SUMMARY REPORT
312 ASH STREET (FORMERLY 329 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 SUMMARY REPORT
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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



Appendix C

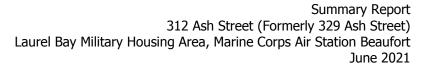
Appendix D

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List of Acronyms

bgs below ground surface

BTEX benzene, toluene, ethylbenzene, and xylenes

CTO 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).

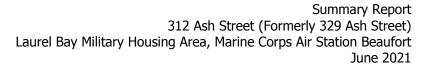
As of January 2014, the LBMH addresses were re-numbered to comply with the E-911 emergency response addressing system; however, in order to remain consistent with historical sampling and reporting for LBMH area, the residences will continue to be referenced with their original address numbers in sample 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 312 Ash Street (Formerly 329 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 312 Ash Street (Formerly 329 Ash Street). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 329 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 – November and December 2015* (Resolution Consultants, 2016). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C.

2.1 UST Removal and Soil Sampling

On April 25, 2012, a single 280 gallon heating oil UST was removed from the underneath the rear concrete patio at 312 Ash Street (Formerly 329 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 5'2" 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 312 Ash Street (Formerly 329 Ash Street) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated July 1, 2015, SCDHEC requested an IGWA for 312 Ash Street (Formerly 329 Ash Street) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

2.3 Groundwater Sampling

On November 12, 2015, a temporary monitoring well was installed at 312 Ash Street (Formerly 329 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 – November and December 2015* (Resolution Consultants, 2016).



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

2.4 Groundwater Analytical Results

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

The groundwater results collected from 312 Ash Street (Formerly 329 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

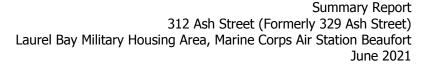
Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 312 Ash Street (Formerly 329 Ash Street). This NFA determination was obtained in a letter dated June 8, 2016. SCDHEC's NFA letter is provided in Appendix D.

4.0 REFERENCES

Marine Corps Air Station Beaufort, 2012. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 329

Ash Street, Laurel Bay Military Housing Area, August 2012.

Resolution Consultants, 2016. *Initial Groundwater Investigation Report – November and December 2015 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, April 2016.





- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2013. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 2.0*, April 2013.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2015. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 3.0*, May 2015.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2016. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 3.1*, February 2016.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2017. *R.61-92, Part 280, Underground Storage Tank Control Regulations*, March 2017.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2018. *Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service*, March 2018.
- South Carolina Department of Health and Environmental Control Bureau of Water, 2016. *R.61-71, Well Standards*, June 2016.

Tables



Table 1 Laboratory Analytical Results - Soil 312 Ash Street (Formerly 329 Ash Street) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Results Sample Collected 04/25/12						
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)								
Benzene	0.003	ND						
Ethylbenzene	1.15	ND						
Naphthalene	0.036	1.46						
Toluene	0.627	ND						
Xylenes, Total	13.01	0.0182						
Semivolatile Organic Compounds An	alyzed by EPA Method 8270D (mg/kg)							
Benzo(a)anthracene	0.66	0.186						
Benzo(b)fluoranthene	0.66	0.130						
Benzo(k)fluoranthene	0.66	0.0623						
Chrysene	0.66	0.196						
Dibenz(a,h)anthracene	0.66	ND						

Notes:

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

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Table 2 Laboratory Analytical Results - Groundwater 312 Ash Street (Formerly 329 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 11/12/15
Volatile Organic Compounds Analyzed	l by EPA Method 8260B (μg	/L)	
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	ND
Naphthalene	25	29.33	2.6
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	ND
Semivolatile Organic Compounds Ana	lyzed by EPA Method 8270) (μg/L)	
Benzo(a)anthracene	10	NA	0.061
Benzo(b)fluoranthene	10	NA	0.045
Benzo(k)fluoranthene	10	NA	ND
Chrysene	10	NA	0.062
Dibenz(a,h)anthracene	10	NA	ND

Notes:

(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

⁽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).

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



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 Military Housing Area, Marine Corps Air Station, Beaufort, SC
Facility Name or Company Site Identifier
329 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 L. DO / DO NOT, with to participate in the SUPERB Brogram (Circle one)
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	329Ash
Product(ex. Gas, Kerosene)	Heating oil
Capacity(ex. 1k, 2k)	280 gal
Age	Late 1950s
Construction Material(ex. Steel, FRP)	Steel
Month/Year of Last Use	Mid 1980s
Depth (ft.) To Base of Tank	5'2"
Spill Prevention Equipment Y/N	No
Overfill Prevention Equipment Y/N	No
Method of Closure Removed/Filled	Removed
Date Tanks Removed/Filled	4/25/2012
Visible Corrosion or Pitting Y/N	Yes
Visible Holes Y/N	Yes
Method of disposal for any USTs removed from the UST 329Ash was removed from the grant was a second from the grant	<u> </u>
Attachment "A."	
Method of disposal for any liquid petroleum, sludge disposal manifests) Contaminated water was pumped from	`

VII. PIPING INFORMATION

Construction Material(ex. Steel, FRP) Distance from UST to Dispenser		329Ash
Distance from UST to Dispenser		Steel
Number of Dispensers	Construction Material(ex. Steel, FRP)	& Copper
Type of System Pressure or Suction Was Piping Removed from the Ground? Y/N Visible Corrosion or Pitting Y/N	Distance from UST to Dispenser	N/A
Was Piping Removed from the Ground? Y/N Visible Corrosion or Pitting Y/N	Number of Dispensers	N/A
Visible Corrosion or Pitting Y/N	Type of System Pressure or Suction	Suction
Visible Holes Y/N	Was Piping Removed from the Ground? Y/N	No
Age	Visible Corrosion or Pitting Y/N	Yes
If any corrosion, pitting, or holes were observed, describe the location and extent for each piping recorrosion and pitting were found on the surface of the steel very 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	Visible Holes Y/N	No
Corrosion, pitting, or holes were observed, describe the location and extent for each piping of Corrosion and pitting were found on the surface of the steel very 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	Age	Late 1950s
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The USTs at the residences are constructed of single wall steel and formerly contained fuel oil for heating. These USTs were		
and formerly contained fuel oil for heating. These USTs were		
_		
Installed in the late 1950s and last used in the mid 1960s.	-	_
		ast used in the mid 1980s.

IX. SITE CONDITIONS

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

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
329Ash	Excav at fill end	Soil	Sandy	5'2"	4/25/12 1615 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.

