	1115650	09/29/11 11:06	RRS	TAL NSH

Client Sample ID: 153 Laurel Bay-a Date Collected: 09/22/11 09:45 Date Received: 09/24/11 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.867	1115281_P	09/22/11 09:45	TSP	TAL NSH
Total	Analysis	SW846 8260B		1.00	U017358	09/28/11 16:07	KKK H	TAL NSH
Total	Prep	EPA 3550B		0.985	1115238_P	09/27/11 07:57	JJR	TAL NSH
Total	Analysis	SW846 8270D		1.00	1115238	09/28/11 05:30	KJP	TAL NSH
Total	Prep	% Solids		1.00	1115650_P	09/28/11 10:28	RRS	TAL NSH
Total	Analysis	SW-846		1.00	1115650	09/29/11 11:06	RRS	TAL NSH

Client Sample ID: 155 Laurel Bay-a Date Collected: 09/22/11 10:45 Date Received: 09/24/11 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		1.17	1115281_P	09/22/11 10:45	TSP	TAL NSH
Total	Analysis	SW846 8260B		1.00	U017358	09/28/11 16:38	KKK H	TAL NSH
Total	Prep	EPA 3550B		0.987	1115238_P	09/27/11 07:57	JJR	TAL NSH
Total	Analysis	SW846 8270D		1.00	1115238	09/28/11 05:50	KJP	TAL NSH
Total	Prep	% Solids		1.00	1115650_P	09/28/11 10:28	RRS	TAL NSH
Total	Analysis	SW-846		1.00	1115650	09/29/11 11:06	RRS	TAL NSH

Laboratory References:

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

Matrix: Soil

Matrix: Soil

Percent Solids: 88.1

Percent Solids: 77.9

9

Method	Method Description	Protocol	Laboratory
SW-846	General Chemistry Parameters		TAL NSH
SW846 8260B	Volatile Organic Compounds by EPA Method 8260B		TAL NSH
SW846 8270D	Polyaromatic Hydrocarbons by EPA 8270D		TAL NSH

Protocol References:

Laboratory References:

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

Certification Summary

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

10

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Nashville	A2LA	ISO/IEC 17025		0453.07
TestAmerica Nashville	A2LA	WY UST		453.07
TestAmerica Nashville	AIHA	IHLAP		100790
TestAmerica Nashville	Alabama	State Program	4	41150
TestAmerica Nashville	Alaska	Alaska UST	10	UST-087
FestAmerica Nashville	Arizona	State Program	9	AZ0473
FestAmerica Nashville	Arkansas	State Program	6	88-0737
TestAmerica Nashville	CALA	CALA		3744
lestAmerica Nashville	California	NELAC	9	1168CA
FestAmerica Nashville	Colorado	State Program	8	N/A
FestAmerica Nashville	Connecticut	State Program	1	PH-0220
estAmerica Nashville	Florida	NELAC	4	E87358
estAmerica Nashville	Illinois	NELAC	5	200010
estAmerica Nashville	Iowa	State Program	7	131
estAmerica Nashville	Kansas	NELAC	7	E-10229
FestAmerica Nashville	Kentucky	Kentucky UST	4	19
estAmerica Nashville	Kentucky	State Program	4	90038
FestAmerica Nashville	Louisiana	NELAC	6	LA100011
estAmerica Nashville	Louisiana	NELAC	6	30613
estAmerica Nashville	Maryland	State Program	3	316
estAmerica Nashville	Massachusetts	State Program	1	M-TN032
estAmerica Nashville	Minnesota	NELAC	5	047-999-345
estAmerica Nashville	Mississippi	State Program	4	N/A
estAmerica Nashville	Montana	MT DEQ UST	8	NA
estAmerica Nashville	New Jersey	NELAC	2	TN965
estAmerica Nashville	New York	NELAC	2	11342
estAmerica Nashville	North Carolina	North Carolina DENR	4	387
estAmerica Nashville	North Dakota	State Program	8	R-146
estAmerica Nashville	Ohio	OVAP	5	CL0033
estAmerica Nashville	Oklahoma	State Program	6	9412
estAmerica Nashville	Oregon	NELAC	10	TN200001
estAmerica Nashville	Pennsylvania	NELAC	3	68-00585
estAmerica Nashville	Rhode Island	State Program	1	LAO00268
estAmerica Nashville	South Carolina	State Program	4	84009
estAmerica Nashville	South Carolina	State Program	4	84009
estAmerica Nashville	Tennessee	State Program	4	2008
estAmerica Nashville	Texas	NELAC	6	T104704077-09-TX
estAmerica Nashville	USDA	USDA		S-48469
estAmerica Nashville	Utah	NELAC	8	TAN
estAmerica Nashville	Virginia	NELAC Secondary AB	3	460152
estAmerica Nashville	Virginia	State Program	3	00323
FestAmerica Nashville	Washington	State Program	10	C789
TestAmerica Nashville	West Virginia	West Virginia DEP	3	219

