SUMMARY REPORT 219 ASH STREET (FORMERLY 324 ASH STREET) LAUREL BAY MILITARY HOUSING AREA MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SC

> Revision: 0 Prepared for:

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

and



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

JUNE 2021

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Prepared by:



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 219 Ash Street (Formerly 324 Ash Street) Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort June 2021

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List of Acronyms

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



1.0 INTRODUCTION

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

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

This report summarizes the results the environmental investigation activities associated with the storage of home heating oil and the potential release of petroleum constituents at the referenced property. Based on the results of the investigation, a No Further Action (NFA) determination has been made by the South Carolina Department of Health and Environmental Control (SCDHEC) for 219 Ash Street (Formerly 324 Ash Street). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

1.1 Background Information

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



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

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

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

1.2 UST Removal and Assessment Process

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

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

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



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

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

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 219 Ash Street (Formerly 324 Ash Street). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 324 Ash Street* (MCAS Beaufort, 2012). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Initial Groundwater Investigation Report – May and June 2015* (Resolution Consultants, 2015). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C.

2.1 UST Removal and Soil Sampling

On November 21, 2011, a single 280 gallon heating oil UST was removed from the underneath the edge of the concrete walk and front landscaped bed area adjacent to the driveway at 219 Ash Street (Formerly 324 Ash Street). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The UST was removed, cleaned, and shipped



offsite for recycling. There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depth to the base of the UST was 6'1" bgs and a single soil sample was collected from that depth. The sample was collected from the fill port side of the former UST to represent a worst case scenario.

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

2.2 Soil Analytical Results

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

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST location were used by MCAS Beaufort, in consultation with SCDHEC, to determine a path forward (i.e., additional sampling or NFA) for the property. The soil results collected from 219 Ash Street (Formerly 324 Ash Street) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated May 15, 2014, SCDHEC requested an IGWA for 219 Ash Street (Formerly 324 Ash Street) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

2.3 Groundwater Sampling

On May 21, 2015, a temporary monitoring well was installed at 219 Ash Street (Formerly 324 Ash Street), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST. The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – May and June 2015* (Resolution Consultants, 2015).



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

2.4 Groundwater Analytical Results

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

The groundwater results collected from 219 Ash Street (Formerly 324 Ash Street) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated that the groundwater was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

3.0 PROPERTY STATUS

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 219 Ash Street (Formerly 324 Ash Street). This NFA determination was obtained in a letter dated February 22, 2016. SCDHEC's NFA letter is provided in Appendix D.

4.0 **REFERENCES**

- Marine Corps Air Station Beaufort, 2012. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report 324 Ash Street, Laurel Bay Military Housing Area*, April 2012.
- Resolution Consultants, 2015. *Initial Groundwater Investigation Report May and June 2015 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, October 2015.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2013. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 2.0*, April 2013.



- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2015. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 3.0*, May 2015.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2016. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 3.1*, February 2016.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2017. *R.61-92, Part 280, Underground Storage Tank Control Regulations,* March 2017.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2018. *Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service*, March 2018.
- South Carolina Department of Health and Environmental Control Bureau of Water, 2016. *R.61-71, Well Standards*, June 2016.

Tables



Table 1Laboratory Analytical Results - Soil219 Ash Street (Formerly 324 Ash Street)Laurel Bay Military Housing AreaMarine Corps Air Station BeaufortBeaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Results Sample Collected 11/21/11			
platile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)					
Benzene	0.003	ND			
Ethylbenzene	1.15	0.530			
Naphthalene	0.036	4.46			
Toluene	0.627	0.00328			
Xylenes, Total	13.01	0.284			
Semivolatile Organic Compounds Ana	lyzed by EPA Method 8270D (mg/kg)				
Benzo(a)anthracene	0.66	0.677			
Benzo(b)fluoranthene	0.66	0.454			
Benzo(k)fluoranthene	0.66	0.447			
Chrysene	0.66	0.707			
Dibenz(a,h)anthracene	0.66	0.0986			

Notes:

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

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Table 2 Laboratory Analytical Results - Groundwater 219 Ash Street (Formerly 324 Ash Street) 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 05/21/15			
Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)						
Benzene	5	16.24	ND			
Ethylbenzene	700	45.95	ND			
Naphthalene	25	29.33	2.8			
Toluene	1000	105,445	ND			
Xylenes, Total	10,000	2,133	ND			
Semivolatile Organic Compounds Ana	lyzed by EPA Method 8270	Ο (μg/L)				
Benzo(a)anthracene	10	NA	0.027			
Benzo(b)fluoranthene	10	NA	0.021			
Benzo(k)fluoranthene	10	NA	ND			
Chrysene	10	NA	0.032			
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 Rece	ived				
		State U	se Only	Ne a	

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

I. OWNERSHIP OF UST (S)

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

II. SITE IDENTIFICATION AND LOCATION

Permit I.D. # Laurel Bay Mil Facility Name or Com	itary Housing Area, Marine Corj pany Site Identifier	ps Air Station, Beaufort, SC				
324 Ash Street Street Address or State	324 Ash Street, Laurel Bay Military Housing Area Street Address or State Road (as applicable)					
Beaufort,	Beaufort					
City	County					
		Attachment 2				

III. INSURANCE INFORMATION

Insurance Statement

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

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

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

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

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

IV. REQUEST FOR SUPERB FUNDING

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

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

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

Name (Type or print.)

Signature

To be completed by Notary Public:

Sworn before me this ______ day of _____, 20____

(Name)

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

VI. UST INFORMATION

A.	Product(ex. Gas, Kerosene)	Heating oil
B.	Capacity(ex. 1k, 2k)	280 gal
C.	Age	Late 1950s
D.	Construction Material(ex. Steel, FRP)	Steel
Е·	Month/Year of Last Use	Mid 1980s
F.	Depth (ft.) To Base of Tank	6'1"
G.	Spill Prevention Equipment Y/N	No
Н∙	Overfill Prevention Equipment Y/N	No
I.	Method of Closure Removed/Filled	Removed
J _.	Date Tanks Removed/Filled	11/21/11
K.	Visible Corrosion or Pitting Y/N	Yes
L.	Visible Holes Y/N	Yes

324Ash

M. Method of disposal for any USTs removed from the ground (attach disposal manifests) UST 324Ash was removed from the ground, cleaned and recycled. See Attachment "A."

N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests) Contaminated water was pumped from UST 324Ash and disposed by MCAS.

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 throughout the tank.

VII. PIPING INFORMATION

		324Ash
		Steel
A.	Construction Material(ex. Steel, FRP)	& Copper
B.	Distance from UST to Dispenser	N/A
C.	Number of Dispensers	N/A
2.		
D.	Type of System Pressure or Suction	Suction
E.	Was Piping Removed from the Ground? Y/N	No
F.	Visible Corrosion or Pitting Y/N	Yes
- •		
G.	Visible Holes Y/N	No
H.	Age	Late 1950s
I.	If any corrosion, pitting, or holes were observed, des	cribe the location and extent for each piping run.

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

VIII. BRIEF SITE DESCRIPTION AND HISTORY

The USTs at the residences are constructed of single wall steel and formerly contained fuel oil for heating. These USTs were

installed in the late 1950s and last used in the mid 1980s.

		Yes	No	Unk
Α.	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	
В.	Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells? If yes, indicate location on site map and describe the odor (strong, mild, etc.)		x	
C.	Was water present in the UST excavation, soil borings, or trenches? If yes, how far below land surface (indicate location and depth)?		Х	
D.	Did contaminated soils remain stockpiled on site after closure? If yes, indicate the stockpile location on the site map. Name of DHEC representative authorizing soil removal:		х	
E.	Was a petroleum sheen or free product detected on any excavation or boring waters? If yes, indicate location and thickness.		X	

IX. SITE CONDITIONS

-- -

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009

В.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
324Ash	Excav at fill end	Soil	Sandy	6'1"	11/21/11 1315 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
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?	*X r can	al
	If yes, indicate type of receptor, distance, and direction on site map.		
В.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		Х
	If yes, indicate type of well, distance, and direction on site map.		
C.	Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?		Х
	If yes, indicate type of structure, distance, and direction on site map.		
D.	Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the	*X	
	contamination? *Sewer, water, electri cable & fiber o	city, ptic	
	If yes, indicate the type of utility, distance, and direction on the site map.		
E.	Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete?		Х
	If yes, indicate the area of contaminated soil on the site map.		

XIII. SITE MAP

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

(Attach Site Map Here)









Picture 1: Location of UST 324Ash.



Picture 2: UST 324Ash tank pit.

XIV. SUMMARY OF ANALYSIS RESULTS

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

CoC UST	324Ash		
Benzene	ND		
Toluene	0.00328 mg/kg		
Ethylbenzene	0.530 mg/kg		
Xylenes	0.284 mg/kg		
Naphthalene	4.46 mg/kg		
Benzo (a) anthracene	0.677 mg/kg		
Benzo (b) fluoranthene	0.454 mg/kg		
Benzo (k) fluoranthene	0.447 mg/kg		
Chrysene	0.707 mg/kg		
Dibenz (a, h) anthracene	0.0986 mg/kg		
TPH (EPA 3550)			
CoC		 	
Benzene		 	
Toluene			
Ethylbenzene			
Xylenes			
Naphthalene			
Benzo (a) anthracene			
Benzo (b) fluoranthene			
Benzo (k) fluoranthene			
Chrysene			
Dibenz (a, h) anthracene			
TPH (EPA 3550)			

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

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

XV. ANALYTICAL RESULTS

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

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



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: NUK3501

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

For:

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

Attn: Tom McElwee

Em fatta

Authorized for release by: 12/12/2011 1:38:56 PM

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

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

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

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Sample Summary

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
NUK3501-01	324 Ash	Soil	11/21/11 13:15	11/26/11 07:50
NUK3501-02	338 Ash-1	Soil	11/22/11 14:00	11/26/11 07:50
NUK3501-03	338 Ash-2	Soil	11/23/11 10:45	11/26/11 07:50

Definitions/Glossary

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

Qualifiers

quamero	
GCMS Volatil	es
Qualifier	Qualifier Description
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.
GCMS Semive	olatiles
Qualifier	Qualifier Description
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
¢	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

RL

RPD Relative Percent Difference, a measure of the relative difference between two points

 TEF
 Toxicity Equivalent Factor (Dioxin)

 TEQ
 Toxicity Equivalent Quotient (Dioxin)

Reporting Limit

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

Client Sample ID: 324 Ash

Date Collected: 11/21/11 13:15 Date Received: 11/26/11 07:50

Lab Sample ID: NUK3501-01 Matrix: Soil

Percent Solids: 79.6

Method. 5W040 0200D - Volatile Organic Compounds by LFA Method 0200D
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Analyte Ro	esult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	1	0.00194	0.00107	mg/kg dry	\$	11/21/11 13:15	11/28/11 20:06	1.00
Toluene 0.00	0328		0.00194	0.00107	mg/kg dry	ø	11/21/11 13:15	11/28/11 20:06	1.00
Xylenes, total 0	.284		0.00486	0.00243	mg/kg dry	¢	11/21/11 13:15	11/28/11 20:06	1.00
Surrogate %Reco	overy	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	100		70 - 130				11/21/11 13:15	11/28/11 20:06	1.00
Dibromofluoromethane	99		70 - 130				11/21/11 13:15	11/28/11 20:06	1.00
Toluene-d8	260	ZX	70 - 130				11/21/11 13:15	11/28/11 20:06	1.00
4-Bromofluorobenzene	270	ZX	70 - 130				11/21/11 13:15	11/28/11 20:06	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.530		0.105	0.0576	mg/kg dry	Q.	11/21/11 13:15	11/29/11 16:45	50.0
Naphthalene	4.46		0.262	0.131	mg/kg dry	¢	11/21/11 13:15	11/29/11 16:45	50.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	93	1	70 - 130				11/21/11 13:15	11/29/11 16:45	50.0
Dibromofluoromethane	95		70 - 130				11/21/11 13:15	11/29/11 16:45	50.0
Toluene-d8	89		70 - 130				11/21/11 13:15	11/29/11 16:45	50.0
4-Bromofluorobenzene	108		70 - 130				11/21/11 13:15	11/29/11 16:45	50.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0829	0.0421	mg/kg dry	- D	11/28/11 12:25	11/28/11 21:42	1.00
Acenaphthylene	0.797		0.0829	0.0421	mg/kg dry	\$	11/28/11 12:25	11/28/11 21:42	1.00
Anthracene	1.33		0.0829	0.0421	mg/kg dry	¢	11/28/11 12:25	11/28/11 21:42	1.00
Benzo (a) anthracene	0.677		0.0829	0.0421	mg/kg dry	\$	11/28/11 12:25	11/28/11 21:42	1.00
Benzo (a) pyrene	0.435		0.0829	0.0421	mg/kg dry	ø	11/28/11 12:25	11/28/11 21:42	1.00
Benzo (b) fluoranthene	0.454		0.0829	0.0421	mg/kg dry	¢.	11/28/11 12:25	11/28/11 21:42	1.00
Benzo (g,h,i) perylene	0.157		0.0829	0.0421	mg/kg dry	\$	11/28/11 12:25	11/28/11 21:42	1.00
Benzo (k) fluoranthene	0.447		0.0829	0.0421	mg/kg dry	0	11/28/11 12:25	11/28/11 21:42	1.00
Chrysene	0.707		0.0829	0.0421	mg/kg dry	-	11/28/11 12:25	11/28/11 21:42	1.00
Dibenz (a,h) anthracene	0.0986		0.0829	0.0421	mg/kg dry	\$	11/28/11 12:25	11/28/11 21:42	1.00
Fluoranthene	1.80		0.0829	0.0421	mg/kg dry	\$	11/28/11 12:25	11/28/11 21:42	1.00
Fluorene	ND		0.0829	0.0421	mg/kg dry	¢	11/28/11 12:25	11/28/11 21:42	1.00
Indeno (1,2,3-cd) pyrene	0.167		0.0829	0.0421	mg/kg dry	40	11/28/11 12:25	11/28/11 21:42	1.00
Pyrene	1.96		0.0829	0.0421	mg/kg dry	ø	11/28/11 12:25	11/28/11 21:42	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	93		18 - 120				11/28/11 12:25	11/28/11 21:42	1.00
2-Fluorobiphenyl	71		14 - 120				11/28/11 12:25	11/28/11 21:42	1.00
Nitrobenzene-d5	186	ZX	17 - 120				11/28/11 12:25	11/28/11 21:42	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	8.06	-	1.66	0.841	mg/kg dry	\$	11/28/11 12:25	11/29/11 11:45	20.0
Phenanthrene	13.2		1.66	0.841	mg/kg dry	ø	11/28/11 12:25	11/29/11 11:45	20.0
1-Methylnaphthalene	29.1		1.66	0.841	mg/kg dry	¢	11/28/11 12:25	11/29/11 11:45	20.0
2-MethyInaphthalene	51.0		1.66	0.841	mg/kg dry	森	11/28/11 12:25	11/29/11 11:45	20.0