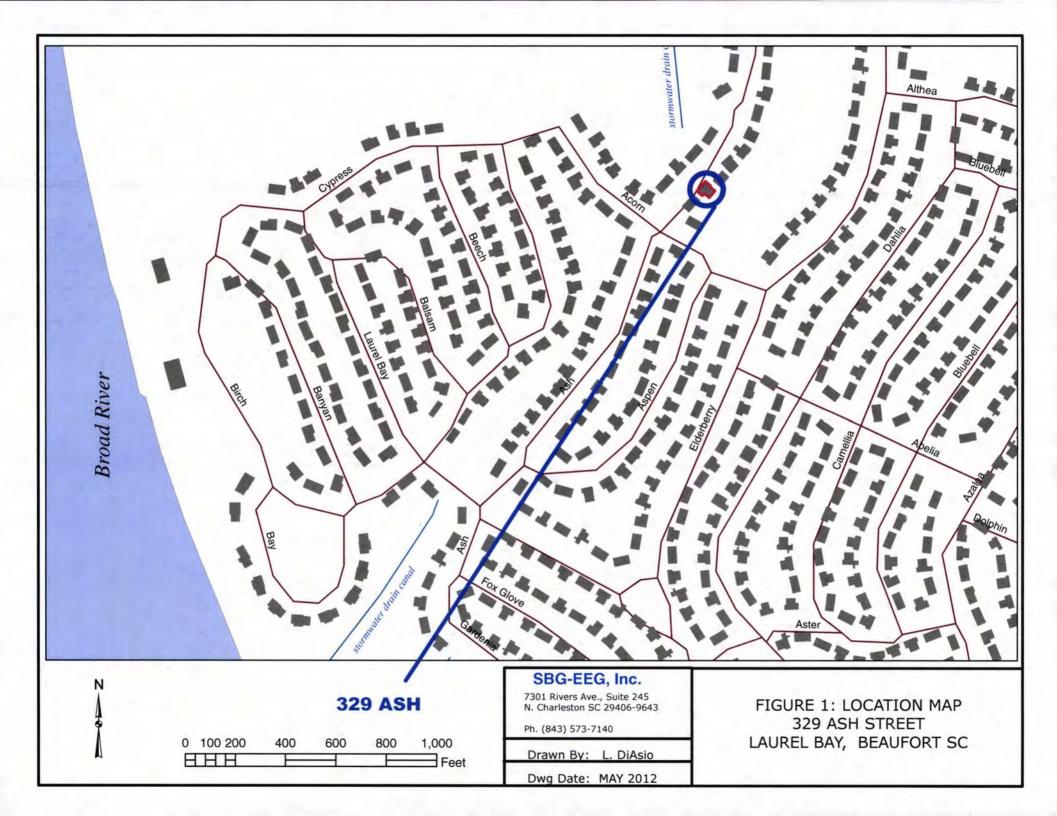
XII. RECEPTORS

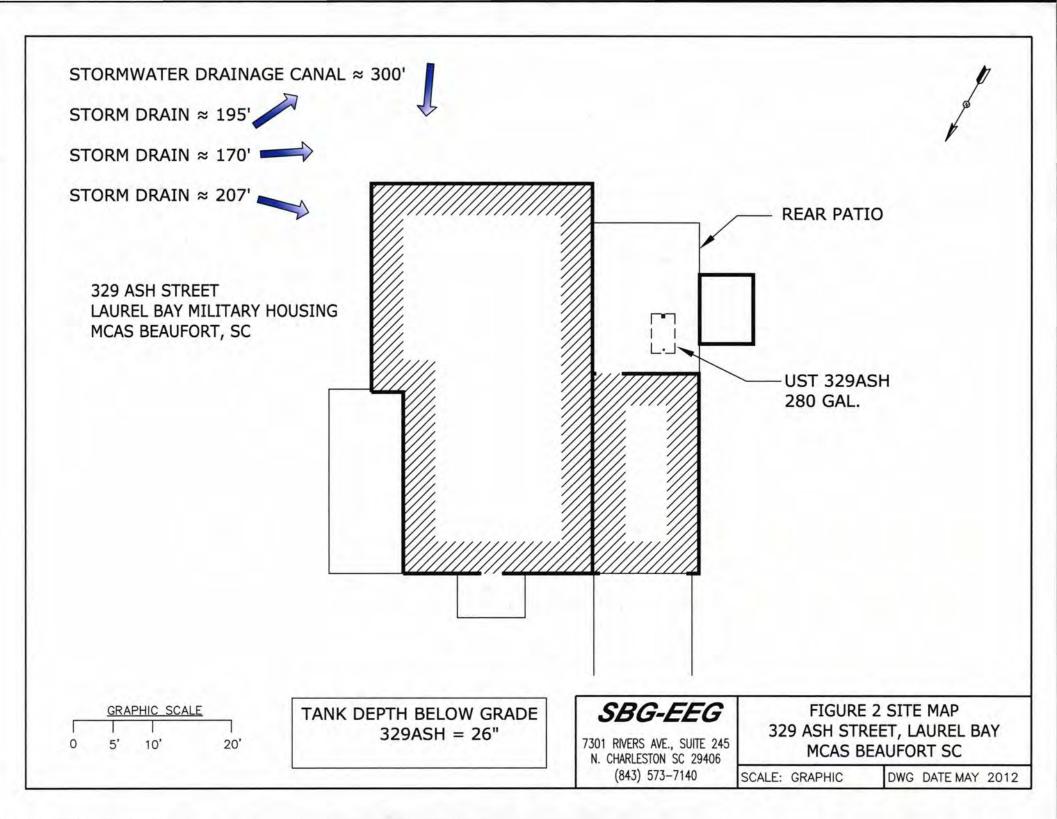
Yes No Are there any lakes, ponds, streams, or wetlands located within *X 1000 feet of the UST system? *stormwater canal & storm drains If yes, indicate type of receptor, distance, and direction on site map. Are there any public, private, or irrigation water supply wells within Х 1000 feet of the UST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

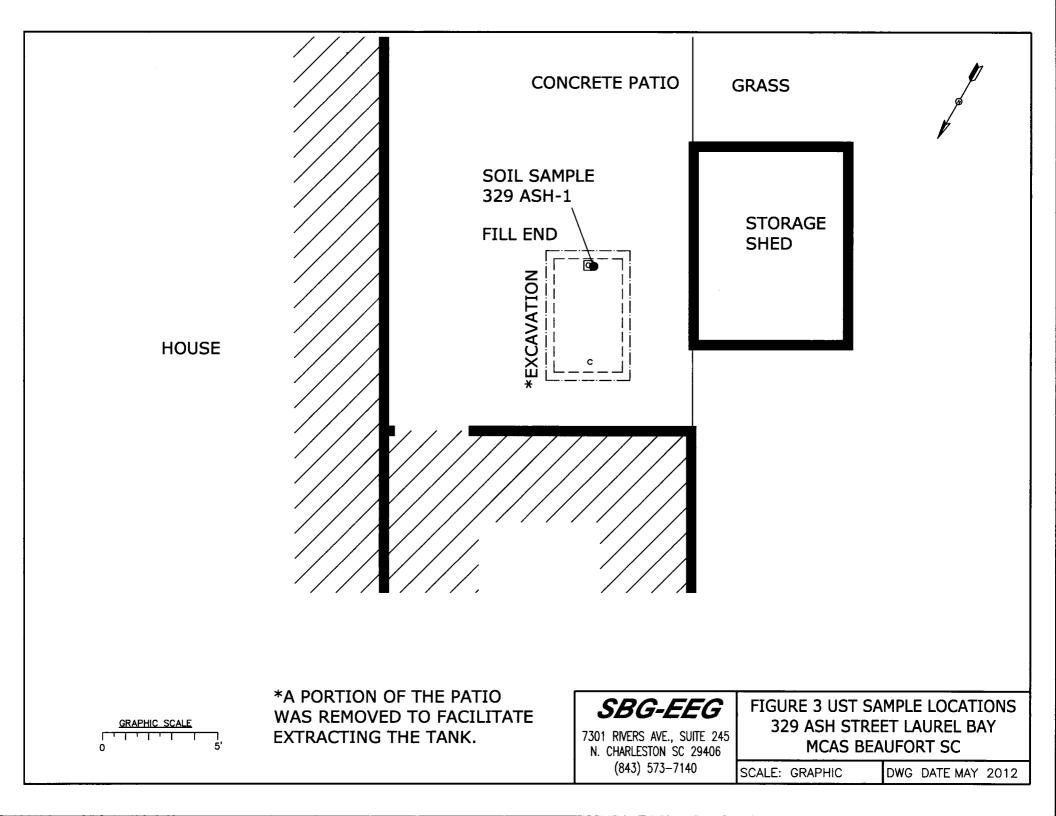
XIII. SITE MAP

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 329Ash.



Picture 2: UST 329Ash extraction in progress.



Picture 3: UST 329Ash extraction in progress.



Picture 4: 329 Ash Street patio near job completion.

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.

	, 					
329Ash						
ND						
oluene ND						
ND						
0.0182 mg/kg	9					
1.46 mg/kg						
0.186 mg/kg						
0.130 mg/kg						
0.0623 mg/kg						
0.196 mg/kg						
ND						
				<u> </u>		
			_			
		:				
	,					
	;					
	329Ash ND ND 0.0182 mg/kg 1.46 mg/kg 0.186 mg/kg 0.130 mg/kg 0.0623 mg/kg 0.196 mg/kg	329Ash ND ND ND 0.0182 mg/kg 1.46 mg/kg 0.186 mg/kg 0.130 mg/kg 0.0623 mg/kg	329Ash ND ND ND 0.0182 mg/kg 1.46 mg/kg 0.186 mg/kg 0.130 mg/kg 0.0623 mg/kg 0.196 mg/kg	329Ash ND ND ND 0.0182 mg/kg 1.46 mg/kg 0.186 mg/kg 0.130 mg/kg 0.0623 mg/kg 0.196 mg/kg	329Ash ND ND ND 0.0182 mg/kg 1.46 mg/kg 0.186 mg/kg 0.130 mg/kg 0.0623 mg/kg 0.196 mg/kg	ND N

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)



TestAmerica

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: NWD3539

Client Project/Site: [none]

Client Project Description: Laurel Bay Housing Project

For:

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

Attn: Tom McElwee

1 fatta

Authorized for release by: 5/14/2012 10:47:58 AM

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.