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

ies:	Americ	Nashville Divisio 2960 Foster Crei Nashville, TN 372	ghton	Phone 81300 Toll Free 19690 Fax, 658445	5 -		n (n. 1997) 1997 - Standard Maria, 1997 1997 - Standard Maria, 1997 - Standard Maria, 1997 1997 - Standard Maria, 1997 - Standard Mari	n Sector and
C	Chent Name/Account #: EEG -		name for a state of a state of the	and and a second second second particular and the second second second second second second second second second			the second se	to may the second
	Address: 10179 City/State/Zip: Ladsre					4 (a) (b) (b)	4	an a
	Project Manager: Tom 3	tcElwee email muelwee(plea)		2.07	5a	. i	1027	
	Telephone Number: <u>843.4</u> Sampler Name: (Print)	PRAH She	Fax Brh 3	No. 843-8	19-040	1) there are Between	• • • • •	الم
	Sampler Signature:	ND-4	Ë		6	in the second		 A second sec second second sec
10/10, Sample 2 Desci 159 Cy 159 Cy 4CC EM 141 LAU 153 LAU	prizss -1 9/ prizss -2 9/ den bierry 9/ ec Bay - a 9/ inel Bay - a 9/ inel Bay - a 9/		Sectored and the second sector			*		
Row succession	alf e	1		drex	=/n-/	6900		

Page 24 of 24

10/10/2011

ATTACHMENT A

NON-HAZARDOUS MANIFEST	Generator's US EF	PA ID No.	Manifest I	loc No.	2.1	Page 1					
3. Generator's Mailing Address: MCAS, BEAUFORT LAUREL BAY HOUSING BEAUFORT, SC 29907	Ger	nerator's Site Ad	ldress (If different th	an mailing):	A. 1	Manife	est Number	00316 Generator's			
Generator's Phone 843-228-6 Transporter 1 Company Name	5461	6.	US EPA ID Numb	er	C/S	State T	ransporter's l	D			
EEG, INC. 7. Transporter 2 Company Name		8.	US EPA ID Numb	er			orter's Phone		879-041	1	
Production of the state of the state		10.	US EPA ID Num				ransporter's ll orter's Phone				
9. Designated Facility Name and Site Add HICKORY HILL LANDFILL 2621 LOW COUNTRY ROAD RIDGELAND, SC 29936	ress	10.	US EPA ID NUM	Jer			acility ID acility Phone	ne 843-987-4643			
1. Description of Waste Materials				2. Containers	1210	Total	14, Unit	LN	lisc. Commer	nts	
. HEATING OIL TANKS FILLED WIT	H SAND		No	Тур	e Qua	antity	Wt./Vol.				
WM Profile #	102655SC					-					
wM Profile #											
WM Profile #								-			
WM Profile # Additional Descriptions for Materials Li	sted Above		K. Dis	posal Loca	tion						
			Cell					Level			
5. Special Handling Instructions and Addi urchase Order # 5. GENERATOR'S CERTIFICATE: hereby certify that the above-described m ccurately described, classified and package inted Name	54 LANKE 153 LAN	EMERGI EMERGI		R Part 261	or any app			151 A 159 C ive been ful Month	ly and	E E S	
10. 8. 0.	6 seals		U	242	_	-	2	PO	21	1	
7. Transporter 1 Acknowledgement of Re- Printed Name	j	Signature	ies Bal	Que	-			Month	Day 22	Ye 	
Printed Name	cerpt of materials	Signature						Month	Day	Ye	
 Certificate of Final Treatment/Disposal certify, on behalf of the above listed treatment oplicable laws, regulations, permits and lice 	enses on the date	es listed above.				ste wa	as managed in	compliance	e with all		
). Facility Owner or Operator: Certification	on of receipt of no		terials covered b	this mani	fest.	1 1	0	Month	Day	Ve	
Printed Name	2 .1	Signature	lan	Ca	T	1.l		Month	Day O	Yea	

