SUMMARY REPORT
426 BLUE BELL LANE (FORMERLY 747 BLUE BELL LANE)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC

Revision: 0 Prepared for:

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

and



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

Prepared by:



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Contract Number: N62470-14-D-9016

CTO WE52

**JUNE 2021** 



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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).

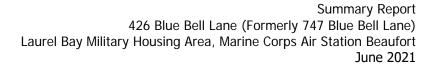
As of January 2014, the LBMH addresses were re-numbered to comply with the E-911 emergency response addressing system; however, in order to remain consistent with historical sampling and reporting for LBMH area, the residences will continue to be referenced with their original address numbers in sample 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 426 Blue Bell Lane (Formerly 747 Blue Bell Lane). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

### 1.1 Background Information

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





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

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

In 2007, MCAS Beaufort began a voluntary program to remove the unregulated, residential heating oil 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, February 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, February 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, April 2013) and were revised again in Revision 3.0 (SCDHEC, May 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 IGWA sampling process utilizes temporary groundwater sampling points that are typically installed and sampled within the same day. The intent of the sampling point is to determine the presence or absence of the aforementioned COPCs in groundwater and identify whether former UST locations may require additional delineation of COPCs in groundwater. These sampling points are not subjected to the same installation standards as permanent monitoring wells and, as such; the data obtained from the IGWA wells can sometimes be biased high and is considered preliminary data. In order to confirm the presence of any impact to groundwater, a permanent well is installed where IGWA sampling has indicated the presence of COPCs is in excess of the SCDHEC RBSLs for groundwater. If COPCs are found to be present in the permanent well, additional permanent wells are installed to delineate the extent of impact to groundwater and a sampling program is established. Groundwater analytical results from permanent wells 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 426 Blue Bell Lane (Formerly 747 Blue Bell Lane). The sampling activities at 426 Blue Bell Lane (Formerly 747 Blue Bell Lane) comprised a soil investigation, IGWA sampling and installation and sampling of a permanent well. Details regarding the soil investigation at this site are provided in the SCDHEC UST Assessment Report – 747 Blue Bell Lane (MCAS Beaufort, 2011) and the SCDHEC UST Assessment Report – 747 Blue Bell Lane (MCAS Beaufort, 2013). The UST Assessment Reports are 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. Details regarding the permanent well installation and sampling activities at this site are provided in the *Groundwater Assessment Report – March and April 2017* (Resolution Consultants, 2017). The laboratory report that includes the pertinent groundwater analytical results for this site is presented in Appendix D.

### 2.1 UST Removal and Soil Sampling

In June 2011 and May 2013, three 280 gallon heating oil USTs were removed from the front area at 426 Blue Bell Lane (Formerly 747 Blue Bell Lane). Tank 1 was removed on June 30, 2011. Tank 2 and Tank 3 were removed on May 9, 2013. The former UST locations are indicated on Figures 2 and 3 of the UST Assessment Reports (Appendix B). The USTs were removed and properly disposed of (i.e., shipped offsite for recycling or transported to a landfill). There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removals. According to the UST Assessment Reports (Appendix B), the depths to the bases of the USTs were 4'4" (Tank 1), 5'7" (Tank 2) and 3'10" (Tank 3) bgs and a single soil sample was collected for each from that depth. The samples were collected from the fill port side of the former USTs to represent a worst case scenario.

Following UST removals, a soil sample was collected from the bases of the excavations 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 reports are included in the UST Assessment Reports presented in Appendix B. The laboratory analytical data reports includes the soil results for the additional PAHs that were analyzed, but do not have associated RBSLs.

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST locations (Tanks 1, 2, and 3) 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 the former UST locations (Tanks 1, 2, and 3) at 426 Blue Bell Lane (Formerly 747 Blue Bell Lane) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated July 1, 2015, SCDHEC requested an IGWA for 426 Blue Bell Lane



(Formerly 747 Blue Bell Lane) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix E.

### 2.3 Initial Groundwater Sampling

On November 17, 2015, a temporary monitoring well was installed at 426 Blue Bell Lane (Formerly 747 Blue Bell Lane), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil USTs (Tanks 1, 2 and 3). The former UST locations are indicated on Figures 2 and 3 of the UST Assessment Reports (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.H-I (SCDHEC, 2016). Field forms are provided in the *Initial Groundwater Investigation Report – November and December 2015* (Resolution Consultants, 2016).

### 2.4 Initial 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 426 Blue Bell Lane (Formerly 747 Blue Bell Lane) were greater than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated further investigation was required. In a letter dated June 8, 2016, SCDHEC requested a permanent well be installed for 426 Blue Bell Lane (Formerly 747 Blue Bell Lane) to confirm the impact to groundwater detected in the temporary well sample. SCDHEC's request letter is provided in Appendix E.