Project/Site: [none]

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Sample Summary

Client: EEG - Small Business Group, Inc. (2449)

Project/Site: [none]

TestAmerica Job ID: NWD3539

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
NWD3539-01	533 Laurel Bay	Soil	04/24/12 13:45	04/28/12 08:20	
NWD3539-02	329 Ash	Soil	04/25/12 16:15	04/28/12 08:20	

Definitions/Glossary

Client: EEG - Small Business Group, Inc. (2449)

Project/Site: [none]

TestAmerica Job ID: NWD3539

Qualifiers

GCMS Volatiles

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
В	Analyte was detected in the associated Method Blank.
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

GCMS Semivolatiles

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

Glossary

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

Client Sample Results

Client: EEG - Small Business Group, Inc. (2449)

Client Sample ID: 533 Laurel Bay

Date Collected: 04/24/12 13:45

Project/Site: [none]

Analyte

% Dry Solids

TestAmerica Job ID: NWD3539

Lab Sample ID: NWD3539-01

Matrix: Soil

Method: SW846 8260B - Volatile Analyte Benzene Ethylbenzene Naphthalene		ounds by E		60B					
Benzene Ethylbenzene		Qualifier							
Ethylbenzene	ND		RL		Unit	D	Prepared	Analyzed	Dil Fac
			0.00225	0.00124	mg/kg dry	0	04/24/12 13:45	05/05/12 18:32	1.00
Manhthalana	ND		0.00225	0.00124	mg/kg dry	0	04/24/12 13:45	05/05/12 18:32	1.00
Naphthalene	ND		0.00562	0.00281	mg/kg dry	0	04/24/12 13:45	05/05/12 18:32	1.00
Toluene	ND		0.00225	0.00124	mg/kg dry	0	04/24/12 13:45	05/05/12 18:32	1.00
Xylenes, total	ND		0.00562	0.00281	mg/kg dry	0	04/24/12 13:45	05/05/12 18:32	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	110		70 - 130				04/24/12 13:45	05/05/12 18:32	1.00
Dibromofluoromethane	100		70 - 130				04/24/12 13:45	05/05/12 18:32	1.00
Toluene-d8	99		70 - 130				04/24/12 13:45	05/05/12 18:32	1.00
4-Bromofluorobenzene	109		70 - 130				04/24/12 13:45	05/05/12 18:32	1.00
Method: SW846 8270D - Polyare	omatic Hydroca	rbons by El	PA 8270D						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0775	0.0393	mg/kg dry	0	05/01/12 16:30	05/02/12 12:25	1.00
Acenaphthylene	ND		0.0775	0.0393	mg/kg dry	0	05/01/12 16:30	05/02/12 12:25	1.00
Anthracene	ND		0.0775	0.0393	mg/kg dry	0	05/01/12 16:30	05/02/12 12:25	1.00
Benzo (a) anthracene	ND		0.0775	0.0393	mg/kg dry	ø	05/01/12 16:30	05/02/12 12:25	1.00
Benzo (a) pyrene	ND		0.0775	0.0393	mg/kg dry	**	05/01/12 16:30	05/02/12 12:25	1.00
Benzo (b) fluoranthene	ND		0.0775	0.0393	mg/kg dry	O	05/01/12 16:30	05/02/12 12:25	1.00
Benzo (g,h,i) perylene	ND		0.0775	0.0393	mg/kg dry	0	05/01/12 16:30	05/02/12 12:25	1.00
Benzo (k) fluoranthene	ND		0.0775	0.0393	mg/kg dry	0	05/01/12 16:30	05/02/12 12:25	1.00
Chrysene	ND		0.0775	0.0393	mg/kg dry	\$	05/01/12 16:30	05/02/12 12:25	1.00
Dibenz (a,h) anthracene	ND		0.0775	0.0393	mg/kg dry	0	05/01/12 16:30	05/02/12 12:25	1.00
Fluoranthene	ND		0.0775	0.0393	mg/kg dry	0	05/01/12 16:30	05/02/12 12:25	1.00
Fluorene	ND		0.0775	0.0393	mg/kg dry	0	05/01/12 16:30	05/02/12 12:25	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0775	0.0393	mg/kg dry	0	05/01/12 16:30	05/02/12 12:25	1.00
Naphthalene	ND		0.0775	0.0393	mg/kg dry	0	05/01/12 16:30	05/02/12 12:25	1.00
Phenanthrene	ND		0.0775	0.0393	mg/kg dry	0	05/01/12 16:30	05/02/12 12:25	1.00
Pyrene	ND		0.0775	0.0393	mg/kg dry	0	05/01/12 16:30	05/02/12 12:25	1.00
1-Methylnaphthalene	ND		0.0775	0.0393	mg/kg dry	ø	05/01/12 16:30	05/02/12 12:25	1.00
2-Methylnaphthalene	ND		0.0775	0.0393	mg/kg dry	0	05/01/12 16:30	05/02/12 12:25	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	74		18 - 120				05/01/12 16:30	05/02/12 12:25	1.00
2-Fluorobiphenyl	58		14 - 120				05/01/12 16:30	05/02/12 12:25	1.00
Nitrobenzene-d5	63		17 - 120				05/01/12 16:30	05/02/12 12:25	1.00

Analyzed

05/01/12 08:38

Prepared

04/30/12 12:35

Dil Fac

1.00

RL

0.500

MDL Unit

0.500 %

Result Qualifier

86.4

Client Sample Results

Client: EEG - Small Business Group, Inc. (2449)

Project/Site: [none]

TestAmerica Job ID: NWD3539

Client Sample ID: 329 Ash Lab Sample ID: NWD3539-02 Matrix: Soil

Date Collected: 04/25/12 16:15 Date Received: 04/28/12 08:20

Percent Solids: 79

ate Neceived. 04/20/12 00:20								r ercent oc	mus. 1
Method: SW846 8260B - Vola	atile Organic Comp	ounds by E	PA Method 82	60B					
Analyte	The state of the s	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND		0.00246	0.00135	mg/kg dry	**	04/25/12 16:15	05/05/12 19:04	1.0
Ethylbenzene	ND		0.00246	0.00135	mg/kg dry	0	04/25/12 16:15	05/05/12 19:04	1.0
Toluene	ND		0.00246	0.00135	mg/kg dry	0	04/25/12 16:15	05/05/12 19:04	1.0
Cylenes, total	0.0182		0.00616	0.00308	mg/kg dry	*	04/25/12 16:15	05/05/12 19:04	1.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4	125	300000000000000000000000000000000000000	70 - 130				04/25/12 16:15	05/05/12 19:04	1.0
Dibromofluoromethane	116		70 - 130				04/25/12 16:15	05/05/12 19:04	1.0
Foluene-d8	99		70 - 130				04/25/12 16:15	05/05/12 19:04	1.0
1-Bromofluorobenzene		ZX	70 - 130				04/25/12 16:15	05/05/12 19:04	1.0
Method: SW846 8260B - Vola	atile Organic Comp	ounds by F	PA Method 82	60B - RE	1				
Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fa
Naphthalene	1.46		0.344	0.172	mg/kg dry	*	04/25/12 16:15	05/09/12 14:47	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
.2-Dichloroethane-d4	109		70 - 130				04/25/12 16:15	05/09/12 14:47	50
Dibromofluoromethane	99		70 - 130				04/25/12 16:15	05/09/12 14:47	50
Foluene-d8	100		70 - 130				04/25/12 16:15	05/09/12 14:47	50
I-Bromofluorobenzene	98		70 - 130				04/25/12 16:15	05/09/12 14:47	50
Method: SW846 8270D - Poly	varomatic Hydroca	rhone by Fl	2Δ 8270D						
Analyte	Committee of the Commit	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Acenaphthene	0.398		0.0840	0.0426	mg/kg dry	0	05/01/12 16:30	05/02/12 12:47	1.0
Acenaphthylene	0.161		0.0840	0.0426	mg/kg dry	Ø	05/01/12 16:30	05/02/12 12:47	1.0
Anthracene	0.132		0.0840	0.0426	mg/kg dry	0	05/01/12 16:30	05/02/12 12:47	1.
Benzo (a) anthracene	0.186		0.0840	0.0426	mg/kg dry	*	05/01/12 16:30	05/02/12 12:47	1.
Benzo (a) pyrene	0.0915		0.0840	0.0426	mg/kg dry	-32	05/01/12 16:30	05/02/12 12:47	1.
Benzo (b) fluoranthene	0.130		0.0840	0.0426	mg/kg dry	400	05/01/12 16:30	05/02/12 12:47	1.
Benzo (g,h,i) perylene	ND		0.0840	0.0426	mg/kg dry	**	05/01/12 16:30	05/02/12 12:47	1.
Benzo (k) fluoranthene	0.0623	J	0.0840	0.0426	mg/kg dry	袋	05/01/12 16:30	05/02/12 12:47	1.
Chrysene	0.196		0.0840	0.0426	mg/kg dry	-DE	05/01/12 16:30	05/02/12 12:47	1.
Dibenz (a,h) anthracene	ND		0.0840	0.0426	mg/kg dry	0	05/01/12 16:30	05/02/12 12:47	1.
luoranthene	0.576		0.0840	0.0426	mg/kg dry	105	05/01/12 16:30	05/02/12 12:47	1.
luorene	0.917		0.0840	0.0426	mg/kg dry	0	05/01/12 16:30	05/02/12 12:47	1.
ndeno (1,2,3-cd) pyrene	ND		0.0840	0.0426	mg/kg dry	₩	05/01/12 16:30	05/02/12 12:47	1.
Vaphthalene	0.541		0.0840	0.0426	mg/kg dry	42	05/01/12 16:30	05/02/12 12:47	1.
Phenanthrene	2.02		0.0840	0.0426	mg/kg dry	305	05/01/12 16:30	05/02/12 12:47	1.
Pyrene	0.451		0.0840	0.0426	mg/kg dry	0	05/01/12 16:30	05/02/12 12:47	1.0
-Methylnaphthalene	2.24		0.0840	0.0426	mg/kg dry	\$	05/01/12 16:30	05/02/12 12:47	1.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil F
erphenyl-d14	78		18 - 120				05/01/12 16:30	05/02/12 12:47	1.
2-Fluorobiphenyl	72		14 - 120				05/01/12 16:30	05/02/12 12:47	1.
litrobenzene-d5	107		17 - 120				05/01/12 16:30	05/02/12 12:47	1.
Method: SW846 8270D - Poly	yaromatic Hydroca	rbons by El	PA 8270D - RE	1					
Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil F