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 159Cypress-1, 159 Cypress 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 TANKSIZE (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> (Date)

Appendix C Laboratory Analytical Report - Groundwater



Volatile Organic Compounds by GC/MS

Client:	AECOM -	Resolution	Consultants	

Description: BEALB159TW02WG20170306

Laboratory ID: SC08036-004 Matrix: Aqueous

Date Sampled:03/06/2017 1640

Date Received: 03/08/2017											
RunPrep Method15030B	Analytical Method 8260B	Dilution 1		s Date Analyst 17 1126 PMV	Prep	Date	Batch 36622				
Parameter			CAS nber	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene		71-	43-2	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Ethylbenzene		100-4	41-4	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Naphthalene		91-3	20-3	8260B	2.3		1.0	0.80	0.40	ug/L	1
Toluene		108-8	88-3	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Xylenes (total)		1330-	20-7	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Surrogate	Q %	Run 1 Recovery	Acceptan Limit								
Bromofluorobenzene		108	85-114								
Dibromofluoromethane		102	80-119)							
1,2-Dichloroethane-d4		96	81-118	3							
Toluene-d8		98	89-112	2							

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

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

Client: AECOM - Resolution Consultants

Description: BEALB159TW02WG20170306

Laboratory ID: SC08036-004

Date Sampled:03/06/2017 1640

Matrix: Aqueous

Date Received: 03/08/2017

RunPrep Method13520C	Analytical Method 8270D		n <mark>alysis Date Analyst</mark> /16/2017 1958 RBH	•	Date Bate 017 1736 3665			
Parameter		CAS Numbe		Result	Q LO	Q LOD	DL	Units Run
Benzo(a)anthracene		56-55-3	8 8270D	0.10	U 0.2	0.10	0.040	ug/L 1
Benzo(b)fluoranthene		205-99-2	2 8270D	0.10	U 0.2	0.10	0.040	ug/L 1
Benzo(k)fluoranthene		207-08-9	8270D	0.10	U 0.2	0.10	0.040	ug/L 1
Chrysene		218-01-9	8270D	0.10	U 0.2	0.10	0.040	ug/L 1
Dibenzo(a,h)anthracene		53-70-3	8 8270D	0.10	U 0.2	0 0.10	0.040	ug/L 1
Surrogate	Q %I	Run 1 Acc Recovery	eptance Limits					
Nitrobenzene-d5		67 4	14-120					
2-Fluorobiphenyl		64 4	44-119					
Terphenyl-d14		76 క	50-134					

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





August 24, 2016

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 Tank Assessment Reports

Dear Mr. Drawdy:

The South Carolina Department of Health and Environmental Control (the Department) received the Underground Storage Tanks (USTs) Assessment Reports for the addresses listed in the attachment. 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 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 these sites.