Client Sample Results

Client: EEG - Small Business Group, Inc. (2449) Project/Site: [none] TestAmerica Job ID: NUK3501

Client Sample ID: 324 Ash Lab Sample ID: NUK3501-01 Date Collected: 11/21/11 13:15 Matrix: Soil Date Received: 11/26/11 07:50 Percent Solids: 79.6 Method: SW-846 - General Chemistry Parameters

Methou. Sw-040 - General Offen	insury raramete	15							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	79.6		0.500	0.500	%		11/30/11 12:38	12/01/11 11:44	1.00

Client Sample ID: 338 Ash-1

Date Collected: 11/22/11 14:00 Date Received: 11/26/11 07:50

% Dry Solids

Lab Sample ID: NUK3501-02 Matrix: Soil

Percent Solids: 77.7

Method: SW846	8260B - Volatile	Organic Com	pounds by EP	A Method 8260B
moundar on one	onoon ronunio	organic com	poundo by Li	The thou or or or

esult Q	ualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		0.00208	0.00115	mg/kg dry	Ø	11/22/11 14:00	11/28/11 20:37	1.00
ND		0.00208	0.00115	mg/kg dry	12	11/22/11 14:00	11/28/11 20:37	1.00
ND		0.00521	0.00261	mg/kg dry	\$	11/22/11 14:00	11/28/11 20:37	1.00
ND		0.00208	0.00115	mg/kg dry	\$	11/22/11 14:00	11/28/11 20:37	1.00
ND		0.00521	0.00261	mg/kg dry	\$	11/22/11 14:00	11/28/11 20:37	1.00
very Q	ualifier	Limits				Prepared	Analyzed	Dil Fac
104		70 - 130				11/22/11 14:00	11/28/11 20:37	1.00
102		70 - 130				11/22/11 14:00	11/28/11 20:37	1.00
88		70 - 130				11/22/11 14:00	11/28/11 20:37	1.00
109		70 - 130				11/22/11 14:00	11/28/11 20:37	1.00
	esult G ND ND ND ND ND ND ND 104 102 88 109	esult Qualifier ND ND ND ND ND ND ND ND ND ND	Qualifier RL ND 0.00208 ND 0.00208 ND 0.00521 ND 0.00208 ND 0.00521 ND 70 - 130 88 70 - 130 109 70 - 130	Qualifier RL MDL ND 0.00208 0.00115 ND 0.00208 0.00115 ND 0.00521 0.00261 ND 0.00208 0.00115 ND 0.00521 0.00261 ND 70 - 130 102 102 70 - 130 130 109 70 - 130 130	Qualifier RL MDL Unit ND 0.00208 0.00115 mg/kg dry ND 0.00208 0.00115 mg/kg dry ND 0.00521 0.00261 mg/kg dry ND 0.00208 0.00115 mg/kg dry ND 0.00208 0.00115 mg/kg dry ND 0.00208 0.00115 mg/kg dry ND 0.00521 0.00261 mg/kg dry ND 0.00521 0.00261 mg/kg dry ND 0.00521 0.00261 mg/kg dry ND 70 - 130 mg/kg dry 102 102 70 - 130 130 109 70 - 130	Qualifier RL MDL Unit D ND 0.00208 0.00115 mg/kg dry Img/kg	Qualifier RL MDL Unit D Prepared ND 0.00208 0.00115 mg/kg dry I1/22/11 14:00 I1/22/11 14:00 ND 0.00521 0.00261 mg/kg dry I1/22/11 14:00 I1/22/11 14:00 ND 0.00521 0.00261 mg/kg dry I1/22/11 14:00 I1/22/11 14:00 ND 0.00208 0.00115 mg/kg dry I1/22/11 14:00 I1/22/11 14:00 ND 0.00521 0.00261 mg/kg dry I1/22/11 14:00 I1/22/11 14:00 ND 0.00521 0.00261 mg/kg dry I1/22/11 14:00 I1/22/11 14:00 ND 70 - 130 11/22/11 14:00 I1/22/11 14:00 I1/22/11 14:00 88 70 - 130 11/22/11 14:00 I1/22/11 14:00 I1/22/11 14:00 109 70 - 130 11/22/11 14:00 I1/22/11 14:00 I1/22/11 14:00	Qualifier RL MDL Unit D Prepared Analyzed ND 0.00208 0.00115 mg/kg dry I1/22/11 14:00 11/28/11 20:37 ND 0.00208 0.00115 mg/kg dry I1/22/11 14:00 11/28/11 20:37 ND 0.00521 0.00261 mg/kg dry I1/22/11 14:00 11/28/11 20:37 ND 0.00521 0.00261 mg/kg dry I1/22/11 14:00 11/28/11 20:37 ND 0.00521 0.00261 mg/kg dry I1/22/11 14:00 11/28/11 20:37 ND 0.00521 0.00261 mg/kg dry I1/22/11 14:00 11/28/11 20:37 ND 0.00521 0.00261 mg/kg dry I1/22/11 14:00 11/28/11 20:37 ND 70-130 I1/22/11 14:00 11/28/11 20:37 11/22/11 14:00 11/28/11 20:37 102 70-130 I1/22/11 14:00 11/28/11 20:37 11/22/11 14:00 11/28/11 20:37 88 70-130 I1/22/11 14:00 11/28/11 20:37 11/22/11 14:00 11/28/11 20:37 109

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

77.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0845	0.0429	mg/kg dry	Ø	11/28/11 12:25	11/28/11 22:02	1.00
Acenaphthylene	ND		0.0845	0.0429	mg/kg dry	-\$E	11/28/11 12:25	11/28/11 22:02	1.00
Anthracene	ND		0.0845	0.0429	mg/kg dry	Ø	11/28/11 12:25	11/28/11 22:02	1.00
Benzo (a) anthracene	ND		0.0845	0.0429	mg/kg dry	ø	11/28/11 12:25	11/28/11 22:02	1.00
Benzo (a) pyrene	ND		0.0845	0.0429	mg/kg dry	\$	11/28/11 12:25	11/28/11 22:02	1.00
Benzo (b) fluoranthene	ND		0.0845	0.0429	mg/kg dry	ø	11/28/11 12:25	11/28/11 22:02	1.00
Benzo (g,h,i) perylene	ND		0.0845	0.0429	mg/kg dry	ø	11/28/11 12:25	11/28/11 22:02	1.00
Benzo (k) fluoranthene	ND		0.0845	0.0429	mg/kg dry	ø	11/28/11 12:25	11/28/11 22:02	1.00
Chrysene	ND		0.0845	0.0429	mg/kg dry	\$	11/28/11 12:25	11/28/11 22:02	1.00
Dibenz (a,h) anthracene	ND		0.0845	0.0429	mg/kg dry	ø	11/28/11 12:25	11/28/11 22:02	1.00
Fluoranthene	ND		0.0845	0.0429	mg/kg dry	¢	11/28/11 12:25	11/28/11 22:02	1.00
Fluorene	ND		0.0845	0.0429	mg/kg dry	¢	11/28/11 12:25	11/28/11 22:02	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0845	0.0429	mg/kg dry	¢	11/28/11 12:25	11/28/11 22:02	1.00
Naphthalene	ND		0.0845	0.0429	mg/kg dry	φ	11/28/11 12:25	11/28/11 22:02	1.00
Phenanthrene	ND		0.0845	0.0429	mg/kg dry	¢	11/28/11 12:25	11/28/11 22:02	1.00
Pyrene	ND		0.0845	0.0429	mg/kg dry	ţ2	11/28/11 12:25	11/28/11 22:02	1.00
1-Methylnaphthalene	ND		0.0845	0.0429	mg/kg dry	ø	11/28/11 12:25	11/28/11 22:02	1.00
2-MethyInaphthalene	0.0715	J	0.0845	0.0429	mg/kg dry	ø	11/28/11 12:25	11/28/11 22:02	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	85		18 - 120				11/28/11 12:25	11/28/11 22:02	1.00
2-Fluorobiphenyl	73		14 - 120				11/28/11 12:25	11/28/11 22:02	1.00
Nitrobenzene-d5	73		17 - 120				11/28/11 12:25	11/28/11 22:02	1.00
Method: SW-846 - General C	Chemistry Paramete	ers							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

1.00

11/30/11 12:38 12/01/11 11:44

0.500

0.500 %

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

Client Sample ID: 338 Ash-2

Date Collected: 11/23/11 10:45 Date Received: 11/26/11 07:50

Lab Sample ID: NUK3501-03 Matrix: Soil Percent Solids: 76.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00218	0.00120	mg/kg dry	\$	11/23/11 10:45	11/29/11 15:43	1.00
Ethylbenzene	ND		0.00218	0.00120	mg/kg dry	\$5	11/23/11 10:45	11/29/11 15:43	1.00
Naphthalene	ND		0.00546	0.00273	mg/kg dry	Ó	11/23/11 10:45	11/29/11 15:43	1.00
Toluene	ND		0.00218	0.00120	mg/kg dry	Ó	11/23/11 10:45	11/29/11 15:43	1.00
Xylenes, total	ND		0.00546	0.00273	mg/kg dry	ø	11/23/11 10:45	11/29/11 15:43	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	102	1	70 - 130				11/23/11 10:45	11/29/11 15:43	1.00
Dibromofluoromethane	103		70 - 130				11/23/11 10:45	11/29/11 15:43	1.00
Toluene-d8	91		70 - 130				11/23/11 10:45	11/29/11 15:43	1.00
4-Bromofluorobenzene	129		70 - 130				11/23/11 10:45	11/29/11 15:43	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0869	0.0441	mg/kg dry	Ø	11/28/11 12:25	11/28/11 22:23	1.00
Acenaphthylene	ND		0.0869	0.0441	mg/kg dry	Ø	11/28/11 12:25	11/28/11 22:23	1.00
Anthracene	ND		0.0869	0.0441	mg/kg dry	D	11/28/11 12:25	11/28/11 22:23	1.00
Benzo (a) anthracene	ND		0.0869	0.0441	mg/kg dry	\$3	11/28/11 12:25	11/28/11 22:23	1.00
Benzo (a) pyrene	ND		0,0869	0.0441	mg/kg dry	Ø	11/28/11 12:25	11/28/11 22:23	1.00
Benzo (b) fluoranthene	ND		0.0869	0.0441	mg/kg dry	÷	11/28/11 12:25	11/28/11 22:23	1.00
Benzo (g,h,i) perylene	ND		0.0869	0.0441	mg/kg dry	ø	11/28/11 12:25	11/28/11 22:23	1.00
Benzo (k) fluoranthene	ND		0.0869	0.0441	mg/kg dry	\$	11/28/11 12:25	11/28/11 22:23	1.00
Chrysene	ND		0.0869	0.0441	mg/kg dry	42	11/28/11 12:25	11/28/11 22:23	1.00
Dibenz (a,h) anthracene	ND		0.0869	0.0441	mg/kg dry	0	11/28/11 12:25	11/28/11 22:23	1.00
Fluoranthene	ND		0.0869	0.0441	mg/kg dry	\$	11/28/11 12:25	11/28/11 22:23	1.00
Fluorene	ND		0.0869	0.0441	mg/kg dry	\diamond	11/28/11 12:25	11/28/11 22:23	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0869	0.0441	mg/kg dry	0	11/28/11 12:25	11/28/11 22:23	1.00
Naphthalene	ND		0.0869	0.0441	mg/kg dry	0	11/28/11 12:25	11/28/11 22:23	1.00
Phenanthrene	ND		0.0869	0.0441	mg/kg dry	3	11/28/11 12:25	11/28/11 22:23	1.00
Pyrene	ND		0.0869	0.0441	mg/kg dry	\$	11/28/11 12:25	11/28/11 22:23	1.00
1-Methylnaphthalene	ND		0.0869	0.0441	mg/kg dry	328	11/28/11 12:25	11/28/11 22:23	1.00
2-Methylnaphthalene	ND		0.0869	0.0441	mg/kg dry	13	11/28/11 12:25	11/28/11 22:23	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	90		18 - 120				11/28/11 12:25	11/28/11 22:23	1.00
2-Fluorobiphenyl	69		14 - 120				11/28/11 12:25	11/28/11 22:23	1.00
Nitrobenzene-d5	76		17 - 120				11/28/11 12:25	11/28/11 22:23	1.00
Method: SW-846 - General C	hemistry Paramete	rs							