Client Sample Results

Client: EEG - Small Business Group, Inc. (2449)

Project/Site: [none]

Client Sample ID: 329 Ash Lab Sample ID: NWD3539-02

Date Collected: 04/25/12 16:15 Date Received: 04/28/12 08:20 Matrix: Soil

TestAmerica Job ID: NWD3539

Percent Solids: 79

Method: SW-846 - Genera	I Chemistry Paramete	ers							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	79.0		0.500	0.500	%		04/30/12 12:35	05/01/12 08:38	1.00

Client: EEG - Small Business Group, Inc. (2449)

Project/Site: [none]

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

Lab Sample ID: 12E1561-BLK1

Matrix: Soil

Analysis Batch: V007525

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 12E1561_P

	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		05/05/12 00:54	05/05/12 15:50	1.00
Ethylbenzene	ND		0.00200	0.00110	mg/kg wet		05/05/12 00:54	05/05/12 15:50	1.00
Naphthalene	ND		0.00500	0.00250	mg/kg wet		05/05/12 00:54	05/05/12 15:50	1.00
Toluene	0.00116	J	0.00200	0.00110	mg/kg wet		05/05/12 00:54	05/05/12 15:50	1.00
Xylenes, total	ND		0.00500	0.00250	mg/kg wet		05/05/12 00:54	05/05/12 15:50	1.00
	Plank	Plank							

	Blank Blank				
Surrogate	%Recovery Qualifie	r Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	113	70 - 130	05/05/12 00:54	05/05/12 15:50	1.00
Dibromofluoromethane	105	70 - 130	05/05/12 00:54	05/05/12 15:50	1.00
Toluene-d8	99	70 - 130	05/05/12 00:54	05/05/12 15:50	1.00
4-Bromofluorobenzene	100	70 - 130	05/05/12 00:54	05/05/12 15:50	1.00

Lab Sample ID: 12E1561-BLK2

Matrix: Soil

Analysis Batch: V007525

Client Sample ID: Method Blank Prep Type: Total

Prep Batch: 12E1561_P

	Diank	Dialik							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0550	mg/kg wet		05/05/12 00:54	05/05/12 16:22	50.0
Ethylbenzene	ND		0.100	0.0550	mg/kg wet		05/05/12 00:54	05/05/12 16:22	50.0
Naphthalene	ND		0.250	0.125	mg/kg wet		05/05/12 00:54	05/05/12 16:22	50.0
Toluene	0.0875	J	0.100	0.0550	mg/kg wet		05/05/12 00:54	05/05/12 16:22	50.0
Xylenes, total	ND		0.250	0.125	mg/kg wet		05/05/12 00:54	05/05/12 16:22	50.0

	Blank	Blank				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	112		70 - 130	05/05/12 00:54	05/05/12 16:22	50.0
Dibromofluoromethane	106		70 - 130	05/05/12 00:54	05/05/12 16:22	50.0
Toluene-d8	98		70 - 130	05/05/12 00:54	05/05/12 16:22	50.0
4-Bromofluorobenzene	100		70 - 130	05/05/12 00:54	05/05/12 16:22	50.0

Lab Sample ID: 12E1561-BS1

Matrix: Soil

Analysis Batch: V007525

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 12E1561_P

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	50.0	52.1		ug/kg		104	75 - 127	
Ethylbenzene	50.0	50.6		ug/kg		101	80 - 134	
Naphthalene	50.0	63.4		ug/kg		127	69 - 150	
Toluene	50.0	48.0	В	ug/kg		96	80 - 132	
Xylenes, total	150	152		ug/kg		101	80 - 137	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	111		70 - 130
Dibromofluoromethane	107		70 - 130
Toluene-d8	94		70 - 130
4-Bromofluorobenzene	100		70 - 130

Client: EEG - Small Business Group, Inc. (2449)

Project/Site: [none]

TestAmerica Job ID: NWD3539

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

Blank Blank

Lab Sample ID: 12E2093-BLK1

Matrix: Soil

Analysis Batch: V007829

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 12E2093_P

	Blank	Blank							1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		05/09/12 10:40	05/09/12 13:38	1.00
Ethylbenzene	ND		0.00200	0.00110	mg/kg wet		05/09/12 10:40	05/09/12 13:38	1.00
Naphthalene	ND		0.00500	0.00250	mg/kg wet		05/09/12 10:40	05/09/12 13:38	1.00
Toluene	ND		0.00200	0.00110	mg/kg wet		05/09/12 10:40	05/09/12 13:38	1.00
Xylenes, total	ND		0.00500	0.00250	mg/kg wet		05/09/12 10:40	05/09/12 13:38	1.00

	Blank Blank				
Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	105	70 - 130	05/09/12 10:40	05/09/12 13:38	1.00
Dibromofluoromethane	97	70 - 130	05/09/12 10:40	05/09/12 13:38	1.00
Toluene-d8	102	70 - 130	05/09/12 10:40	05/09/12 13:38	1.00
4-Bromofluorobenzene	99	70 - 130	05/09/12 10:40	05/09/12 13:38	1.00

Lab Sample ID: 12E2093-BLK2

Matrix: Soil

Analysis Batch: V007829

Client Sample ID: Method Blank Prep Type: Total

Prep Batch: 12E2093_P

	Diami								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0550	mg/kg wet		05/09/12 10:40	05/09/12 14:05	50.0
Ethylbenzene	ND		0.100	0.0550	mg/kg wet		05/09/12 10:40	05/09/12 14:05	50.0
Naphthalene	ND		0.250	0.125	mg/kg wet		05/09/12 10:40	05/09/12 14:05	50.0
Toluene	ND		0.100	0.0550	mg/kg wet		05/09/12 10:40	05/09/12 14:05	50.0
Xylenes, total	ND		0.250	0.125	mg/kg wet		05/09/12 10:40	05/09/12 14:05	50.0

	Blank Blank				
Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	104	70 - 130	05/09/12 10:40	05/09/12 14:05	50.0
Dibromofluoromethane	98	70 - 130	05/09/12 10:40	05/09/12 14:05	50.0
Toluene-d8	102	70 - 130	05/09/12 10:40	05/09/12 14:05	50.0
4-Bromofluorobenzene	98	70 - 130	05/09/12 10:40	05/09/12 14:05	50.0