### 2.5 Permanent Well Groundwater Sampling

On March 14, 2017, a permanent monitoring well was installed at 426 Blue Bell Lane (Formerly 747 Blue Bell Lane), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil USTs (Tanks 1, 2 and 3) and the IGWA sample location. The former UST locations are indicated on Figures 2 and 3 of the UST Assessment Reports (Appendix B). Further details are provided in the *Groundwater Assessment Report – March and April 2017* (Resolution Consultants, 2017).

The sampling strategy for this phase of the investigation required a one-time sampling event of the permanent 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. Field forms are provided in the *Groundwater Assessment Report – March and April 2017* (Resolution Consultants, 2017).

### 2.6 Permanent Well Groundwater Analytical Results

A summary of the laboratory analytical results and SCDHEC RBSLs is presented in Table 3. A copy of the laboratory analytical data report is included in Appendix D.

The groundwater results collected from 426 Blue Bell Lane (Formerly 747 Blue Bell Lane) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 3), which indicated that the groundwater was not impacted by COPCs associated with the former UST (Tanks 1, 2 and 3) at concentrations that present a potential risk to human health and the environment.

### 3.0 PROPERTY STATUS

Based on the analytical results for groundwater collected from the permanent monitoring well, SCDHEC made the determination that NFA was required for 426 Blue Bell Lane (Formerly 747 Blue Bell Lane). This NFA determination was obtained in a letter dated December 11, 2017. SCDHEC's NFA letter is provided in Appendix E.



### 4.0 REFERENCES

- Marine Corps Air Station Beaufort, 2011. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report 747 Blue Bell Lane, Laurel Bay Military Housing Area, December 2011.
- Marine Corps Air Station Beaufort, 2013. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report 747 Blue Bell Lane, Laurel Bay Military Housing Area, October 2013.
- Resolution Consultants, 2016. *Initial Groundwater Investigation Report November and December 2015 for Laurel Bay Military Housing Area, Multiple Properties, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, April 2016.
- Resolution Consultants, 2017. *Groundwater Assessment Report March and April 2017 for Laurel Bay Military Housing Area, Multiple Properties, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, August 2017.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2013. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 2.0*, April 2013.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2015. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 3.0*, May 2015.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2016. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 3.1*, February 2016.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2017. *R.61-92, Part 280, Underground Storage Tank Control Regulations*, March 2017.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2018. *Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service*, March 2018.



Summary Report 426 Blue Bell Lane (Formerly 747 Blue Bell Lane) Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort June 2021

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 426 Blue Bell Lane (Formerly 747 Blue Bell Lane)

### Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Results Samples Collected 06/30/11 and 05/09/13			
Constituent	SCONEC ROSES	747 Bluebell 06/30/2011	747 Bluebell-1 05/09/13	747 Bluebell-2 05/09/13	
Volatile Organic Compounds Analyze	d by EPA Method 8260B (mg/kg)				
Benzene	0.003	ND	0.00314	0.00324	
Ethylbenzene	1.15	0.409	0.108	1.19	
Naphthalene	0.036	11.7	37.7	19.0	
Toluene	0.627	0.00178 0.00238		0.00499	
Xylenes, Total	13.01	0.137 0.0364		1.19	
Semivolatile Organic Compounds Ana	llyzed by EPA Method 8270D (mg/kg)				
Benzo(a)anthracene	0.66	ND	0.164	ND	
Benzo(b)fluoranthene	0.66	ND <b>0.126</b>		ND	
Benzo(k)fluoranthene 0.66		ND	0.0525	ND	
Chrysene 0.66		ND	0.138	ND	
Dibenz(a,h)anthracene	0.66	ND	ND	ND	

### Notes:

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

<sup>(1)</sup> 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).

# Table 2 Laboratory Analytical Results - Initial Groundwater 426 Blue Bell Lane (Formerly 747 Blue Bell Lane) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	(μg/L) <sup>(-)</sup>		Results Sample Collected 11/17/15	
<b>Volatile Organic Compounds Analyze</b>	d by EPA Method 8260B	(μg/L)		
Benzene	5	16.24	ND	
Ethylbenzene	700	45.95	1.3	
Naphthalene	25	29.33	31	
Toluene	1000	105,445	0.47	
Xylenes, Total	10,000	2,133	0.80	
Semivolatile Organic Compounds Ana	lyzed by EPA Method 82	70D (µg/L)		
Benzo(a)anthracene	10	NA	ND	
Benzo(b)fluoranthene	10	NA	ND	
Benzo(k)fluoranthene	10	NA	ND	
Chrysene	10	NA	ND	
Dibenz(a,h)anthracene	10	NA	ND	

#### Notes:

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

<sup>&</sup>lt;sup>(1)</sup> South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.0 (SCDHEC, May 2015).