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	76.1	-	0.500	0.500	%		11/30/11 12:38	12/01/11 11:44	1.00

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

Lab Sample ID: 11K6686-BLK1 Matrix: Soil

Client Sample ID: Method Blank Prep Type: Total Prep Batch: 11K6686_P

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 11K6686_P

Analysis Batch: U021104

	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		11/29/11 09:28	11/29/11 12:04	1.00
Ethylbenzene	ND		0.00200	0.00110	mg/kg wet		11/29/11 09:28	11/29/11 12:04	1.00
Naphthalene	ND		0.00500	0.00250	mg/kg wet		11/29/11 09:28	11/29/11 12:04	1.00
Toluene	ND		0.00200	0.00110	mg/kg wet		11/29/11 09:28	11/29/11 12:04	1.00
Xylenes, total	ND		0.00500	0.00250	mg/kg wet		11/29/11 09:28	11/29/11 12:04	1.00
	Blank	Blank							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1 2-Dichloroethane-d4	99		70 - 130				11/29/11 09:28	11/29/11 12:04	1.00

1,2-Dichloroethane-d4	99	70 - 130	11/29/11 09:28	11/29/11 12:04	1.00
Dibromofluoromethane	102	70 - 130	11/29/11 09:28	11/29/11 12:04	1.00
Toluene-d8	89	70 - 130	11/29/11 09:28	11/29/11 12:04	1.00
4-Bromofluorobenzene	103	70 - 130	11/29/11 09:28	11/29/11 12:04	1.00

Lab Sample ID: 11K6686-BLK2 Matrix: Soil Analysis Batch: U021104

	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0550	mg/kg wet		11/29/11 09:28	11/29/11 12:35	50.0
Ethylbenzene	ND		0.100	0.0550	mg/kg wet		11/29/11 09:28	11/29/11 12:35	50.0
Naphthalene	ND		0.250	0.125	mg/kg wet		11/29/11 09:28	11/29/11 12:35	50.0
Toluene	ND		0.100	0.0550	mg/kg wet		11/29/11 09:28	11/29/11 12:35	50.0
Xylenes, total	ND		0.250	0.125	mg/kg wet		11/29/11 09:28	11/29/11 12:35	50.0

	Blank	Blank				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	101		70 - 130	11/29/11 09:28	11/29/11 12:35	50.0
Dibromofluoromethane	104		70 - 130	11/29/11 09:28	11/29/11 12:35	50.0
Toluene-d8	88		70 - 130	11/29/11 09:28	11/29/11 12:35	50.0
4-Bromofluorobenzene	101		70 - 130	11/29/11 09:28	11/29/11 12:35	50.0

Lab Sample ID: 11K6686-BS1 Matrix: Soil

Analysis Batch: U021104

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	50.0	50.7		ug/kg		101	75 - 127	
Ethylbenzene	50.0	46.7		ug/kg		93	80 - 134	
Naphthalene	50.0	46.4		ug/kg		93	69 - 150	
Toluene	50.0	41.0		ug/kg		82	80 - 132	
Xylenes, total	150	138		ug/kg		92	80 - 137	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	98		70 - 130
Dibromofluoromethane	105		70 - 130
Toluene-d8	88		70 - 130
4-Bromofluorobenzene	103		70 - 130

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 11K6686_P %Rec.

TestAmerica Nashville 12/12/2011

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

Lab Sample ID: 11K6686-BSD1				Clien	t Samp	le ID: L	ab Control	Sampl	e Dup	
Matrix: Soil							Pre	p Type:	Total	
Analysis Batch: U021104						4	Prep Batch	atch: 11K6686 P		
	Spike	LCS Dup	LCS Dup				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	50.0	55.6		ug/kg		111	75 - 127	9	50	
Ethylbenzene	50.0	50.4		ug/kg		101	80 - 134	8	50	
Naphthalene	50.0	50.6		ug/kg		101	69 - 150	8	50	
Toluene	50.0	44.9		ug/kg		90	80 - 132	9	50	
Xylenes, total	150	152		ug/kg		101	80 - 137	9	50	

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	101		70 - 130
Dibromofluoromethane	105		70 - 130
Toluene-d8	87		70 - 130
4-Bromofluorobenzene	102		70 - 130

Lab Sample ID: 11K6686-MS1 Matrix: Soil Analysis Batch: U021104

Analysis Batch: U021104									Prep Batch: 11K6686_P
	Sample	Sample	Spike	Matrix Spike	Matrix Spi	ke			%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	ND		2.76	3.35	_	mg/kg dry	Ø	121	31 - 143
Ethylbenzene	ND		2.76	3.02		mg/kg dry	¢	109	23 - 161
Naphthalene	ND		2.76	2.50		mg/kg dry	0	91	10 - 176
Toluene	ND		2.76	2.65		mg/kg dry	ø	96	30 - 155
Xylenes, total	ND		8.29	9.08		mg/kg dry	ø	110	25 - 162

	Matrix Spike	Matrix Spike	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	95		70 - 130
Dibromofluoromethane	100		70 - 130
Toluene-d8	85		70 - 130
4-Bromofluorobenzene	101		70 - 130

Lab Sample ID: 11K6686-MSD1 Matrix: Soil Analysis Batch: U021104

								Top Baton		
Sample	Sample Spike	Matrix Spike Dup	Matrix Spike Dur				%Rec.		RPD	
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
ND		2.76	2.91		mg/kg dry	Ø	105	31 - 143	14	50
ND		2.76	2.60		mg/kg dry	\$	94	23 - 161	15	50
ND		2.76	2.11		mg/kg dry	¢	76	10 - 176	17	50
ND		2.76	2.31		mg/kg dry	ø	84	30 - 155	14	50
ND		8.29	7.86		mg/kg dry	ø	95	25 - 162	14	50
	Sample Result ND ND ND ND ND	Sample Sample Result Qualifier ND ND ND ND ND ND ND	Sample Sample Spike Result Qualifier Added ND 2.76 ND 8.29	SampleSampleSpikeMatrix Spike DupResultQualifierAddedResultND2.762.91ND2.762.60ND2.762.11ND2.762.31ND8.297.86	Sample ResultSample QualifierSpike AddedMatrix Spike Dup Matrix SpikMatrix Spi QualifierND2.762.91ND2.762.60ND2.762.11ND2.762.31ND8.297.86	SampleSampleSpikeMatrix Spike DupMatrix Spike DupResultQualifierAddedResultQualifierUnitND2.762.91mg/kg dryND2.762.60mg/kg dryND2.762.11mg/kg dryND2.762.31mg/kg dryND2.762.31mg/kg dryND2.762.31mg/kg dry	SampleSampleSpikeMatrix Spike DupMatrix Spike DupResultQualifierAddedResultQualifierUnitDND2.762.91mg/kg dry°ND2.762.60mg/kg dry°ND2.762.11mg/kg dry°ND2.762.31mg/kg dry°ND2.762.31mg/kg dry°ND2.762.31mg/kg dry°ND8.297.86mg/kg dry°	Sample ResultSample QualifierSpike AddedMatrix Spike Dup ResultMatrix Spike DupNDQualifierAddedResult QualifierQualifierUnitD%RecND2.762.91mg/kg dry0105ND2.762.60mg/kg dry094ND2.762.11mg/kg dry076ND2.762.31mg/kg dry084ND8.297.86mg/kg dry095	Sample Sample Spike Matrix Spike Dup Matrix Spike Dup Matrix Spike Dup %Rec. Result Qualifier Added Result Qualifier Unit D %Rec. ND 2.76 2.91 mg/kg dry 0 105 31 - 143 ND 2.76 2.60 mg/kg dry 0 94 23 - 161 ND 2.76 2.11 mg/kg dry 0 10 - 176 ND 2.76 2.31 mg/kg dry 0 84 30 - 155 ND 8.29 7.86 mg/kg dry 0 95 25 - 162	Sample Sample Spike Matrix Spike Dup Matrix Spike Duf %Rec. Result Qualifier Added Result Qualifier Unit D %Rec. RPD ND 2.76 2.91 mg/kg dry 3 105 31 - 143 14 ND 2.76 2.60 mg/kg dry 3 94 23 - 161 15 ND 2.76 2.11 mg/kg dry 3 76 10 - 176 17 ND 2.76 2.31 mg/kg dry 3 84 30 - 155 14 ND 2.76 7.86 mg/kg dry 3 5 14

	Matrix Spike Dup	Matrix Spike Dup			
Surrogate	%Recovery	Qualifier	Limits		
1,2-Dichloroethane-d4	96		70 - 130		
Dibromofluoromethane	101		70 - 130		
Toluene-d8	86		70 - 130		
4-Bromofluorobenzene	101		70 - 130		