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,

LIPT

Laurel Petrus, Environmental Engineer Associate RCRA Federal Facilities Section

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, August 24, 2016 Subject: IGWA, Laurel Bay Underground Tank Assessment Reports

Draft Final Initial Groundwater Investigation Report for (41 addresses)

122 Banyan	905 Barracuda	
159 Cypress Tank 2	921 Barracuda	
221 Cypress	935 Albacore	
283 Birch Tank 2	946 Albacore	
328 Ash Tank 2	1037 Iris	
346 Ash	1039 Iris	
359 Aspen	1110 Iris	
370 Aspen	1134 Iris	
377 Aspen	1143 Iris	
409 Elderberry	1202 Cardinal	
486 Laurel Bay	1212 Cardinal	
515 Laurel Bay	1222 Cardinal	10
542 Laurel Bay	1224 Cardinal	
593 Aster	1226 Dove	
630 Dahlia	1236 Dove	
693 Camellia	1245 Dove	
723 Blue Bell	1247 Dove	
774 Althea	1274 Albatross	1995.
860 Dolphin	1319 Albatross	
873 Cobia	1337 Albatross	
883 Cobia		



July 27, 2017

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

RE: Draft Final Initial Groundwater Investigation Report, February and March 2017

Dear Mr. Drawdy:

The South Carolina Department of Health and Environmental Control (DHEC) received groundwater data from temporary monitoring well installations in the Draft Final Groundwater Investigation Report, Laurel Bay Military Housing Area for the fifty two (52) addresses shown in the attachment. 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 DHEC's request, groundwater samples were collected from the attached referenced addresses. DHEC 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 groundwater monitoring wells should be installed at the three (3) stated addresses. For the remaining forty nine (49) addresses, there is no indication of contamination on the property and therefore no further investigation is required at this time.

Please note that DHEC'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, DHEC 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,

Lalpt

Laurel Petrus, Environmental Engineer Associate Bureau of Land and Waste Management

Cc: Russell Berry, EQC Region 8 Shawn Dolan, Resolution Consultants Bryan Beck, NAVFAC MIDLANT Attachment to: Petrus to Drawdy

Draft Final Initial Groundwater Investigation Report for (52 addresses)

Permanent Well Installation recommedation (3 Addresses):

- 254 Beech Street (110 ug/L)
- o 268 Beech Street (28 ug/L)
- o 774 Althea Street (35 ug/L)

No Further Action recommendation (49 addresses):

113 Birch Drive 0 121 Banyan Drive 0 122 Banyan Drive 0 **159 Cypress Street** 0 221 Cypress Street 0 274 Birch Drive 0 279 Birch Drive 0 283 Birch Drive 0 328 Ash Street 0 346 Ash Street 0 359 Aspen Street 0 370 Aspen Street 0 377 Aspen Street 0 409 Elderberry Drive 0 465 Dogwood Drive 0 480 Laurel Bay Boulevard 0 486 Laurel Bay Boulevard 0 515 Laurel Bay Boulevard Q 542 Laurel Bay Boulevard 0 593 Aster Street 0 630 Dahlia Drive 0 641 Dahlia Drive 0 693 Camelia Drive 0 723 Bluebell Lane 0 860 Dolphin Street 0 873 Cobia Drive 0 883 Cobia Drive 0 905 Barracuda Drive 0 921 Barracuda Drive 0 935 Albacore Street 0 946 Albacore Street 0 1037 Iris Lane 0 1039 Iris Lane 0 1110 Iris Lane 0 1134 Iris Lane 0 1143 Iris Lane 0 1177 Bobwhite Drive 0 1202 Cardinal Lane 0 0 1212 Cardinal Lane 0 1222 Cardinal Lane 1224 Cardinal Lane 0 1226 Dove Lane 0 1236 Dove Lane 0 1245 Dove Lane 0 1247 Dove Lane 0 0 1274 Albatross Drive 1319 Albatross Drive 0 1337 Albatross Drive 0 1346 Cardinal Lane 0