<sup>&</sup>lt;sup>(2)</sup> 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<sup>-6</sup>, 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.

#### Table 3

## Laboratory Analytical Results - Permanent Well Groundwater 426 Blue Bell Lane (Formerly 747 Blue Bell Lane) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Site-Specific Groundwater VISLs (µg/L) <sup>(2)</sup>	Results Sample Collected 03/23/17
Volatile Organic Compounds Analyze	d by EPA Method 8260B	β (μg/L)	
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	2.1
Naphthalene	25	29.33	22
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	0.70
Semivolatile Organic Compounds And	alyzed by EPA Method 8	270D (μg/L)	
Benzo(a)anthracene	10	NA	ND
Benzo(b)fluoranthene	10	NA	ND
Benzo(k)fluoranthene	10	NA	ND
Chrysene	10	NA	ND
Dibenz(a,h)anthracene	10	NA	ND

### Notes:

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 D.

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

 $\mu g/L$  - micrograms per liter

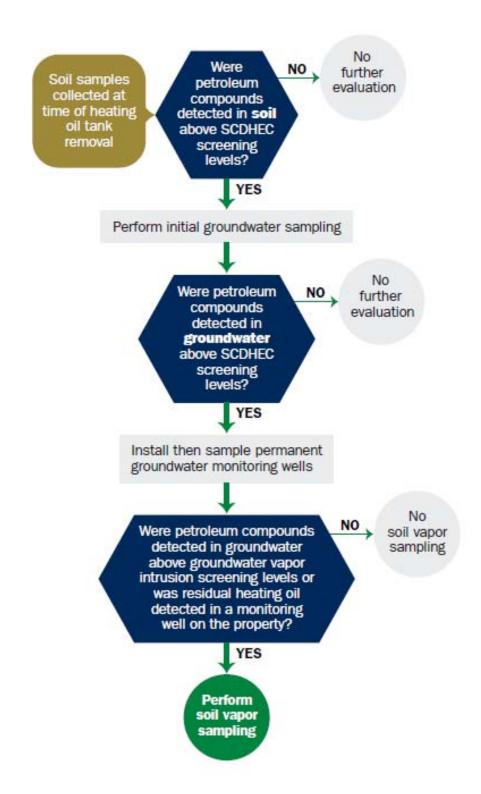
VISL - Vapor Intrusion Screening Level

<sup>(1)</sup> 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).

 $<sup>^{(2)}</sup>$  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  $1 \times 10^{-6}$ , 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.

### Appendix A Multi-Media Selection Process for LBMH





**Appendix A - Multi-Media Selection Process for LBMH** 

## Appendix B UST Assessment Reports



### South Carolina Department of Health and Environmental Control (SCDHEC)

### **Underground Storage Tank (UST) Assessment Report**

		CASASA GASA REPORTED HAD SACRETED AND	
Date Received			
Date received			
		Jse Only	
	State	CO ( Iniv	
	Diane t	JOU CHILY	

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



DEC 0 8 2011

SC DHEC - Buresu of Land & Waste Management

OWNERSHIP OF UST (S)

MCAS Beaufort, Commandi Owner Name (Corporation, Individ		REAO (Craig Ehde)
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
747 Bluebell Lane, 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

747Bluebell  Heating oil  280 gal
280 gal
Late 1950s
Steel
Mid 80s
4 ' 4 "
No
No
Removed
6/30/11
Yes
Yes
ground (attach disposal manifests) the ground, cleaned and recycled.