ų.,	31 - 143
9	23 - 161
1	10 - 176
	122 122

Client Sample ID: 338 Ash-2

Prep Type: Total

Client Sample ID	: 338 Ash-2
Prep	Type: Total
Pron Batch	11K6686 P

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

Analysis Batch: U021078 Bank Ba	Lab Sample ID: 11K6689-BLK1 Matrix: Soil									С	lient Sa	ample ID: Metho Prep Tvi	od Blank
Bink Bink Analyze Reut 0 Duillier RL MDL Unit D Prepared Analyzed DIF Benzene ND 0.00200 0.00110 mgkg wet 11/28/11 08.45 11/28/11 108.45	Analysis Batch: U021078										19	Prep Batch: 11	(6689 P
Analyse Result Qualifier RL MDL Unit D Prepared Analysed Diff Entytenzene ND 0.00200 0.00110 mgk quet 11/28/11 00.45<		Blan	Blank									The cardy star	1
Benzene ND 0.00020 0.00110 mgk weit 11/2/11/10945 11/2/11/1351 11. Naphthahene ND 0.00020 0.00250 mgk weit 11/2/11/10945 11/2/11/1351 11. Naphthahene ND 0.00020 0.00250 mgk weit 11/2/11/10945 11/2/11/1351 11. Strengete ND 0.00250 0.00250 mgk weit 11/2/11/10945 11/2/2/11/1351 11. Strengete NRecovery Qualifier Inter Pregard Analyzed DIF. 1.2-Dichtoroethane-d4 102 70.730 17/2/2/17/0345 17/2/2/17/351 11. 1.2-Dichtoroethane-d4 102 70.730 17/2/2/17/0345 17/2/2/17/351 1. 4.2-Dondhoroebanzene 107 70.730 17/2/2/17/0345 17/2/2/17/0345 17/2/2/17/0345 17/2/2/17/0345 17/2/2/17/0345 17/2/2/17/0345 17/2/2/17/0345 17/2/2/17/0345 17/2/2/17/0345 17/2/2/17/0345 17/2/2/17/0345 17/2/2/17/0345 17/2/2/17/0345 17/2/2/17/0345 17/2/2/17/0345	Analyte	Resul	t Qualifier	RL	MD	LL	Jnit		D	Pre	pared	Analyzed	Dil Fac
Ethylenzene ND 0.00200 0.00110 mgk wet 11/2211 0.45 11/2211 1.351 1.1 Tolusne ND 0.00200 0.00110 mgk wet 11/2211 0.45 11/2211 1.351 1.1 Tolusne ND 0.00200 0.00110 mgk wet 11/2211 0.45 11/2211 1.351 1.1 Strenget 19.00 0.00110 mgk wet 11/2211 0.45 11/2211 1.351 1.0 Strenget 19.0 0.00110 mgk wet 11/2211 0.45 11/2211 1.351 1.0 Strenget 19.0 70.130 11/2211 0.45 11/2211 1.351 1.0 Strenget 107 70.30 11/2211 0.45 11/2211 1.351 1.0 Strenget 107 70.30 11/2211 0.45 11/2211 1.351 1.0 Strenget 107 70.30 11/2211 0.45 11/2211 0.45 11/2211 0.45 11/2211 0.45 11/2211 0.45 11/2211 0.45 11/2211 0.45 11/2211 0.45 11/2211 0.45 11/2211 0.45 11/2211 0.45 11/2211 0.45 11/2211 0.45	Benzene	N)	0.00200	0.0011	0 n	mg/kg wet			11/28/	11 09:45	11/28/11 13:51	1.00
Naphtakene ND 0.00250 0.00250 mgkg wet 11/2811 08.45 11/2811 13.51 1.1 Xylenes, total ND 0.00250 0.00250 mgkg wet 11/2811 08.45 11/2811 13.51 1.0 Strengate %Recoverg Qualifier Linits Prepared Analyzet DIF 1.2 Debuktorethane-d4 f02 70.130 11/2811 08.45 11/2811 13.51 1.0 Differmoflucorethane-d4 f02 70.130 11/2811 08.45 11/2811 13.51 1.0 Analyzet 00 70.130 11/2811 08.45 11/2811 13.51 1.0 Aleformoflucorethane-d4 f01 70.130 11/2811 08.45 11/2811 13.51 1.0 Lab Sample ID: 11K6689-BLK2 Strengate Recoverg Cillent Sample ID: Method Blan Prep Tryer: Tot Analysis Batch: U021078 Result Qualifier RL MDL Unit D Prepared Analyzed DIF Strengate ND 0.100 0.0550 mgkg wet 11/2811 10.42 50 1	Ethylbenzene	NE)	0.00200	0.0011	0 n	ng/kg wet			11/28/	11 09:45	11/28/11 13:51	1.00
Toluene ND 0.00200 0.00110 mgkg wet 11/28/11 09.45 11/28/11 03.51 1.1.1 Kylenes, total ND 0.00250 0.00250 mgkg wet 11/28/11 09.45 11/28/11 03.51 1.1.1 Surrogato %Recovery Qualifier Limits Prepared Analyzed Distribution Disconducoronethane 104 70.130 11/28/11 03.45	Naphthalene	NE)	0.00500	0.0025	50 n	ng/kg wet			11/28/	11 09:45	11/28/11 13:51	1.00
ND 0.00500 0.00250 mgg yet 11/28/11 09.45 11/28/11 13.51 1.0 Blank Blank Limits Prepared Analyzed Dir 1.2-Dichonedhane-d4 102 70.130 11/28/11 09.45 11/28/11 13.51 1.0 1.2-Dichonedhane-d4 102 70.130 11/28/11 09.45 11/28/11 13.51 1.0 4-Bromofluorobenzene 101 70.130 11/28/11 09.45 11/28/11 33.51 1.0 Lab Sample ID: 11K6689-BLK2 Matrix: Soil Analysis Batch: U021078 Prep Type: Tot Analysis Batch: U021078 Prep Batch: 11/28/11 09.45 11/28/11 10.45 11/28/11 10.45 11/28/11 14.22 50 Analyte Blank Blank Blank Blank ND 0.000 0.0550 mg/g yet 11/28/11 09.45 11/28/11 14.22 50 Naphthalene ND 0.0100 0.0550 mg/g yet 11/28/11 09.45 11/28/11 14.22 50 Nighthalene ND 0.100 0.0550 mg/g yet 11/28/11 14.21 11/28/11 14.22 50	Toluene	N)	0.00200	0.0011	0 n	ng/kg wet			11/28/	11 09:45	11/28/11 13:51	1.00
Blank Blank Blank Limits Propared Nankyed Dif F Surrogate 10/2 70.730 11/28/11 09.45 11/28/11 10.42 50 Analyted ND 0.100 0.0550 mg/kg wet 11/28/11 09.45 11/28/11 10.42 50 Standamenee ND 0.100 0.0550 mg/kg wet 11/28/11 09.45 11/28/11 10.42 50 Standamenee ND 0.100	Xylenes, total	NE)	0.00500	0.0025	50 n	ng/kg wet			11/28/	11 09:45	11/28/11 13:51	1.00
Surragate %Recovery Qualifier Links Prepared Analyzed DIF 1,2-Dichlorodhane-d4 102 70:130 11/28/11 08:45 11/28/11 14:22 50 Analysed ND 0.100 0.0550 mg/sg wet 11/28/11 08:45 11/28/11 14:22 50 Naphthalene ND 0.255 0.125 mg/sg wet 11/28/11 08:45 11/28/11 14:22 50 Striphene, total ND 0.250 0.125 mg/s		Blan	Blank										
12-Dichloroethane-d4 102 70 - 130 11/28/11 08-45 <td>Surrogate</td> <td>%Recover</td> <td>Qualifier</td> <td>Limits</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Pre</td> <td>pared</td> <td>Analyzed</td> <td>Dil Fac</td>	Surrogate	%Recover	Qualifier	Limits						Pre	pared	Analyzed	Dil Fac
Dibromofluoromethane 104 70.130 11/28/11 98-45 11/28/11 13-51 1.0 Toluen-e3B 90 70.130 11/28/11 98-45 11/28/11 13-51 1.0 4-Bromofluoroberzene 101 70.130 11/28/11 08-45 11/28/11 13-51 1.0 4-Bromofluoroberzene 101 70.130 11/28/11 08-45 11/28/11 13-51 1.0 4-Bromofluoroberzene 101 70.130 11/28/11 08-45 11/28/11 13-51 1.0 Analyte Result Qualiffer RL MDL Unit D Prepared Analyze Dil Fa Benzene ND 0.100 0.0550 mgk wet 11/28/11 08-45 11/28/11 14-22 50 Naphhalene ND 0.250 0.125 mgk wet 11/28/11 08-45 11/28/11 14-22 50 Toluene ND 0.250 0.125 mgk wet 11/28/11 08-45 11/28/11 14-22 50 Dibromofluoroberzene 101 70.130 11/28/11 08-45 11/28/11 14-22 50	1,2-Dichloroethane-d4	10.	2	70 - 130						11/28/	11 09:45	11/28/11 13:51	1.00
Toluene-d8 90 70.130 11/28/11 09.45 11/28/11 13.51 1.0 4-Bromolluocobenzene 101 70.130 11/28/11 09.45 11/28/11 13.51 1.0 Lab Sample ID: 11K6689-BLK2 Matrix: SOI Analysis Batch: U021078 Elemk Blank Blank Blank Blank Blank Blank Prep Tack: 11/6689 DI Fr. Analysis Batch: U021078 ND 0.100 0.0550 mg/kg wet 11/28/11 09.45 11/28/11 10.42 50 Analysis Batch: U021078 ND 0.100 0.0550 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Analyse Batch: U021078 ND 0.100 0.0550 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 ND 0.250 0.125 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 ND 0.250 0.125 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Toluene ND 0.250 0.125 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Difencoffuoro	Dibromofluoromethane	10-	1	70 - 130						11/28/	11 09:45	11/28/11 13:51	1.00
4-Bromofiluorobenzene 101 70.130 11/28/11 09.45 11/28/11 13.51 1.0 Lab Sample ID: 11K6689-BLK2 Matrix: Soil Client Sample ID: 11K6689-BLK2 Client Sample ID: 1020178 Prep Type: Tot Sample ID: 102011 14.22 Soil Prep Batch: 11K6689 Difference ND 0.100 0.0550 mg/kg wet 11/28/11 09.45 11/28/11 09.45 11/28/11 09.45 11/28/11 09.45 11/28/11 14.22 Soil Soil Soil Prep Batch: 11K6689 Difference ND 0.100 0.0550 mg/kg wet 11/28/11 09.45 11/28/11 09.45 11/28/11 14.22 Soil ND ND 0.100 0.0550 mg/kg wet 11/28/11 09.45 11/28/11 09.45 11/28/11 14.22 Soil ND ND 0.250 0.125 mg/kg wet 11/28/11 09.45 11/28/11 14.22 Soil	Toluene-d8	9)	70 - 130						11/28/	11 09:45	11/28/11 13:51	1.00
Lab Sample ID: 11K6689-BLK2 Client Sample ID: Method Bian Prop Type: Tot T	4-Bromofluorobenzene	10	r i	70 - 130						11/28/	11 09:45	11/28/11 13:51	1.00
Blank Blank Prep Type: Toth Analysis Batch: U021078 Blank Blank Analyte Result Qualifier RL MDL Unit D Prep ared Analyzed Dil F. Benzene ND 0.100 0.0550 mg/kg wet 11/28/11 08.45 11/28/11 14.22 50 Naphthalene ND 0.100 0.0550 mg/kg wet 11/28/11 08.45 11/28/11 14.22 50 Naphthalene ND 0.100 0.0550 mg/kg wet 11/28/11 08.45 11/28/11 14.22 50 Nylenes, total ND 0.250 0.125 mg/kg wet 11/28/11 08.45 11/28/11 14.22 50 Surogate */Recovery Qualifier Limits Prep ared Analyzed Dil F. 1_2-Dichloroethane-d4 98 70.130 11/28/11 08.45 11/28/11 14.22 50 Dibromofluoromethane 100 70.130 11/28/11 09.45 11/28/11 14.22 50 Dibromofluoromethane 101 70.130 11/28	Lab Sample ID: 11K6689-BLK2									C	lient Sa	mole ID: Metho	d Blank
Prep Batch: 11/66839 Blank Blank Blank Blank Blank Mol. Unit D Prep Batch: 11/66839 Dill Fil Benzene ND 0.100 0.0550 mg/kg wet 11/28/11 109.45 11/28/11 14.22 50 Benzene ND 0.100 0.0550 mg/kg wet 11/28/11 109.45 11/28/11 14.22 50 Naphthalene ND 0.100 0.0550 mg/kg wet 11/28/11 109.45 11/28/11 14.22 50 ND 0.100 0.0550 mg/kg wet 11/28/11 109.45 11/28/11 14.22 50 Surrogate ND 0.250 0.125 mg/kg wet 11/28/11 109.45 11/28/11 14.22 50 Dibromofluoromethane 103 70.130 11/28/11 09.45 11/28/11 14.22 50 Dibromofluorobenzene 101 70.130 11/28/11 09.45 11/28/11 14.22 50 Lab Sample ID: 11K6689-BS1 Spike LCS LCS Kecc Kecc Analyzis Batch: U021078 Spike	Matrix: Soil											Pren Ty	e Total
Blank Blank Blank MD MD MD 0.055 mg/kg wet D Prepared Analyzed DII Fr Benzene ND 0.100 0.0550 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Naphthalene ND 0.250 0.125 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Naphthalene ND 0.250 0.125 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Toluene ND 0.250 0.125 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Sylenes, total ND 0.250 0.125 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Sylenes, total ND 0.250 0.125 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Dibromofluoromethane 103 70.130 11/28/11 09.45 11/28/11 14.22 50 Dibromofluoromethane 101 70.130 11/28/11 09.45 11/28/11 14.22 50 Mathyt <td>Analysis Batch: 1021078</td> <td></td> <td>Pren Batch: 11</td> <td>(6689 P</td>	Analysis Batch: 1021078											Pren Batch: 11	(6689 P
Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fr Benzene ND 0.100 0.0550 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Ethylbenzene ND 0.250 0.125 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Toluene ND 0.250 0.125 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Toluene ND 0.250 0.125 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Surrogate ND 0.250 0.125 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Surrogate WRecovery Qualifier Limits 11/28/11 09.45 11/28/11 14.22 50 Chloroothuoromethane 103 70 - 130 11/28/11 09.45 11/28/11 14.22 50 Chloroothuoromethane 104 70 - 130 11/28/11 09.45 11/28/11 14.22 50 Analyced 11/28/11 14.22 50	Analysis Baten. Sources	Blan	Blank									Trep Daten. Th	10000_1
Benzene ND 0.100 0.0850 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Benzene ND 0.100 0.0850 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Naphthalene ND 0.250 0.125 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Naphthalene ND 0.250 0.125 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Xylenes, total ND 0.250 0.125 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Surrogate Skecovery Qualifier Limits Prepared Analyzed DI F; 1.2-Dichloroethane-d4 98 70 - 130 11/28/11 09.45 11/28/11 14.22 50 Dioteronoflouroethane 101 70 - 130 11/28/11 09.45 11/28/11 14.22 50 Toluene 92 70 - 130 11/28/11 09.45 11/28/11 14.22 50 Lab Sample ID: 11K6689-BS1 Spike LCS LCS NE Prep Batch: 11/28/11 1	Analyte	Resul	Qualifier	RL	MD	LU	Jnit		D	Pre	pared	Analyzed	Dil Fac
Ethylbenzene ND 0.100 0.0550 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Naphthalene ND 0.100 0.0550 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Toluene ND 0.100 0.0550 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Surrogate ND 0.250 0.125 mg/kg wet 11/28/11 09.45 11/28/11 14.22 50 Surrogate Skreecvery Qualifier Limits Prepared Analyzed Dil F 1/2-Dichloroethane-d4 98 70 - 130 11/28/11 09.45 11/28/11 14.22 50 Dibromofluoromethane 103 70 - 130 11/28/11 09.45 11/28/11 14.22 50 Agromofluorobenzene 101 70 - 130 11/28/11 09.45 11/28/11 14.22 50 Lab Sample ID: 11K6689-BS1 Spike LCS LCS KRec KRec Matrix: Soil Analysis Batch: U021078 Spike LCS LCS KRec Limits	Benzene	NE)	0.100	0.055	i0 n	na/ka wet	-		11/28/	11 09:45	11/28/11 14:22	50.0