Lab Sample ID: 12E2093-BS1

Matrix: Soil

Analysis Batch: V007829

Client Sample ID: Lab Control Sample Prep Type: Total

Prep Batch: 12E2093_P

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	50.0	55.8		ug/kg		112	75 - 127	
Ethylbenzene	50.0	59.0		ug/kg		118	80 - 134	
Naphthalene	50.0	52.6		ug/kg		105	69 - 150	
Toluene	50.0	58.5		ug/kg		117	80 - 132	
Xylenes, total	150	174		ug/kg		116	80 - 137	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	105		70 - 130
Dibromofluoromethane	99		70 - 130
Toluene-d8	101		70 - 130
4-Bromofluorohenzene	97		70 130

TestAmerica Job ID: NWD3539

Client: EEG - Small Business Group, Inc. (2449)

Project/Site: [none]

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

Lab Sample ID: 12E2093-BSD1 Client Sample ID: Lab Control Sample Dup **Prep Type: Total**

Matrix: Soil

Analysis Batch: V007829 Prep Batch: 12E2093_P

Water a contract to the state of	Spike	LCS Dup	LCS Dup				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	50.0	57.6		ug/kg		115	75 - 127	3	50
Ethylbenzene	50.0	60.3		ug/kg		121	80 - 134	2	50
Naphthalene	50.0	52.5		ug/kg		105	69 - 150	0.2	50
Toluene	50.0	59.9		ug/kg		120	80 - 132	2	50
Xylenes, total	150	178		ug/kg		119	80 - 137	2	50

LCS Dup LCS Dup %Recovery Qualifier Limits Surrogate 106 70 - 130 1,2-Dichloroethane-d4 100 70 - 130 Dibromofluoromethane Toluene-d8 100 70 - 130 4-Bromofluorobenzene 97 70 - 130

Lab Sample ID: 12E2093-MS1

Matrix: Soil

Analysis Batch: V007829

Client Sample ID: Matrix Spike Prep Type: Total

Prep Batch: 12E2093_P

	Sample	Sample	Spike	Matrix Spike	Matrix Spi	ke			%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	ND		20.6	24.1		mg/kg wet		117	31 - 143
Ethylbenzene	5.25		20.6	32.1		mg/kg wet		130	23 - 161
Naphthalene	3.66		20.6	28.8		mg/kg wet		122	10 - 176
Toluene	5.26		20.6	30.6		mg/kg wet		123	30 - 155
Xylenes, total	35.8		61.9	114		mg/kg wet		127	25 - 162

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

Lab Sample ID: 12E2093-MSD1

Matrix: Soil

Analysis Batch: V007829

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total

Prep Batch: 12E2093 P

	Sample	Sample	Spike	ıtrix Spike Dup	Matrix Spi	ke Duş			%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		20.6	24.0		mg/kg wet		116	31 - 143	0.1	50
Ethylbenzene	5.25		20.6	31.5		mg/kg wet		127	23 - 161	2	50
Naphthalene	3.66		20.6	28.4		mg/kg wet		120	10 - 176	1	50
Toluene	5.26		20.6	29.9		mg/kg wet		119	30 - 155	2	50
Xylenes, total	35.8		61.9	112		mg/kg wet		123	25 - 162	2	50

Matrix	Cnika	Dun	Matrix	Spike Dup	
waurx	SDIKE	DUD	Wallix	SDIKE DUD	,

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	102		70 - 130
Dibromofluoromethane	99		70 - 130
Toluene-d8	100		70 - 130
4-Bromofluorobenzene	99		70 - 130

Client: EEG - Small Business Group, Inc. (2449)

Project/Site: [none]

TestAmerica Job ID: NWD3539

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

Lab Sample ID: 12D6187-BLK1

Matrix: Soil

Analysis Batch: 12D6187

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 12D6187_P

Analysis Batch: 12D6187	200	Sec. 12.					F	Prep Batch: 120	06187_P
Analyte		Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0340	mg/kg wet		05/01/12 16:30	05/02/12 10:55	1.00
Acenaphthylene	ND		0.0670	0.0340	mg/kg wet		05/01/12 16:30	05/02/12 10:55	1.00
Anthracene	ND		0.0670	0.0340	mg/kg wet		05/01/12 16:30	05/02/12 10:55	1.00
Benzo (a) anthracene	ND		0.0670	0.0340	mg/kg wet		05/01/12 16:30	05/02/12 10:55	1.00
Benzo (a) pyrene	ND		0.0670	0.0340	mg/kg wet		05/01/12 16:30	05/02/12 10:55	1.00
Benzo (b) fluoranthene	ND		0.0670	0.0340	mg/kg wet		05/01/12 16:30	05/02/12 10:55	1.00
Benzo (g,h,i) perylene	ND		0.0670	0.0340	mg/kg wet		05/01/12 16:30	05/02/12 10:55	1.00
Benzo (k) fluoranthene	ND		0.0670	0.0340	mg/kg wet		05/01/12 16:30	05/02/12 10:55	1.00
Chrysene	ND		0.0670	0.0340	mg/kg wet		05/01/12 16:30	05/02/12 10:55	1.00
Dibenz (a,h) anthracene	ND		0.0670	0.0340	mg/kg wet		05/01/12 16:30	05/02/12 10:55	1.00
Fluoranthene	ND		0.0670	0.0340	mg/kg wet		05/01/12 16:30	05/02/12 10:55	1.00
Fluorene	ND		0.0670	0.0340	mg/kg wet		05/01/12 16:30	05/02/12 10:55	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0670	0.0340	mg/kg wet		05/01/12 16:30	05/02/12 10:55	1.00
Naphthalene	ND		0.0670	0.0340	mg/kg wet		05/01/12 16:30	05/02/12 10:55	1.00
Phenanthrene	ND		0.0670	0.0340	mg/kg wet		05/01/12 16:30	05/02/12 10:55	1.00
Pyrene	ND		0.0670	0.0340	mg/kg wet		05/01/12 16:30	05/02/12 10:55	1.00
1-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		05/01/12 16:30	05/02/12 10:55	1.00
2-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		05/01/12 16:30	05/02/12 10:55	1.00
	Blank	Blank							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	79		18 - 120				05/01/12 16:30	05/02/12 10:55	1.00
2-Fluorobiphenyl	63		14 - 120				05/01/12 16:30	05/02/12 10:55	1.00
Nitrobenzene-d5	69		17 - 120				05/01/12 16:30	05/02/12 10:55	1.00

Lab Sample ID: 12D6187-BS1

Matrix: Soil

Analysis Batch: 12D6187

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 12D6187_P

Analysis Batch. 12D0107	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthene	1.67	1.09		mg/kg wet		66	36 - 120
Acenaphthylene	1.67	1.11		mg/kg wet		67	38 - 120
Anthracene	1.67	1.18		mg/kg wet		70	46 - 124
Benzo (a) anthracene	1.67	1.18		mg/kg wet		71	45 - 120
Benzo (a) pyrene	1.67	1.30		mg/kg wet		78	45 - 120
Benzo (b) fluoranthene	1.67	1.10		mg/kg wet		66	42 - 120
Benzo (g,h,i) perylene	1.67	1.22		mg/kg wet		73	38 - 120
Benzo (k) fluoranthene	1.67	1.27		mg/kg wet		76	42 - 120
Chrysene	1.67	1.21		mg/kg wet		72	43 - 120
Dibenz (a,h) anthracene	1.67	1.20		mg/kg wet		72	32 - 128
Fluoranthene	1.67	1.17		mg/kg wet		70	46 - 120
Fluorene	1.67	1.15		mg/kg wet		69	42 - 120
Indeno (1,2,3-cd) pyrene	1.67	1.21		mg/kg wet		73	41 - 121
Naphthalene	1.67	1.04		mg/kg wet		62	32 - 120
Phenanthrene	1.67	1.17		mg/kg wet		70	45 - 120
Pyrene	1.67	1.18		mg/kg wet		71	43 - 120
1-Methylnaphthalene	1.67	0.782		mg/kg wet		47	32 - 120
2-Methylnaphthalene	1.67	0.993		mg/kg wet		60	28 - 120

Client: EEG - Small Business Group, Inc. (2449)

Project/Site: [none]

TestAmerica Job ID: NWD3539

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

Lab Sample ID: 12D6187-BS1

Matrix: Soil

Analysis Batch: 12D6187

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 12D6187_P

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Terphenyl-d14	65		18 - 120
2-Fluorobiphenyl	51		14 - 120
Nitrobenzene-d5	53		17 - 120