ND 0.250 0.125 mg/kg wet 11/28/11 08/45 11/28/11 14/22 50 Toluene ND 0.250 0.125 mg/kg wet 11/28/11 08/45 11/28/11 14/22 50 Blank	Ethylbenzene	N)	0 100	0.055	i0 n	na/ka wet			11/28/	11 09:45	11/28/11 14.22	50.0
ND 0.100 0.050 mg/ng vet 11/28/11 09.45 11/28/11 14.22 50 Vylenes, total ND 0.250 0.155 mg/ng vet 11/28/11 09.45 11/28/11 14.22 50 Blank Blank Blank Blank Prepared Analyzed Dil Fu Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fu 1,2-Dichloroethane-d4 98 70 - 130 11/28/11 09.45 11/28/11 14:22 50 Dibromofluoromethane 103 70 - 130 11/28/11 09.45 11/28/11 14:22 50 Chleme-d8 92 70 - 130 11/28/11 09.45 11/28/11 14:22 50 Lab Sample ID: 11K6689-BS1 Client Sample ID: 11/28/11 09.45 11/28/11 14:22 50 Matrix: Soil Prep Batch: 11/28/11 14:22 50 Prep Type: Tot Analyte Spike LCS LCS Spike LCS LS %Rec Limits Solid Spike LCS LCS Spike LCS <th< td=""><td>Naphthalene</td><td>N</td><td>)</td><td>0.250</td><td>0.12</td><td>5 n</td><td>na/ka wet</td><td></td><td></td><td>11/28/</td><td>11 09 45</td><td>11/28/11 14:22</td><td>50.0</td></th<>	Naphthalene	N)	0.250	0.12	5 n	na/ka wet			11/28/	11 09 45	11/28/11 14:22	50.0
Number ND 0.250 0.125 mg/g nt. International (Name) International (Name) <thinternat< td=""><td>Toluene</td><td>NE</td><td>,</td><td>0 100</td><td>0.055</td><td>i0 n</td><td>na/ka wet</td><td></td><td></td><td>11/28/</td><td>11 09:45</td><td>11/28/11 14:22</td><td>50.0</td></thinternat<>	Toluene	NE	,	0 100	0.055	i0 n	na/ka wet			11/28/	11 09:45	11/28/11 14:22	50.0
Biank Biank <th< td=""><td>Xvienes total</td><td>NE</td><td>)</td><td>0.250</td><td>0.12</td><td>5 0</td><td>ng/kg wet</td><td></td><td></td><td>11/28/</td><td>11 09:45</td><td>11/28/11 14:22</td><td>50.0</td></th<>	Xvienes total	NE)	0.250	0.12	5 0	ng/kg wet			11/28/	11 09:45	11/28/11 14:22	50.0
Blank Blank Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fe 1,2-Dichloroethane-d4 98 70 - 130 11/28/11 09:45 11/28/11 14:22 50 Dibromofluoromethane 103 70 - 130 11/28/11 09:45 11/28/11 14:22 50 Toluene-d8 92 70 - 130 11/28/11 09:45 11/28/11 14:22 50 4-Bromofluorobenzene 101 70 - 130 11/28/11 09:45 11/28/11 14:22 50 Lab Sample ID: 11K6689-BS1 Sintarix: Soil Client Sample ID: Lab Control Sample Prep Type: Totar Analysis Batch: U021078 Frep Type: Totar Spike LCS LCS %Rec Analysis Batch: U021078 Spike LCS LCS %Rec Limits Ethylbenzene 50.0 57.4 ug/kg 115 75.127 Ethylbenzene 50.0 46.8 ug/kg 96 69 - 150 Toluene 50.0 47.9 ug/kg 96 69 - 150 Xy				0.200	0.12		ing ing incr					THE STITT THEE	00.0
Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fri 1,2-Dichloroethane-d4 98 70 - 130 11/28/11 09.45 11/28/11 14:22 50 Dibromofluoromethane 103 70 - 130 11/28/11 09.45 11/28/11 14:22 50 1-Bromofluorobenzene 101 70 - 130 11/28/11 09.45 11/28/11 14:22 50 Lab Sample ID: 11K6689-BS1 50 11/28/11 09.45 11/28/11 14:22 50 Matrix: Soil Spike LCS LCS Neec. Prep Type: Total Sample ID: Lab Control Sample So Spike LCS LCS Skeec. Analyte Added Result Qualifier Unit D %Rec. Skeec. Ethylbenzene 50.0 50.8 ug/kg 101 75 .127 Toluene Xylenes, total 150 151 ug/kg 94 80 .132 Toluene-d8 90 70 .130 Skeec. Skeec		Blan	Blank										
1,2-Dichloroethane-d4 98 70.130 11/28/11 09.45 11/28/11 14.22 50 Dibromofluoromethane 103 70.130 11/28/11 09.45 11/28/11 14.22 50 Toluene-d8 92 70.130 11/28/11 09.45 11/28/11 14.22 50 4-Bromofluorobenzene 101 70.130 11/28/11 09.45 11/28/11 14.22 50 4-Bromofluorobenzene 101 70.130 11/28/11 09.45 11/28/11 14.22 50 Lab Sample ID: 11K6689-BS1 Sike LCS LCS Client Sample ID: Lab Control Sampl Matrix: Soil Analyte Added Result Qualifier Unit D %Rec. Analyte 50.0 57.4 ug/kg 102 80.134 80.134 Benzene 50.0 57.4 ug/kg 102 80.134 Naphthalene 50.0 46.8 ug/kg 101 80.132 Yelenes, total 150 151 ug/kg 101 80.137 LCS LCS LCS Surgative 101 80.137 Dibromofluoromethane-d4 10	Surrogate	%Recovery	Qualifier	Limits						Pre	pared	Analyzed	Dil Fac
Dibromofluoromethane 103 70 - 130 11/28/11 09:45 11/28/11 14:22 50 Toluene-d8 92 70 - 130 11/28/11 09:45 11/28/11 14:22 50 4-Bromofluorobenzene 101 70 - 130 11/28/11 09:45 11/28/11 14:22 50 Lab Sample ID: 11K6689-BS1 Client Sample ID: 11K6689-BS1 Client Sample ID: Lab Control Sample ID: Lab Control Sample ID: Lab Control Sample ID: Lab Control Sample ID: 11K6689 Prep Type: Total Analyte Added Result Qualifier Unit D %Rec. Mec. Benzene 50.0 57.4 ug/kg 110 75 . 127 Elmits Ethylbenzene 50.0 47.9 ug/kg 96 69 . 150 Toluene 50.0 46.8 ug/kg 94 80 . 132 Xylenes, total 150 151 ug/kg 101 80 . 137 LCS LCS LCS Surogate %Recovery Qualifier 130 1,2-Dichloroethane-d4 101 70 . 130 70 . 130 70 . 130	1,2-Dichloroethane-d4	90	3	70 - 130						11/28/	11 09:45	11/28/11 14:22	50.0
Toluene-d8 92 70.130 11/28/11 09:45 11/28/11 14:22 50 4-Bromofluorobenzene 101 70.130 11/28/11 09:45 11/28/11 14:22 50 Lab Sample ID: 11K6689-BS1 Matrix: Soil Client Sample ID: Lab Control Sample Prep Type: Tota Analysis Batch: U021078 Spike LCS LCS Prep Batch: 11K6689_ %Rec. Analyte Added Result Qualifier Unit D %Rec. Benzene 50.0 57.4 ug/kg 115 75.127 112 Ethylbenzene 50.0 47.9 ug/kg 96 69.150 132 Naphthalene 50.0 46.8 ug/kg 94 80.132 132 Xylenes, total 150 151 ug/kg 101 80.137 LCS LCS Surrogate %Recovery Qualifier Limits 12-Dichloroethane-d4 101 70.130 70.130 101 80.137 Dibromofluoromethane 104 70.130 70.130 70.130 <t< td=""><td>Dibromofluoromethane</td><td>10:</td><td>3</td><td>70 - 130</td><td></td><td></td><td></td><td></td><td></td><td>11/28/</td><td>11 09:45</td><td>11/28/11 14:22</td><td>50.0</td></t<>	Dibromofluoromethane	10:	3	70 - 130						11/28/	11 09:45	11/28/11 14:22	50.0
4-Bromofluorobenzene 101 70 - 130 11/28/11 10:45 11/28/11 14:22 50 Lab Sample ID: 11K6689-BS1 Matrix: Soil Client Sample ID: Lab Control Sample Analysis Batch: U021078 Spike LCS LCS Prep Batch: 11K6689 Analyte Added Result Qualifier Unit D %Rec. Benzene 50.0 57.4 ug/kg 115 75.127 Emits Ethylbenzene 50.0 50.8 ug/kg 102 80 - 134 Naphthalene 50.0 46.8 ug/kg 96 69 - 150 Toluene 50.0 46.8 ug/kg 101 80 - 132 Xylenes. total 150 151 ug/kg 101 80 - 137 LCS LCS Surgate %Recovery Qualifier Limits 101 80 - 130 Dibromofluoromethane 104 70 - 130 70 - 130 480 - 130 480 - 130 Addeed 90 70 - 130 70 - 130 70 - 130 480 - 130 480 - 130	Toluene-d8	92	2	70 - 130						11/28/	11 09:45	11/28/11 14:22	50.0
Lab Sample ID: 11K6689-BS1 Matrix: Soil Analysis Batch: U021078 Client Sample ID: Lab Control Sample Prep Type: Total Prep Batch: 11K6689_ Prep Batch: 11K6689_ %Rec. Analyte Spike LCS LCS Prep Batch: 11K6689_ %Rec. Analyte Added Result Qualifier Unit D %Rec. Imits Benzene 30.0 57.4 ug/kg 115 75.127 75.127 Ethylbenzene 50.0 40.468 ug/kg 96 69.150 134 Naphthalene 50.0 46.8 ug/kg 94 80.132 132 Toluene 50.0 151 ug/kg 101 80.137 LCS LCS Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 101 70.130 70.130 70.130 Dibromofluoromethane 90 70.130 70.130 70.130	4-Bromofluorobenzene	10		70 - 130						11/28/	11 09:45	11/28/11 14:22	50.0
Prep Type: Tota Analysis Batch: U021078 Spike LCS LCS Prep Batch: 11K6689 WRec. Analyte Added Result Qualifier Unit D %Rec. Limits Benzene 50.0 57.4 ug/kg 115 75.127 115 75.127 Ethylbenzene 50.0 50.8 ug/kg 102 80.134 102 80.134 Naphthalene 50.0 46.8 ug/kg 94 80.132 101 80.132 101 80.132 101 80.137 101 101 70.130 101 80.137 101 80.137 101 80.137 101 80.137 101 101 101 101 101 101 101 80.137 101 80.137 101 101 101 101 101 101 101 80.137 101 80.137 101 101 101 101 101 101 101 101 101 101 <t< td=""><td>Lab Sample ID: 11K6689-BS1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>CI</td><td>ient S</td><td>ample</td><td>ID: Lab Control</td><td>Sample</td></t<>	Lab Sample ID: 11K6689-BS1								CI	ient S	ample	ID: Lab Control	Sample
Analysis Batch: U021078 Prep Batch: 11K6689_ %Rec. Analyte Added Result Qualifier Unit D %Rec. Analyte Added Result Qualifier Unit D %Rec. Benzene 50.0 57.4 ug/kg 115 75.127 Ethylbenzene 50.0 50.8 ug/kg 102 80.134 Naphthalene 50.0 47.9 ug/kg 96 69.150 Toluene 50.0 46.8 ug/kg 94 80.132 Xylenes, total 150 151 ug/kg 101 80.137 LCS LCS L L Limits L L L L L 1,2-Dichloroethane-d4 101 70.130 70.13	Matrix: Soil											Prep Typ	e: Total
Spike LCS LCS Max Main Analyte Added Result Qualifier Unit D %Rec. Benzene 50.0 57.4 ug/kg 115 75.127 Ethylbenzene 50.0 50.8 ug/kg 102 80.134 Naphthalene 50.0 46.8 ug/kg 96 69.150 Toluene 50.0 46.8 ug/kg 101 80.132 Xylenes, total 150 151 ug/kg 101 80.137 LCS LCS LCS Los Los Los Los Los 1,2-Dichloroethane-d4 101 70.130 70.130 70.130 70.130 70.130 70.130 Toluene-d8 90 70.130 70.130 70.130 70.130 70.130	Analysis Batch: U021078										1	Prep Batch: 11	(6689 P
Analyte Added Result Qualifier Unit D %Rec Limits Benzene 50.0 57.4 ug/kg 115 75.127 Ethylbenzene 50.0 50.8 ug/kg 102 80.134 Naphthalene 50.0 47.9 ug/kg 96 69.150 Toluene 50.0 46.8 ug/kg 94 80.132 Xylenes, total 150 151 ug/kg 101 80.137 LCS LCS 150 151 ug/kg 101 80.137 Surrogate %Recovery Qualifier Limits 101 70.130 101 80.137 Dibromofluoromethane 104 70.130 70.130 101 80.137 101 <td>and the second second</td> <td></td> <td></td> <td>Spike</td> <td>LCS I</td> <td>LCS</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>%Rec.</td> <td></td>	and the second			Spike	LCS I	LCS						%Rec.	
Benzene 50.0 57.4 ug/kg 115 75.127 Ethylbenzene 50.0 50.8 ug/kg 102 80.134 Naphthalene 50.0 47.9 ug/kg 96 69.150 Toluene 50.0 46.8 ug/kg 94 80.132 Xylenes, total 150 151 ug/kg 101 80.137 LCS LCS LCS Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 101 70.130 70.130 70.130 70.130 70.130 Dibromofluoromethane 101 70.130 70.130 70.130 70.130 70.130 70.130	Analyte			Added	Result (Qual	lifier U	nit		D	%Rec	Limits	
Ethylbenzene 50.0 50.8 ug/kg 102 80 - 134 Naphthalene 50.0 47.9 ug/kg 96 69 - 150 Toluene 50.0 46.8 ug/kg 94 80 - 132 Xylenes, total 150 151 ug/kg 101 80 - 137 LCS LCS Surrogate %Recovery Qualifier Limits View View <th<< td=""><td>Benzene</td><td></td><td>_</td><td>50.0</td><td>57.4</td><td></td><td>uş</td><td>g/kg</td><td>_</td><td></td><td>115</td><td>75 - 127</td><td></td></th<<>	Benzene		_	50.0	57.4		uş	g/kg	_		115	75 - 127	
Naphthalene 50.0 47.9 ug/kg 96 69 - 150 Toluene 50.0 46.8 ug/kg 94 80 - 132 Xylenes, total 150 151 ug/kg 101 80 - 137 LCS LCS LCS Surrogate %Recovery Qualifier Limits Value	Ethylbenzene			50.0	50.8		ug	g/kg			102	80 - 134	
Toluene 50.0 46.8 ug/kg 94 80 - 132 Xylenes, total 150 151 ug/kg 101 80 - 137 LCS LCS LCS Limits 151 ug/kg 101 80 - 137 Surrogate %Recovery Qualifier Limits 101 70 - 130 101 101 70 - 130 Dibromofluoromethane 104 70 - 130 70 - 130 140 1	Naphthalene			50.0	47.9		u	g/kg			96	69 - 150	
Xylenes, total 150 151 ug/kg 101 80 - 137 LCS LCS LCS Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 101 70 - 130 Dibromofluoromethane 104 70 - 130 Toluene-d8 90 70 - 130 4-Bromofluorobenzene 101 70 - 130	Toluene			50.0	46.8		ug	g/kg			94	80 - 132	
LCS LCS Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 101 70 - 130 Dibromofluoromethane 104 70 - 130 Toluene-d8 90 70 - 130 4.Bromofluorobenzene 101 70 - 130	Xylenes, total			150	151		ug	g/kg			101	80 - 137	
Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 101 70 - 130 Dibromofluoromethane 104 70 - 130 Toluene-d8 90 70 - 130 4.Bromofluorohenzene 101 70 - 130		LCS LC	S										
1,2-Dichloroethane-d4 101 70 - 130 Dibromofluoromethane 104 70 - 130 Toluene-d8 90 70 - 130 4-Bromofluorobenzene 101 70 - 130	Surrogate	%Recovery Qu	alifier	Limits									
Dibromofluoromethane 104 70 - 130 Toluene-d8 90 70 - 130 4-Bromofluorobenzene 101 70 - 130	1.2-Dichloroethane-d4	101		70 - 130									
Toluene-d8 90 70 - 130 4-Bromofluorobenzene 101 70 - 130	Dibromofluoromethane	104		70 - 130									
4-Bromofluorobenzene 101 70 - 130	Toluene-d8	90		70 - 130									
	4-Bromofluorobenzene	101		70 130									