Lab Sample ID: 12D6187-MS1

Matrix: Soil

Analysis Batch: 12D6187

Client Sample ID: 533 Laurel Bay

Prep Type: Total

Prep Batch: 12D6187_P

	Sample	Sample	Spike	Matrix Spike	Matrix Spil	ke			%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Acenaphthene	ND		1.88	1.40		mg/kg dry	农	75	19 - 120	
Acenaphthylene	ND		1.88	1.38		mg/kg dry	Ò	74	25 - 120	
Anthracene	ND		1.88	1.51		mg/kg dry	0	81	28 - 125	
Benzo (a) anthracene	ND		1.88	1.53		mg/kg dry	O	82	23 - 120	
Benzo (a) pyrene	ND		1.88	1.72		mg/kg dry	42	92	15 - 128	
Benzo (b) fluoranthene	ND		1.88	1.61		mg/kg dry	Ø	86	12 - 133	
Benzo (g,h,i) perylene	ND		1.88	1.58		mg/kg dry	100	84	22 - 120	
Benzo (k) fluoranthene	ND		1.88	1.50		mg/kg dry	章	80	28 - 120	
Chrysene	ND		1.88	1.53		mg/kg dry	0	81	20 - 120	
Dibenz (a,h) anthracene	ND		1.88	1.57		mg/kg dry	0	84	12 - 128	
Fluoranthene	ND		1.88	1.56		mg/kg dry	益	83	10 - 143	
Fluorene	ND		1.88	1.44		mg/kg dry	42	77	20 - 120	
Indeno (1,2,3-cd) pyrene	ND		1.88	1.59		mg/kg dry	ø	85	22 - 121	
Naphthalene	ND		1.88	1.22		mg/kg dry	0	65	10 - 120	
Phenanthrene	ND		1.88	1.49		mg/kg dry	*	79	21 - 122	
Pyrene	ND		1.88	1.50		mg/kg dry	0	80	20 - 123	
1-Methylnaphthalene	ND		1.88	0.953		mg/kg dry	0	51	10 - 120	
2-Methylnaphthalene	ND		1.88	1.21		mg/kg dry	0	64	13 - 120	

Matrix	Spike	Matrix	Spike

Surrogate	%Recovery	Qualifier	Limits
Terphenyl-d14	79		18 - 120
2-Fluorobiphenyl	58		14 - 120
Nitrobenzene-d5	57		17 - 120

Lab Sample ID: 12D6187-MSD1

Matrix: Soil

Analysis Batch: 12D6187

Prep Type: Total

Prep Batch: 12D6187 P

Analysis Daten. 1200101									rich Date	II. IZDU	101_1
	Sample	Sample	Spike	ıtrix Spike Dup	Matrix Spi	ke Duj			%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthene	ND		1.90	1.40		mg/kg dry	0	74	19 - 120	0.06	50
Acenaphthylene	ND		1.90	1.36		mg/kg dry	300	71	25 - 120	2	50
Anthracene	ND		1.90	1.52		mg/kg dry	Ø	80	28 - 125	0.1	49
Benzo (a) anthracene	ND		1.90	1.51		mg/kg dry	蒜	79	23 - 120	1	50
Benzo (a) pyrene	ND		1.90	1.69		mg/kg dry	*	89	15 - 128	1	50
Benzo (b) fluoranthene	ND		1.90	1.61		mg/kg dry	*	85	12 - 133	0.4	50
Benzo (g,h,i) perylene	ND		1.90	1.58		mg/kg dry	0	83	22 - 120	0.4	50
Benzo (k) fluoranthene	ND		1.90	1.44		mg/kg dry	13	76	28 - 120	4	45
Chrysene	ND		1.90	1.49		mg/kg dry	-0	78	20 - 120	3	49
Dibenz (a,h) anthracene	ND		1.90	1.56		mg/kg dry	φ	82	12 - 128	0.5	50
Fluoranthene	ND		1.90	1.54		mg/kg dry	-03	81	10 - 143	2	50

Client: EEG - Small Business Group, Inc. (2449)

Project/Site: [none]

TestAmerica Job ID: NWD3539

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

Lab Sample ID: 12D6187-MSD1 Matrix: Soil

Analysis Batch: 12D6187

Client Sample ID: 533 Laurel Bay

Prep Type: Total

Prep Batch: 12D6187_P

	Sample	Sample	Spike	ıtrix Spike Dup	Matrix Spil	ke Duş			%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Fluorene	ND		1.90	1.42		mg/kg dry	*	74	20 - 120	2	50
Indeno (1,2,3-cd) pyrene	ND		1.90	1.57		mg/kg dry	*	83	22 - 121	1	50
Naphthalene	ND		1.90	1.22		mg/kg dry	\Rightarrow	64	10 - 120	0.2	50
Phenanthrene	ND		1.90	1.47		mg/kg dry	**	77	21 - 122	1	50
Pyrene	ND		1.90	1.49		mg/kg dry	*	78	20 - 123	0.4	50
1-Methylnaphthalene	ND		1.90	0.947		mg/kg dry	*	50	10 - 120	0.6	50
2-Methylnaphthalene	ND		1.90	1.20		mg/kg dry	₩	63	13 - 120	0.5	50

Matrix Spike Dup Matrix Spike Dup

Surrogate	%Recovery	Qualifier	Limits
Terphenyl-d14	77		18 - 120
2-Fluorobiphenyl	58		14 - 120
Nitrobenzene-d5	58		17 - 120

Method: SW-846 - General Chemistry Parameters

Lab Sample ID: 12D6345-DUP1

Matrix: Soil

-L -- - D-4-L 40D004F

Client Sample ID: Duplicate

Prep Type: Total

	Sample	Sample	Duplicate	Duplicate				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
% Dry Solids	80.5	7	80.0		%		0.7	20

TestAmerica Nashville 5/14/2012

QC Association Summary

Client: EEG - Small Business Group, Inc. (2449)

Project/Site: [none]

TestAmerica Job ID: NWD3539

GCMS Volatiles

Analys	sis	Bat	tch:	VO	007	525
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Client Sample ID	Prep Type	Matrix	Method	Prep Batch
Method Blank	Total	Soil	SW846 8260B	12E1561_P
Method Blank	Total	Soil	SW846 8260B	12E1561_P
Lab Control Sample	Total	Soil	SW846 8260B	12E1561_P
533 Laurel Bay	Total	Soil	SW846 8260B	12E1561_P
329 Ash	Total	Soil	SW846 8260B	12E1561_P
	Method Blank Method Blank Lab Control Sample 533 Laurel Bay	Method Blank Total Method Blank Total Lab Control Sample Total 533 Laurel Bay Total	Method BlankTotalSoilMethod BlankTotalSoilLab Control SampleTotalSoil533 Laurel BayTotalSoil	Method Blank Total Soil SW846 8260B Method Blank Total Soil SW846 8260B Lab Control Sample Total Soil SW846 8260B 533 Laurel Bay Total Soil SW846 8260B

Analysis Batch: V007829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12E2093-BLK1	Method Blank	Total	Soil	SW846 8260B	12E2093_P
12E2093-BLK2	Method Blank	Total	Soil	SW846 8260B	12E2093_P
12E2093-BS1	Lab Control Sample	Total	Soil	SW846 8260B	12E2093_P
12E2093-BSD1	Lab Control Sample Dup	Total	Soil	SW846 8260B	12E2093_P
12E2093-MS1	Matrix Spike	Total	Soil	SW846 8260B	12E2093_P
12E2093-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8260B	12E2093_P
NWD3539-02 - RE1	329 Ash	Total	Soil	SW846 8260B	12E2093_P

Prep Batch: 12E1561_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12E1561-BLK1	Method Blank	Total	Soil	EPA 5035	
12E1561-BLK2	Method Blank	Total	Soil	EPA 5035	
12E1561-BS1	Lab Control Sample	Total	Soil	EPA 5035	
NWD3539-01	533 Laurel Bay	Total	Soil	EPA 5035	
NWD3539-02	329 Ash	Total	Soil	EPA 5035	

Prep Batch: 12E2093_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12E2093-BLK1	Method Blank	Total	Soil	EPA 5035	
12E2093-BLK2	Method Blank	Total	Soil	EPA 5035	
12E2093-BS1	Lab Control Sample	Total	Soil	EPA 5035	
12E2093-BSD1	Lab Control Sample Dup	Total	Soil	EPA 5035	
12E2093-MS1	Matrix Spike	Total	Soil	EPA 5035	
12E2093-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 5035	
NWD3539-02 - RE1	329 Ash	Total	Soil	EPA 5035	

GCMS Semivolatiles

Analysis Batch: 12D6187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12D6187-BLK1	Method Blank	Total	Soil	SW846 8270D	12D6187_P
12D6187-BS1	Lab Control Sample	Total	Soil	SW846 8270D	12D6187_P
12D6187-MS1	533 Laurel Bay	Total	Soil	SW846 8270D	12D6187_P
12D6187-MSD1	533 Laurel Bay	Total	Soil	SW846 8270D	12D6187_P
NWD3539-01	533 Laurel Bay	Total	Soil	SW846 8270D	12D6187_P
NWD3539-02	329 Ash	Total	Soil	SW846 8270D	12D6187_P
NWD3539-02 - RE1	329 Ash	Total	Soil	SW846 8270D	12D6187_P

Prep Batch: 12D6187_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12D6187-BLK1	Method Blank	Total	Soil	EPA 3550C	
12D6187-BS1	Lab Control Sample	Total	Soil	EPA 3550C	
12D6187-MS1	533 Laurel Bay	Total	Soil	EPA 3550C	
12D6187-MSD1	533 Laurel Bay	Total	Soil	EPA 3550C	

QC Association Summary

Client: EEG - Small Business Group, Inc. (2449)

Project/Site: [none]

TestAmerica Job ID: NWD3539

GCMS Semivolatiles (Continued)

Prep Batch:	12D6187_P	(Continued)
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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
NWD3539-01	533 Laurel Bay	Total	Soil	EPA 3550C	
NWD3539-02	329 Ash	Total	Soil	EPA 3550C	
NWD3539-02 - RE1	329 Ash	Total	Soil	EPA 3550C	

Extractions

Analysis Batch: 12D6345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12D6345-DUP1	Duplicate	Total	Soil	SW-846	12D6345_P
NWD3539-01	533 Laurel Bay	Total	Soil	SW-846	12D6345_P
NWD3539-02	329 Ash	Total	Soil	SW-846	12D6345_P

Prep Batch: 12D6345_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12D6345-DUP1	Duplicate	Total	Soil	% Solids	
NWD3539-01	533 Laurel Bay	Total	Soil	% Solids	
NWD3539-02	329 Ash	Total	Soil	% Solids	

Lab Chronicle

Client: EEG - Small Business Group, Inc. (2449)

Project/Site: [none]

TestAmerica Job ID: NWD3539

Lab Sample ID: NWD3539-01

Matrix: Soil

Percent Solids: 86.4

Client Sample ID: 533 Laurel Bay

Date Collected: 04/24/12 13:45 Date Received: 04/28/12 08:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.971	12E1561_P	04/24/12 13:45	TSP	TAL NSH
Total	Analysis	SW846 8260B		1.00	V007525	05/05/12 18:32	KKK H	TAL NSH
Total	Prep	EPA 3550C		0.999	12D6187_P	05/01/12 16:30	KDF	TAL NSH
Total	Analysis	SW846 8270D		1.00	12D6187	05/02/12 12:25	WLL	TAL NSH
Total	Prep	% Solids		1.00	12D6345_P	04/30/12 12:35	KDJ	TAL NSH
Total	Analysis	SW-846		1.00	12D6345	05/01/12 08:38	KDJ	TAL NSH

Client Sample ID: 329 Ash

Date Collected: 04/25/12 16:15 Date Received: 04/28/12 08:20 Lab Sample ID: NWD3539-02

Matrix: Soil Percent Solids: 79

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.973	12E1561_P	04/25/12 16:15	TSP	TAL NSH
Total	Analysis	SW846 8260B		1.00	V007525	05/05/12 19:04	ккк н	TAL NSH
Total	Prep	EPA 5035	RE1	1.09	12E2093_P	04/25/12 16:15	TSP	TAL NSH
Total	Analysis	SW846 8260B	RE1	50.0	V007829	05/09/12 14:47	MJH /	TAL NSH
Total	Prep	EPA 3550C		0.990	12D6187_P	05/01/12 16:30	KDF	TAL NSH
Total	Analysis	SW846 8270D		1.00	12D6187	05/02/12 12:47	WLL	TAL NSH
Total	Prep	EPA 3550C	RE1	0.990	12D6187_P	05/01/12 16:30	KDF	TAL NSH
Total	Analysis	SW846 8270D	RE1	2.00	12D6187	05/03/12 13:22	WLL	TAL NSH
Total	Prep	% Solids		1.00	12D6345_P	04/30/12 12:35	KDJ	TAL NSH
Total	Analysis	SW-846		1.00	12D6345	05/01/12 08:38	KDJ	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]

TestAmerica Job ID: NWD3539

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: NWD3539

aboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Nashville		ACIL		393
estAmerica Nashville	A2LA	ISO/IEC 17025		0453.07
estAmerica Nashville	Alabama	State Program	4	41150
estAmerica Nashville	Alaska (UST)	State Program	10	UST-087
estAmerica Nashville	Arizona	State Program	9	AZ0473
estAmerica Nashville	Arkansas DEQ	State Program	6	88-0737
estAmerica Nashville	California	NELAC	9	1168CA
estAmerica Nashville	Canadian Assoc Lab Accred (CALA)	Canada		3744
estAmerica Nashville	Colorado	State Program	8	N/A
estAmerica Nashville	Connecticut	State Program	1	PH-0220
estAmerica Nashville	Florida	NELAC	4	E87358
estAmerica Nashville	Illinois	NELAC	5	200010
estAmerica Nashville	Iowa	State Program	7	131
estAmerica Nashville	Kansas	NELAC	7	E-10229
estAmerica Nashville	Kentucky	State Program	4	90038
estAmerica Nashville	Kentucky (UST)	State Program	4	19
estAmerica Nashville	Louisiana	NELAC	6	30613
estAmerica Nashville	Louisiana	NELAC	6	LA110014
estAmerica Nashville	Maryland	State Program	3	316
estAmerica Nashville	Massachusetts	State Program	1	M-TN032
estAmerica Nashville	Minnesota	NELAC	5	047-999-345
estAmerica Nashville	Mississippi	State Program	4	N/A
estAmerica Nashville	Montana (UST)	State Program	8	NA
estAmerica Nashville	New Hampshire	NELAC	1	2963
estAmerica Nashville	New Jersey	NELAC	2	TN965
estAmerica Nashville	New York	NELAC	2	11342
estAmerica Nashville	North Carolina DENR	State Program	4	387
estAmerica Nashville	North Dakota	State Program	8	R-146
estAmerica Nashville	Ohio VAP	State Program	5	CL0033
estAmerica Nashville	Oklahoma	State Program	6	9412
estAmerica Nashville	Oregon	NELAC	10	TN200001
estAmerica Nashville	Pennsylvania	NELAC	3	68-00585
estAmerica Nashville	Rhode Island	State Program	1	LAO00268
estAmerica Nashville	South Carolina	State Program	4	84009
estAmerica Nashville	South Carolina	State Program	4	84009
estAmerica Nashville	Tennessee	State Program	4	2008
estAmerica Nashville	Texas	NELAC	6	T104704077-09-TX
estAmerica Nashville	USDA	Federal	•	S-48469
estAmerica Nashville	Utah	NELAC	8	TAN
estAmerica Nashville	Virginia	NELAC	3	460152
estAmerica Nashville	Virginia	State Program	3	00323
estAmerica Nashville	Washington	State Program	10	C789
estAmerica Nashville	West Virginia DEP	State Program	3	219
estAmerica Nashville	Wisconsin	State Program	5	998020430
estAmerica Nashville	Wyoming (UST)	A2LA	8	453.07

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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Client Name/Account #: E	EG-SBG#244			-		-	-	_			_			77	_	-							1777	nce Mo			Yes	- 1
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.	Date Sempled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	8	MOD, (Red Lebay)	MeOH (Orenga Lobel)	M2SO, Pineto (Yolow Lebal)	HySO, Ghos (Yellow Lebal)	None (Stack Lebal) Other (Sepecte) [112-114-	recurring species	Westanter	Drinking Water	Sol	Other (quedity):	BTEX + Napth - 8260	PAH - 8270D			Arman de Carlos de La companya de Carlos de Ca						
mple 10 / Description 533 Laurel Bay	4/24/12	1345	5	V			H	100	-	H	1	21		T	1	TX		Y	K				1					+
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man and one out had been sent but had her had

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 329Ash; 329 Ash Street, Laurel Bay Housing Area, MCAS Beaufort, S.C.