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

Lab Sample ID: 11K6689-MS1 Matrix: Soil								Client	Sample ID: Matri Prep Typ	x Spike e: Total
Analysis Batch: U021078	Sample	Sample	Spike	Matrix Spike	Matrix Spil	ke		4	Prep Batch: 11K %Rec.	6689_P
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	ND		2.20	2.52		mg/kg wet		115	31 - 143	
Ethylbenzene	ND		2.20	2.36		mg/kg wet		107	23 - 161	
Naphthalene	ND		2.20	1.84		mg/kg wet		84	10 - 176	
Toluene	ND		2.20	2.27		mg/kg wet		103	30 - 155	
Xylenes, total	ND		6.59	7.02		mg/kg wet		107	25 - 162	

Surrogate	%Recovery	Matrix Spike Qualifier	Limits
1,2-Dichloroethane-d4	94		70 - 130
Dibromofluoromethane	102		70 - 130
Toluene-d8	96		70 - 130
4-Bromofluorobenzene	107		70 - 130

Lab Sample ID: 11K6689-MSD1 Matrix: Soil Analysis Batch: U021078

Analysis Batch: U021078								()	Prep Batch	: 11K6	689_P
	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spi	ke Duş			%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		2.20	2.73		mg/kg wet		124	31 - 143	8	50
Ethylbenzene	ND		2.20	2.51		mg/kg wet		114	23 - 161	6	50
Naphthalene	ND		2.20	2.25		mg/kg wet		102	10 - 176	20	50
Toluene	ND		2.20	2.23		mg/kg wet		102	30 - 155	2	50
Xylenes, total	ND		6.59	7.53		mg/kg wet		114	25 - 162	7	50

	Matrix Spike Dup	Matrix Spike	Dup
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	96		70 - 130
Dibromofluoromethane	97		70 - 130
Toluene-d8	88		70 - 130
4-Bromofluorobenzene	107		70 - 130

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

Lab Sample ID: 11K6276-BLK1 Matrix: Soil Analysis Batch: 11K6276

Client Sample ID: Method Bla	nk
Prep Type: To	al
Prep Batch: 11K6276	P

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total

	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Acenaphthylene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Anthracene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Benzo (a) anthracene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Benzo (a) pyrene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Benzo (b) fluoranthene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Benzo (g,h,i) perylene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Benzo (k) fluoranthene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Chrysene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Dibenz (a,h) anthracene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Fluoranthene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Fluorene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00

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

Lab Sample ID: 11K6276-BLK1							Client Sa	mple ID: Metho	d Blank
Matrix: Soil								Prep Typ	e: Total
Analysis Batch: 11K6276							F	Prep Batch: 11k	(6276_P
	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND	_	0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Phenanthrene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Pyrene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
1-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
2-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
	Blank	Blank							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	89		18 - 120				11/28/11 12:25	11/28/11 18:38	1.00
2-Fluorobiphenyl	69		14 - 120				11/28/11 12:25	11/28/11 18:38	1.00
Nitrobenzene-d5	73		17-120				11/28/11 12:25	11/28/11 18:38	1.00

Lab Sample ID: 11K6276-BS1 Matrix: Soil Analysis Batch: 11K6276

Client Sample ID: Lab Control Sample Prep Type: Total Prep Batch: 11K6276 P

care share strand to deal and	Spike	LCS	LCS				%Rec.	-
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Acenaphthene	1.67	1.43		mg/kg wet		86	36 - 120	_
Acenaphthylene	1.67	1.41		mg/kg wet		85	38 - 120	
Anthracene	1.67	1.64		mg/kg wet		99	46 - 124	
Benzo (a) anthracene	1.67	1.61		mg/kg wet		96	45 - 120	
Benzo (a) pyrene	1.67	1.87		mg/kg wet		112	45 - 120	
Benzo (b) fluoranthene	1.67	1.66		mg/kg wet		99	42 - 120	
Benzo (g,h,i) perylene	1.67	1.84		mg/kg wet		110	38 - 120	
Benzo (k) fluoranthene	1.67	1.87		mg/kg wet		112	42 - 120	
Chrysene	1.67	1.65		mg/kg wet		99	43 - 120	
Dibenz (a,h) anthracene	1.67	1.86		mg/kg wet		112	32 - 128	
Fluoranthene	1.67	1.64		mg/kg wet		98	46 - 120	
Fluorene	1.67	1.64		mg/kg wet		98	42 - 120	
Indeno (1,2,3-cd) pyrene	1.67	1.85		mg/kg wet		111	41 - 121	
Naphthalene	1.67	1.51		mg/kg wet		90	32 - 120	
Phenanthrene	1.67	1.64		mg/kg wet		98	45 - 120	
Pyrene	1.67	1.61		mg/kg wet		97	43 - 120	
1-Methylnaphthalene	1.67	1.14		mg/kg wet		68	32 - 120	
2-Methylnaphthalene	1.67	1.34		mg/kg wet		81	28 - 120	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Terphenyl-d14	103		18 - 120
2-Fluorobiphenyl	81		14 - 120
Nitrobenzene-d5	78		17 - 120

Lab Sample ID: 11K6276-MS1 Matrix: Soil

Analysis Batch: 11K6276 Prep Batch: 11K6276_P Sample Sample Spike Matrix Spike Matrix Spike %Rec. **Result** Qualifier Analyte Added **Result Qualifier** Unit D %Rec Limits ò Acenaphthene ND 1.84 1.30 mg/kg dry 71 19 - 120 Acenaphthylene ND 1.84 1.27 mg/kg dry ¢ 69 25 - 120 Anthracene ND 1.84 1.46 mg/kg dry Q. 80 28 - 125 ŏ ND 1.84 1.44 78 23 - 120 Benzo (a) anthracene mg/kg dry

Client Sample ID: Matrix Spike

Prep Type: Total

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

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

Lab Sample ID: 11K6276-MS1	
Matrix: Soil	
Analysis Batch: 11K6276	

Client Sample ID: Matrix Spike Prep Type: Total Prep Batch: 11K6276 P

Contraction of the second second	Sample	Sample	Spike	Matrix Spike	Matrix Spi	ke			%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzo (a) pyrene	ND		1.84	1.65		mg/kg dry	ġ	90	15 - 128
Benzo (b) fluoranthene	ND		1.84	1.79		mg/kg dry	0	98	12 - 133
Benzo (g,h,i) perylene	ND		1.84	1.62		mg/kg dry	0	88	22 - 120
Benzo (k) fluoranthene	ND		1.84	1.32		mg/kg dry	^o	72	28 - 120
Chrysene	ND		1.84	1.48		mg/kg dry	¢.	80	20 - 120
Dibenz (a,h) anthracene	ND		1.84	1.63		mg/kg dry	¢	89	12 - 128
Fluoranthene	ND		1.84	1.46		mg/kg dry	Ċ.	79	10 - 143
Fluorene	ND		1.84	1.47		mg/kg dry	Q	80	20 - 120
Indeno (1,2,3-cd) pyrene	ND		1.84	1.63		mg/kg dry	\$	89	22 - 121
Naphthalene	ND		1.84	1.37		mg/kg dry	\diamond	74	10 - 120
Phenanthrene	ND		1.84	1.44		mg/kg dry	Ø	79	21 - 122
Pyrene	ND		1.84	1.46		mg/kg dry	ö	79	20 - 123
1-Methylnaphthalene	ND		1.84	1.04		mg/kg dry	ø	57	10 - 120
2-Methylnaphthalene	ND		1.84	1.24		mg/kg dry	ø	67	13 - 120
	Matrix Spike	Matrix Spike							
and the second se									

	Watrix Spike	matrix spike	
Surrogate	%Recovery	Qualifier	Limits
Terphenyl-d14	80		18-120
2-Fluorobiphenyl	63		14 - 120
Nitrobenzene-d5	61		17 - 120

Lab Sample ID: 11K6276-MSD1 Matrix: Soil Analysis Batch: 11K6276

Sample Sample Spike Matrix Spike Dup Matrix Spike Dup %Rec. RPD %Rec Limits RPD Limit Analyte Result Qualifier Added Result Qualifier Unit D Đ. 50 ND 1.84 1.67 91 19 - 120 25 Acenaphthene mg/kg dry Ó Acenaphthylene ND 1.84 1.67 mg/kg dry 91 25 - 120 27 50 ø ND 1.84 1.87 101 28.125 Anthracene 24 49 mg/kg dry 35 Benzo (a) anthracene ND 1.84 1.82 mg/kg dry 99 23 - 120 23 50 ø Benzo (a) pyrene ND 1.84 2.06 mg/kg dry 112 15.128 22 50 ń Benzo (b) fluoranthene ND 1.84 2.16 mg/kg dry 117 12 - 133 19 50 ND 1.84 2.00 Q. 108 22 - 120 21 50 mg/kg dry Benzo (g,h,i) perylene 10 Benzo (k) fluoranthene ND 1.84 1.74 mg/kg dry 95 28 . 120 28 45 ND 1.84 1.85 Ø 100 20 - 120 22 49 Chrysene mg/kg dry Dibenz (a,h) anthracene ND 1.84 2.04 mg/kg dry 0 111 12 - 128 22 50 \$2 Fluoranthene ND 1.85 100 10.143 24 50 1.84 mg/kg dry \$2 20.120 Fluorene ND 1.84 1.89 mg/kg dry 102 25 50 Indeno (1,2,3-cd) pyrene ND 1.84 2.02 mg/kg dry \$5 109 22.121 21 50 \$2 10.120 ND 1.72 93 23 50 Naphthalene 1.84 mg/kg dry Phenanthrene ND 1.84 1.82 mg/kg dry 03 99 21 - 122 23 50 ND 1.82 03 99 20.123 22 50 1.84 mg/kg dry Pyrene ND 1.84 1.27 15 69 10 - 120 20 50 1-Methylnaphthalene mg/kg dry ND ¢. 2-Methylnaphthalene 1.84 1.53 83 13.120 21 50 mg/kg dry

	Matrix Spike Dup	Matrix Spike Dup			
Surrogate	%Recovery	Qualifier	Limits		
Terphenyl-d14	98		18 - 120		
2-Fluorobiphenyl	81		14 - 120		
Nitrobenzene-d5	76		17 - 120		

Client Sample ID: Matrix Spike Duplicate Prep Type: Total

Prep Batch: 11K6276_P

STATES OF

Method: SW-846 - General Chemistry Parameters

Lab Sample ID: 11K6756-DUP1							Client Sample ID: Du	plicate
Matrix: Soli							Prep Type	: I otal
Analysis Batch: 11K6756							Prep Batch: 11K6	756 P
The second s	Sample	Sample	Duplicate	Duplicate			and a second second	RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
% Dry Solids	88.3		86.5		%		2	20

QC Association Summary

Client: EEG - Small Business Group, Inc. (2449) Project/Site: [none] TestAmerica Job ID: NUK3501

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GCMS Volatiles

Analysis Batch: U021078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K6689-BLK1	Method Blank	Total	Soil	SW846 8260B	11K6689_P
11K6689-BLK2	Method Blank	Total	Soil	SW846 8260B	11K6689_P
11K6689-BS1	Lab Control Sample	Total	Soil	SW846 8260B	11K6689_P
11K6689-MS1	Matrix Spike	Total	Soil	SW846 8260B	11K6689_P
11K6689-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8260B	11K6689_P
NUK3501-01	324 Ash	Total	Soil	SW846 8260B	11K6689_P
NUK3501-02	338 Ash-1	Total	Soil	SW846 8260B	11K6689_P
Analysis Batch: U021	104				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K6686-BLK1	Method Blank	Total	Soil	SW846 8260B	11K6686_P
11K6686-BLK2	Method Blank	Total	Soil	SW846 8260B	11K6686_P
11K6686-BS1	Lab Control Sample	Total	Soil	SW846 8260B	11K6686 P
11K6686-BSD1	Lab Control Sample Dup	Total	Soil	SW846 8260B	11K6686_P
11K6686-MS1	338 Ash-2	Total	Soil	SW846 8260B	11K6686_P
11K6686-MSD1	338 Ash-2	Total	Soil	SW846 8260B	11K6686_P
NUK3501-01 - RE1	324 Ash	Total	Soil	SW846 8260B	11K6686_P
NUK3501-03 - RE1	338 Ash-2	Total	Soil	SW846 8260B	11K6686_P
Prep Batch: 11K6686	Р				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K6686-BLK1	Method Blank	Total	Soil	EPA 5035	
11K6686-BLK2	Method Blank	Total	Soil	EPA 5035	
11K6686-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11K6686-BSD1	Lab Control Sample Dup	Total	Soil	EPA 5035	
11K6686-MS1	338 Ash-2	Total	Soil	EPA 5035	
11K6686-MSD1	338 Ash-2	Total	Soil	EPA 5035	
NUK3501-01 - RE1	324 Ash	Total	Soil	EPA 5035	
NUK3501-03 - RE1	338 Ash-2	Total	Soil	EPA 5035	
Prep Batch: 11K6689	P				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K6689-BLK1	Method Blank	Total	Soil	EPA 5035	
11K6689-BLK2	Method Blank	Total	Soil	EPA 5035	
11K6689-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11K6689-MS1	Matrix Spike	Total	Soil	EPA 5035	
11K6689-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 5035	
NUK3501-01	324 Ash	Total	Soil	EPA 5035	
NUK3501-02	338 Ash-1	Total	Soil	EPA 5035	
GCMS Semivolatil	es				
Analysis Batch: 11K6	276				

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K6276-BLK1	Method Blank	Total	Soil	SW846 8270D	11K6276_P
11K6276-BS1	Lab Control Sample	Total	Soil	SW846 8270D	11K6276_P
11K6276-MS1	Matrix Spike	Total	Soil	SW846 8270D	11K6276_P
11K6276-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8270D	11K6276_P
NUK3501-01	324 Ash	Total	Soil	SW846 8270D	11K6276_P
NUK3501-02	338 Ash-1	Total	Soil	SW846 8270D	11K6276_P
NUK3501-03	338 Ash-2	Total	Soil	SW846 8270D	11K6276 P

GCMS Semivolatiles (Continued)

Analysis Batch: U020866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
NUK3501-01 - RE1	324 Ash	Total	Soil	SW846 8270D	11K6276_P

Prep Batch: 11K6276_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K6276-BLK1	Method Blank	Total	Soil	EPA 3550C	
11K6276-BS1	Lab Control Sample	Total	Soil	EPA 3550C	
11K6276-MS1	Matrix Spike	Total	Soil	EPA 3550C	
11K6276-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 3550C	
NUK3501-01	324 Ash	Total	Soil	EPA 3550C	
NUK3501-01 - RE1	324 Ash	Total	Soil	EPA 3550C	
NUK3501-02	338 Ash-1	Total	Soil	EPA 3550C	
NUK3501-03	338 Ash-2	Total	Soil	EPA 3550C	

Extractions

Analysis Batch: 11K6756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K6756-DUP1	Duplicate	Total	Soil	SW-846	11K6756_P
NUK3501-01	324 Ash	Total	Soil	SW-846	11K6756_P
NUK3501-02	338 Ash-1	Total	Soil	SW-846	11K6756_P
NUK3501-03	338 Ash-2	Total	Soil	SW-846	11K6756_P

Prep Batch: 11K6756_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K6756-DUP1	Duplicate	Total	Soil	% Solids	
NUK3501-01	324 Ash	Total	Soil	% Solids	
NUK3501-02	338 Ash-1	Total	Soil	% Solids	
NUK3501-03	338 Ash-2	Total	Soil	% Solids	

Lab Sample ID: NUK3501-01

Matrix: Soil Percent Solids: 79.6

Client Sample ID: 324 Ash Date Collected: 11/21/11 13:15 Date Received: 11/26/11 07:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
otal	Prep	EPA 5035	_	0.773	11K6689_P	11/21/11 13:15	AAN	TAL NSH
otal	Analysis	SW846 8260B		1.00	U021078	11/28/11 20:06	ККК Н	TAL NSH
otal	Prep	EPA 5035	RE1	0.833	11K6686_P	11/21/11 13:15	AAN	TAL NSH
otal	Analysis	SW846 8260B	RE1	50.0	U021104	11/29/11 16:45	ККК Н	TAL NSH
otal	Prep	EPA 3550C		0.985	11K6276_P	11/28/11 12:25	RCH2	TAL NSH
otal	Analysis	SW846 8270D		1.00	11K6276	11/28/11 21:42	BES	TAL NSH
otal	Prep	EPA 3550C	RE1	0.985	11K6276_P	11/28/11 12:25	RCH2	TAL NSH
otal	Analysis	SW846 8270D	RE1	20.0	U020866	11/29/11 11:45	BES	TAL NSH
otal	Prep	% Solids		1.00	11K6756_P	11/30/11 12:38	RRS	TAL NSH
otal	Analysis	SW-846		1.00	11K6756	12/01/11 11:44	RRS	TAL NSH

Client Sample ID: 338 Ash-1 Date Collected: 11/22/11 14:00

Date Received: 11/22/11 14:00

Lab Sample ID: NUK3501-02

Lab Sample ID: NUK3501-03

Matrix: Soil Percent Solids: 77.7

Matrix: Soil

Percent Solids: 76.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	EPA 5035	_	0.810	11K6689_P	11/22/11 14:00	AAN	TAL NSH
Total	Analysis	SW846 8260B		1.00	U021078	11/28/11 20:37	ККК Н	TAL NSH
Total	Prep	EPA 3550C		0.981	11K6276_P	11/28/11 12:25	RCH2	TAL NSH
Total	Analysis	SW846 8270D		1.00	11K6276	11/28/11 22:02	BES	TAL NSH
Total	Prep	% Solids		1.00	11K6756_P	11/30/11 12:38	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11K6756	12/01/11 11:44	RRS	TAL NSH

Client Sample ID: 338 Ash-2 Date Collected: 11/23/11 10:45 Date Received: 11/26/11 07:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Fotal	Prep	EPA 5035	RE1	0.831	11K6686_P	11/23/11 10:45	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE1	1.00	U021104	11/29/11 15:43	ККК Н	TAL NSH
otal	Prep	EPA 3550C		0.986	11K6276_P	11/28/11 12:25	RCH2	TAL NSH
Total	Analysis	SW846 8270D		1.00	11K6276	11/28/11 22:23	BES	TAL NSH
otal	Prep	% Solids		1.00	11K6756_P	11/30/11 12:38	RRS	TAL NSH
otal	Analysis	SW-846		1.00	11K6756	12/01/11 11:44	RRS	TAL NSH

Laboratory References:

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

Method Summary

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

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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]

TestAmerica Job ID: NUK3501

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Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Nashville		ACIL		393
TestAmerica Nashville	A2LA	ISO/IEC 17025		0453.07
TestAmerica Nashville	A2LA	WY UST		453.07
TestAmerica Nashville	AIHA - LAP	IHLAP		100790
TestAmerica Nashville	Alabama	State Program	4	41150
TestAmerica Nashville	Alaska	Alaska UST	10	UST-087
TestAmerica Nashville	Arizona	State Program	9	AZ0473
TestAmerica Nashville	Arkansas	State Program	6	88-0737
TestAmerica Nashville	California	NELAC	9	1168CA
TestAmerica Nashville	Canada (CALA)	Canada (CALA)		3744
TestAmerica Nashville	Colorado	State Program	8	N/A
TestAmerica Nashville	Connecticut	State Program	1	PH-0220
TestAmerica Nashville	Florida	NELAC	4	E87358
TestAmerica Nashville	lowa	State Program	7	131
TestAmerica Nashville	Kansas	NELAC	7	E-10229
TestAmerica Nashville	Kentucky	Kentucky UST	4	19
TestAmerica Nashville	Kentucky	State Program	4	90038
TestAmerica Nashville	Louisiana	NELAC	6	30613
TestAmerica Nashville	Louisiana	NELAC	6	LA100011
TestAmerica Nashville	Maryland	State Program	3	316
TestAmerica Nashville	Massachusetts	State Program	1	M-TN032
TestAmerica Nashville	Minnesota	NELAC	5	047-999-345
TestAmerica Nashville	Mississippi	State Program	4	N/A
TestAmerica Nashville	Montana	MT DEQ UST	8	NA
TestAmerica Nashville	New Hampshire	NELAC	1	2963
TestAmerica Nashville	New Jersey	NELAC	2	TN965
TestAmerica Nashville	New York	NELAC	2	11342
TestAmerica Nashville	North Carolina	North Carolina DENR	4	387
TestAmerica Nashville	North Dakota	State Program	8	R-146
TestAmerica Nashville	Ohio	OVAP	5	CL0033
TestAmerica Nashville	Oklahoma	State Program	6	9412
TestAmerica Nashville	Oregon	NELAC	10	TN200001
TestAmerica Nashville	Pennsylvania	NELAC	3	68-00585
TestAmerica Nashville	Rhode Island	State Program	1	LAO00268
TestAmerica Nashville	South Carolina	State Program	4	84009
TestAmerica Nashville	South Carolina	State Program	4	84009
TestAmerica Nashville	Tennessee	State Program	4	2008
TestAmerica Nashville	Texas	NELAC	6	T104704077-09-TX
TestAmerica Nashville	USDA	USDA		S-48469
TestAmerica Nashville	Utah	NELAC	8	TAN
TestAmerica Nashville	Virginia	NELAC Secondary AB	3	460152
TestAmerica Nashville	Virginia	State Program	3	00323
TestAmerica Nashville	Washington	State Program	10	C789
TestAmerica Nashville	West Virginia	West Virginia DEP	3	219
TestAmerica Nashville	Wisconsin	State Program	5	998020430

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.



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ATTACHMENT A

UST Certificate of Disposal

CONTRACTOR

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

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

TANK ID & LOCATION

UST 324Ash; 324 Ash Street, Laurel Bay Housing Area, MCAS Beaufort, S.C.

DISPOSAL LOCATION

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

TYPE OF 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.