DISPOSAL LOCATION

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

TYPE OF TANK	SIZE (GAL)
Steel	280

CLEANING/DISPOSAL METHOD

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

DISPOSAL CERTIFICATION

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

7. C. L20 ee / 5/17/12 (Name) (Date)

Appendix C Laboratory Analytical Report - Groundwater



Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Description: BEALB329TW01WG20151112

Laboratory ID: QK13041-005

Matrix: Aqueous

Date Sampled:11/12/2015 1050 Date Received: 11/13/2015

Run Prep Method Analytical Method Dilution Analysis Date Analyst **Prep Date** Batch 5030B 11/20/2015 1636 SES 90185

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units Run
Benzene	71-43-2	8260B	0.45	U	5.0	0.45	0.21	ug/L 1
Ethylbenzene	100-41-4	8260B	0.51	U	5.0	0.51	0.21	ug/L 1
Naphthalene	91-20-3	8260B	2.6	BJ	5.0	0.96	0.14	ug/L 1
Toluene	108-88-3	8260B	0.48	U	5.0	0.48	0.24	ug/L 1
Xylenes (total)	1330-20-7	8260B	0.57	U	5.0	0.57	0.32	ug/L 1

Surrogate	un 1 covery	Acceptance Limits	
Bromofluorobenzene	95	75-120	
1,2-Dichloroethane-d4	93	70-120	
Toluene-d8	97	85-120	
Dibromofluoromethane	95	85-115	

PQL = Practical quantitation limit ND = Not detected at or above the MDL B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Q = Surrogate failure L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

 $J = Estimated result < PQL and <math>\geq MDL$

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Semivolatile Organic Compounds by GC/MS (SIM)

Client: AECOM - Resolution Consultants

Laboratory ID: QK13041-005

Description: BEALB329TW01WG20151112

Matrix: Aqueous

Date Sampled: 11/12/2015 1050 Date Received: 11/13/2015

Run Prep Method **Analytical Method Dilution** Analysis Date Analyst Batch **Prep Date** 1 3520C 8270D (SIM) 11/24/2015 2025 RBH 11/18/2015 1236 89918

	CAS	Analytical							
Parameter	Number	Method	Result	Q	LOQ	LOD	DL	Units F	≀un
Benzo(a)anthracene	56-55-3	8270D (SIM)	0.061	J	0.20	0.040	0.019	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D (SIM)	0.045	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)	0.062	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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Methylnaphthalene-d10		74	15-139
Fluoranthene-d10		87	23-154

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Q = Surrogate failure L = LCS/LCSD failure

ND = Not detected at or above the MDL Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

 $J = Estimated result < PQL and <math>\geq MDL$

P =The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Appendix D Regulatory Correspondence





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

July 1, 2015

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

RE: IGWA

Laurel Bay Underground Storage Tank Assessment Reports for:

See attached sheet

Dear Mr. Drawdy,

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



Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

Krieg to Drawdy **Attachment to:**

Subject: IGWA Dated 7/1/2015

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

118 Banyan	343 Ash Tank 2
126 Banyan	344 Ash Tank 2
127 Banyan	347 Ash Tank 2
130 Banyan Tank 1	378 Aspen Tank 2
141 Laurel Bay	379 Aspen
151 Laurel Bay	382 Aspen Tank 1
224 Cypress	382 Aspen Tank 2
227 Cypress	394 Acorn Tank 2
256 Beech Tank 2	400 Elderberry
257 Beech Tank 2	432 Elderberry
257 Beech Tank 1 257 Beech Tank 2	436 Elderberry
264 Beech	473 Dogwood Tank 2
265 Beech Tank 2	482 Laurel Bay
265 Beech Tank 2	517 Laurel Bay
275 Birch	586 Aster
277 Birch Tank 1	632 Dahlia
285 Birch	639 Dahlia Tank 2
292 Birch Tank 3	643 Dahlia Tank 1
297 Birch	644 Dahlia Tank 1
301 Ash	644 Dahlia Tank 2
306 Ash	646 Dahlia Tank 1
310 Ash Tank 1	646 Dahlia Tank 2
313 Ash	665 Camellia
315 Ash Tank 2	699 Abelia
316 Ash	744 Blue Bell
319 Ash	745 Blue Bell Tank 1
320 Ash	747 Blue Bell Tank 1
321 Ash	747 Blue Bell Tank 2
329 Ash	747 Blue Bell Tank 2
330 Ash Tank 2	749 Blue Bell Tank 1
331 Ash	749 Blue Bell Tank 2
332 Ash	751 Blue Bell
333 Ash	762 Althea
335 Ash Tank 1	765 Althea Tank 2
335 Ash Tank 2	766 Althea Tank 4
341 Ash	767 Althea Tank 1
342 Ash Tank 1	768 Althea Tank 2
342 Ash Tank 2	768 Althea Tank 3
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Laurel Bay Underground Storage Tank Assessment Reports for: (98 addresses/110 tanks) cont.

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



Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

Division of Waste Management Bureau of Land and Waste Management

June 8, 2016

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

RE: Approval and Concurrence with Draft Final Initial Groundwater Investigation Report-November and December 2015

Laurel Bay Military Housing Area Multiple Properties

Dated April 2015

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received groundwater data in the above referenced Groundwater Investigation Report for the attached addresses on May 2, 2016. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

Per the Department's request, groundwater samples were collected from the attached referenced addresses. The Department reviewed the groundwater data and previous investigations and it agrees with the conclusions and recommendations included in the document. To further assess the impact to groundwater, permanent wells should be installed at the 15 stated addresses. For the remaining 80 addresses, there is no indication of contamination on the property and therefore no further investigation is required at this time.

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

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

Sincerely,

Laurel Petrus

NETS

RCRA Federal Facilities Section

Attachment: Specific Property Recommendations

Cc: Russell Berry, EQC Region 8 (via email)

Shawn Dolan, Resolution Consultants (via email) Bryan Beck, NAVFAC MIDATLANTIC (via email)

Craig Ehde (via email)

Attachment to: Petrus to Drawdy

Subject: Draft Final Initial Groundwater Investigation Report-November and December 2015

Specific Property Recommendations

Dated June 8, 2016

Draft Final Initial Groundwater Investigation Report for (95 addresses)

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

118 Banyan Drive	644 Dahlia Drive	
126 Banyan Drive	646 Dahlia Drive	
127 Banyan Drive	665 Camellia Drive	
141 Laurel Bay Blvd	699 Abelia Street	
151 Laurel Bay Blvd	744 Blue Bell Lane	
224 Cypress Street	745 Blue Bell Lane	
227 Cypress Street	751 Blue Bell Lane	
257 Beech Street	762 Althea Street	
264 Beech Street	765 Althea Street	
265 Beech Street	766 Althea Street	
275 Birch Drive	767 Althea Street	
277 Birch Drive	768 Althea Street	
297 Birch Drive	769 Althea Street	
301 Ash Street	819 Azalea Drive	
306 Ash Street	840 Azalea Drive	
310 Ash Street	878 Cobia Drive	
313 Ash Street	891 Cobia Drive	
315 Ash Street	913 Barracuda Drive	
316 Ash Street	916 Barracuda Drive	
319 Ash Street	923 Wren Lane	
320 Ash Street	1004 Bobwhite Drive	
321 Ash Street	1022 Foxglove Street	
329 Ash Street	1031 Foxglove Street	
332 Ash Street	1061 Gardenia Drive	
333 Ash Street	1064 Gardenia Drive	
341 Ash Street	1067 Gardenia Drive	
347 Ash Street	1077 Heather Street	
378 Aspen Street	1081 Heather Street	
379 Aspen Street	1101 Iris Lane	
382 Aspen Street	1105 Iris Lane	
394 Acorn Street	1142 Iris Lane	
400 Elderberry Drive	1146 Iris Lane	
432 Elderberry Drive	1218 Cardinal Lane	- 30
436 Elderberry Drive	1240 Dove Lane	
482 Laurel Bay Blvd	1266 Dove Lane	
517 Laurel Bay Blvd	1292 Eagle Lane	
586 Aster Street	1299 Eagle Lane	
632 Dahlia Drive	1302 Eagle Lane	
639 Dahlia Drive	1336 Albatross Drive	
643 Dahlia Drive	1351 Cardinal Lane	

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