Name) (Date)

Appendix C Laboratory Analytical Report - Groundwater



Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Description: BEALB324TW01WG20150521

Laboratory ID: QE23005-001 Matrix: Aqueous

Date Sampled:05/21/2015 1710

Date Received: 05/23/2015 Run Prep Method Analytical Method **Dilution Analysis Date Analyst** Batch **Prep Date** 5030B 8260B 05/27/2015 1707 EH1 75865 1 1 CAS Analytical Parameter Result Q LOQ LOD **DL Units Run** Number Method υ Benzene 71-43-2 8260B 0.45 5.0 0.45 0.21 ug/L 1 Ethylbenzene 100-41-4 8260B 0.51 U 5.0 0.51 0.17 ug/L 1 Naphthalene 91-20-3 8260B 2.8 J 5.0 0.96 0.32 ug/L 1 8260B U Toluene 108-88-3 0.48 5.0 0.48 0.16 ug/L 1 Xylenes (total) 1330-20-7 8260B 0.57 U 5.0 0.57 0.19 ug/L 1 Run 1 Acceptance Surrogate Q % Recovery Limits Bromofluorobenzene 105 75-120 1.2-Dichloroethane-d4 103 70-120 Toluene-d8 111 85-120 Dibromofluoromethane 105 85-115

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

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

Level 1 Report v2.1

Description: BEALB324TW01WG20150521

Laboratory ID: QE23005-001

Date Sampled:05/21/2015 1710

Matrix: Aqueous

Date Received: 05/23/2015

RunPrep Method13520C	Analytical Method 8270D (SIM)	Dilution Analy 1 06/01/	sis Date Analys 2015 1956 RBH	t Prep 05/28/2	Date 015 0939	Batch 75944				
Parameter		CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzo(a)anthracene		56-55-3	8270D (SIM)	0.027	J	0.20	0.040	0.019	ug/L	1
Benzo(b)fluoranthene		205-99-2	8270D (SIM)	0.021	J	0.20	0.040	0.019	ug/L	1
Benzo(k)fluoranthene		207-08-9	8270D (SIM)	0.040	U	0.20	0.040	0.024	ug/L	1
Chrysene		218-01-9	8270D (SIM)	0.032	J	0.20	0.040	0.021	ug/L	1
Dibenzo(a,h)anthracene		53-70-3	8270D (SIM)	0.080	U	0.20	0.080	0.040	ug/L	1
Run 1 Acceptance Surrogate Q % Recovery										
2-Methylnaphthalene-d10		60 15-	139							
Fluoranthene-d10		82 23-	154							

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

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

Level 1 Report v2.1

Appendix D Regulatory Correspondence



DHEC

PROMOTE PROTECT PROSPER Catherine B. Templeton, Director

May 15, 2014

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

RE: IGWA

Laurel Bay Underground Storage Tank Assessment Reports for: *See attached sheet*

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received the above referenced Underground Storage Tank Assessment Reports for the addresses listed above. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

The Department has reviewed the referenced assessment reports. The submitted analytical results indicate that petroleum constituents are above established Risk-Based Screening Levels and additional investigation is warranted. Specifically, the Department requests that a groundwater sampling proposal be generated to determine if there has been an impact to groundwater at this site.

Please note that the Department's decision is based on information provided by the Marine Corps Air Station (MCAS) to date. Any information found to be contradictory to this decision may require additional action. Furthermore, the Department retains the right to request further investigation if deemed necessary.

If you have any questions, please contact me at kriegkm@dhec.sc.gov or 803-898-0255.

Sincerely,

Kent Krieg Department of Defense Corrective Action Section Bureau of Land and Waste Management South Carolina Department of Health and Environmental Control

Cc: Russell Berry (via email) Craig Ehde (via email)

DHEC

PROMOLE PROTECT PROSPER

Catherine B. Templeton, Director

Attachment to: Krieg to Drawdy Subject: IGWA Dated 5/15/2014

Laurel Bay Underground Storage Tank Assessment Reports for: (121 addresses/139 tanks)

137 Laurel Bay Tank 2	387 Acorn
139 Laurel Bay	392 Acorn Tank 2
229 Cypress Tank 2	396 Acorn Tank 1
261 Beech Tank 1 •	396 Acorn Tank 2
261 Beech Tank 3	430 Elderberry
273 Birch Tank 1	433 Elderberry
273 Birch Tank 2	439 Elderberry
273 Birch Tank 3	440 Elderberry
276 Birch Tank 2	442 Elderberry
278 Birch Tank 2	443 Elderberry
291 Birch Tank 2	444 Elderberry Tank 1
300 Ash •	445 Elderberry
304 Ash •	446 Elderberry
314 Ash Tank 1	448 Elderberry
314 Ash Tank 2	449 Elderberry
322 Ash Tank 2 *	451 Elderberry
323 Ash *	453 Elderberry
324 Ash *	456 Elderberry Tank 1
325 Ash Tank 1 -	456 Elderberry Tank 2
325 Ash Tank 2	458 Elderberry Tank 1
326 Ash -	458 Elderberry Tank 3
336 Ash •	464 Dogwood
339 Ash •	466 Dogwood
343 Ash Tank 1 *	467 Dogwood
344 Ash Tank 1 *	468 Dogwood
348 Ash *	469 Dogwood
349 Ash Tank 1 *	471 Dogwood Tank 2
353 Ash Tank 1 *	471 Dogwood Tank 3
362 Aspen *	475 Dogwood Tank 1
376 Aspen *	475 Dogwood Tank 2
380 Aspen	516 Laurel Bay Tank 1 (UST#03747)
383 Aspen Tank 2 *	518 Laurel Bay

2600 Bull Street * Columbia, SC23201 * Phone; (803) 808/3452 * www.scdhee.gow

Laurel Bay Underground Storage Tank Assessment Reports for: (121 addresses/139 tanks) cont.

531 Laurel Bay	1219 Cardinal	
532 Laurel Bay	1272 Albatross	
635 Dahlia Tank 2	1305 Eagle	
638 Dahlia	1353 Cardinal	
640 Dahlia Tank 1	1356 Cardinal	
640 Dahlia Tank 2	1357 Cardinal	
645 Dahlia	1359 Cardinal	
647 Dahlia	1360 Cardinal	
648 Dahlia Tank 2	1361 Cardinal	
650 Dahlia Tank 1	1368 Cardinal	
650 Dahlia Tank 2	1370 Cardinal Tank 1	
652 Dahlia Tank 1	1377 Dove	
652 Dahlia Tank 2	1381 Dove	
760 Althea	1382 Dove	
763 Althea	1384 Dove	
771 Althea	1385 Dove	
927 Albacore	1389 Dove	
1015 Foxglove	1391 Dove	
1046 Gardenia	1392 Dove	
1062 Gardenia Tank 2	1393 Dove Tank 1	
1070 Heather	1393 Dove Tank 2	
1072 Heather	1406 Eagle	
1102 Iris Tank 1	1407 Eagle Tank 1	
1107 Iris	1411 Eagle Tank 1	
1126 Iris	1411 Eagle Tank 2	
1129 Iris	1412 Eagle	
1132 Iris	1413 Albatross	
1133 Iris Tank 1	1414 Albatross	
1138 Iris	1422 Albatross	
1144 Iris Tank 1	1425 Albatross	
1144 Iris Tank 2	1426 Albatross	1000
1148 Iris Tank 1	1432 Dove	
1148 Iris Tank 2	1434 Dove	
1161 Jasmine	1436 Dove	
1167 Jasmine	1438 Dove Tank 1	
1170 Jasmine	1440 Dove	
1190 Bobwhite	1442 Dove Tank 1	
1192 Bobwhite		



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

> Division of Waste Management Bureau of Land and Waste Management

February 22, 2016

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

RE: Approval and Concurrence with Draft Final Initial Groundwater Investigation Report-May and June 2015 Laurel Bay Military Housing Area Multiple Properties Dated October 2015

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received groundwater data in the above referenced Groundwater Investigation Report for the addresses attached. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

Per the Department's request, groundwater samples were collected from the attached referenced addresses. The Department reviewed the groundwater data and previous investigations and it agrees with the conclusions and recommendations included in the document. To further assess the impact to groundwater, permanent wells should be installed at the 52 stated addresses. For the remaining 91 addresses, there is no indication of contamination on the property and therefore no further investigation is required at this time.

Please note that the Department's decision is based on information provided by the Marine Corps Air Station (MCAS) to date. Any information found to be contradictory to this decision may require additional action. Furthermore, the Department retains the right to request further investigation if deemed necessary.

If you have any questions, please contact me at petruslb@dhec.sc.gov or 803-898-0294.

Sincerely,

LICA

Laurel Petrus RCRA Federal Facilities Section

Attachment: Specific Property Recommendations

Cc: Russell Berry, EQC Region 8 (via email) Shawn Dolan, Resolution Consultants (via email) Bryan Beck, NAVFAC MIDATLANTIC (via email) Craig Ehde (via email)

Attachment to: Petrus to Drawdy Subject: Draft Final Initial Groundwater Investigation Report-May and June 2015 Specific Property Recommendations Dated February 22, 2016

Draft Final Initial Groundwater Investigation Report for (143 addresses)

Permanent Monitoring Well Investigation recommendation (52 addresses)				
273 Birch Drive	1192 Bobwhite Drive			
325 Ash Street	1194 Bobwhite Drive			
326 Ash Street	1272 Albatross Drive			
336 Ash Street	1352 Cardinal Lane			
343 Ash Street 1356 Cardinal Lane				
353 Ash Street 1359 Cardinal Lane				
430 Elderberry Drive	0 Cardinal Lane			
440 Elderberry Drive	1362 Cardinal Lane			
456 Elderberry Drive	1370 Cardinal Lane			
458 Elderberry Drive	1382 Dove Lane			
468 Dogwood Drive	1384 Dove lane			
518 Laurel Bay Blvd	1385 Dove Lane			
635 Dahlia Drive	1389 Dove Lane			
638 Dahlia Drive	1392 Dove Lane			
640 Dahlia Drive	1393 Dove Lane			
647 Dahlia Drive	1407 Eagle Lane			
648 Dahlia Drive	1411 Eagle Lane			
650 Dahlia Drive	1418 Albatross Drive			
652 Dahlia Drive	1420 Albatross Drive			
760 Althea Street	1426 Albatross Drive			
1102 Iris Lane	1429 Albatross Drive			
1132 Iris Lane	1434 Dove Lane			
1133 Iris Lane	1436 Dove Lane			
1144 Iris Lane	1440 Dove Lane			
1148 Iris Lane	1442 Dove Lane			
1186 Bobwhite Drive	1444 Dove Lane			
No Further Action recommendation (91 addresses):				
137 Laurel Bay Blvd	771 Althea Street			
139 Laurel Bay Blvd	927 Albacore Street			
229 Cypress Street	1015 Foxglove Street			
261 Beech Street	1046 Gardenia Drive			
276 Birch Drive	1062 Gardenia Drive			
278 Birch Drive	1070 Heather Street			
291 Birch Drive	1072 Heather Street			

300 Ash Street	1107 Iris Lane
304 Ash Street	1126 Iris Lane
314 Ash Street	1129 Iris Lane
322 Ash Street	1138 Iris Lane
323 Ash Street	1161 Jasmine Street
324 Ash Street	1167 Jasmine Street
339 Ash Street	1170 Jasmine Street
344 Ash Street	1190 Bobwhite Drive
348 Ash Street	1219 Cardinal Lane
349 Ash Street	1305 Eagle Lane
362 Aspen Street	1353 Cardinal Lane
376 Aspen Street	1354 Cardinal Lane
380 Aspen Street	1357 Cardinal Lane
383 Aspen Street	1361 Cardinal Lane
387 Acom Drive	1364 Cardinal Lane
392 Acom Drive	1368 Cardinal Lane
396 Acom Drive	1377 Dove Lane
433 Elderberry Drive	1381 Dove Lane
439 Elderberry Drive	1391 Dove Lane
442 Elderberry Drive	1403 Eagle Lane
443 Elderberry Drive	1404 Eagle Lane
444 Elderberry Drive	1405 Eagle Lane
445 Elderberry Drive	1406 Eagle Lane
446 Elderberry Drive	1408 Eagle Lane
448 Elderberry Drive	1410 Eagle Lane
449 Elderberry Drive	1412 Eagle Lane
451 Elderberry Drive	1413 Albatross Drive
453 Elderberry Drive	1414 Albatross Drive
464 Dogwood Drive	1417 Albatross Drive
466 Dogwood Drive	1421 Albatross Drive
467 Dogwood Drive	1422 Albatross Drive
469 Dogwood Drive	1425 Albatross Drive
471 Dogwood Drive	1427 Albatross Drive
475 Dogwood Drive	1430 Dove Lane
516 Laurel Bay Blvd	1432 Dove Lane
531 Laurel Bay Blvd	1438 Dove Lane
532 Laurel Bay Blvd	1453 Cardinal Lane
645 Dablia Drive	1455 Cardinal Lane
763 Althea Street	

Attachment to: Petrus to Drawdy Subject: Draft Final Initial Groundwater Investigation Report-May and June 2015 Specific Property Recommendations Dated February 22, 2016, Page 2