### VII. PIPING INFORMATION

	Steel
Construction Material(ex. Steel, FRP)	& Copper
Distance from UST to Dispenser	N/A
Number of Dispensers	N/A
Type of System Pressure or Suction	Suction
Was Piping Removed from the Ground? Y/N	Yes
Visible Corrosion or Pitting Y/N	Yes
Visible Holes Y/N	No
Age	Late 1950s
If any corrosion, pitting, or holes were observed, d	lescribe the location and extent for each nining
if any contosion, planing, or notes were observed, c	escribe the location and extent for each piping
Steel vent piping for UST 747Blu but the copper supply and return	ebell was corroded and pitted,
Steel vent piping for UST 747Blu	ebell was corroded and pitted,
Steel vent piping for UST 747Blu	ebell was corroded and pitted,
Steel vent piping for UST 747Blu but the copper supply and return	ebell was corroded and pitted, piping was sound.
Steel vent piping for UST 747Blu but the copper supply and return  VIII. BRIEF SITE DESCR	ebell was corroded and pitted, piping was sound.  IPTION AND HISTORY
Steel vent piping for UST 747Blu but the copper supply and return  VIII. BRIEF SITE DESCR The USTs at the residences are co	ebell was corroded and pitted, piping was sound.  IPTION AND HISTORY onstructed of single wall steel
Steel vent piping for UST 747Blu but the copper supply and return  VIII. BRIEF SITE DESCR	ebell was corroded and pitted, piping was sound.  IPTION AND HISTORY onstructed of single wall steel for heating. These USTs were
Steel vent piping for UST 747Blu but the copper supply and return  VIII. BRIEF SITE DESCR The USTs at the residences are co	ebell was corroded and pitted, piping was sound.  IPTION AND HISTORY onstructed of single wall steel for heating. These USTs were
Steel vent piping for UST 747Blu but the copper supply and return  VIII. BRIEF SITE DESCR The USTs at the residences are co	ebell was corroded and pitted, piping was sound.  IPTION AND HISTORY onstructed of single wall steel for heating. These USTs were
Steel vent piping for UST 747Blu but the copper supply and return  VIII. BRIEF SITE DESCR  The USTs at the residences are co	ebell was corroded and pitted, piping was sound.  IPTION AND HISTORY onstructed of single wall steel for heating. These USTs were
Steel vent piping for UST 747Blu but the copper supply and return  VIII. BRIEF SITE DESCR  The USTs at the residences are co	ebell was corroded and pitted, piping was sound.  IPTION AND HISTORY onstructed of single wall steel for heating. These USTs were

### 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, 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	

### 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#
747 Bluebell	Excav at fill end	Soil	Sandy	4'4"	6/30/11 1115 hrs	P. Shaw	
	With the second						
8			***************************************				
9							
10							
11							
12							
13							
14							
15							
16							
17							
18						-	
19							· •
20							

<sup>\* =</sup> 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

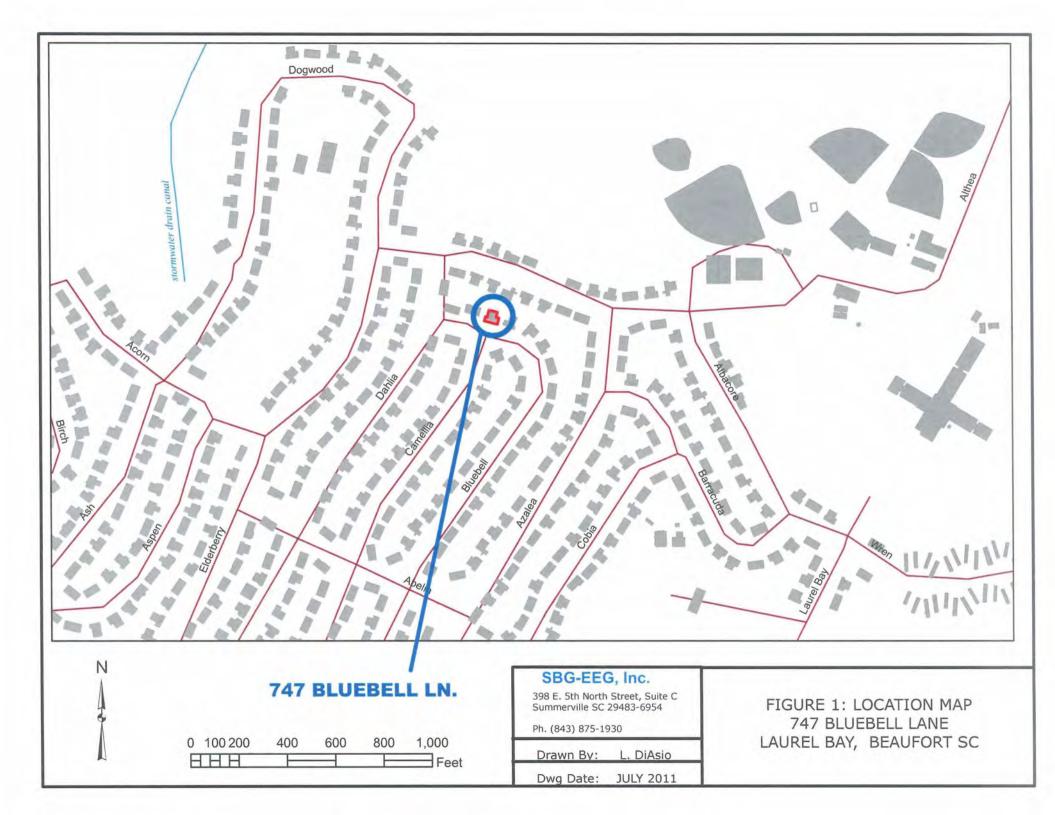
Yes No

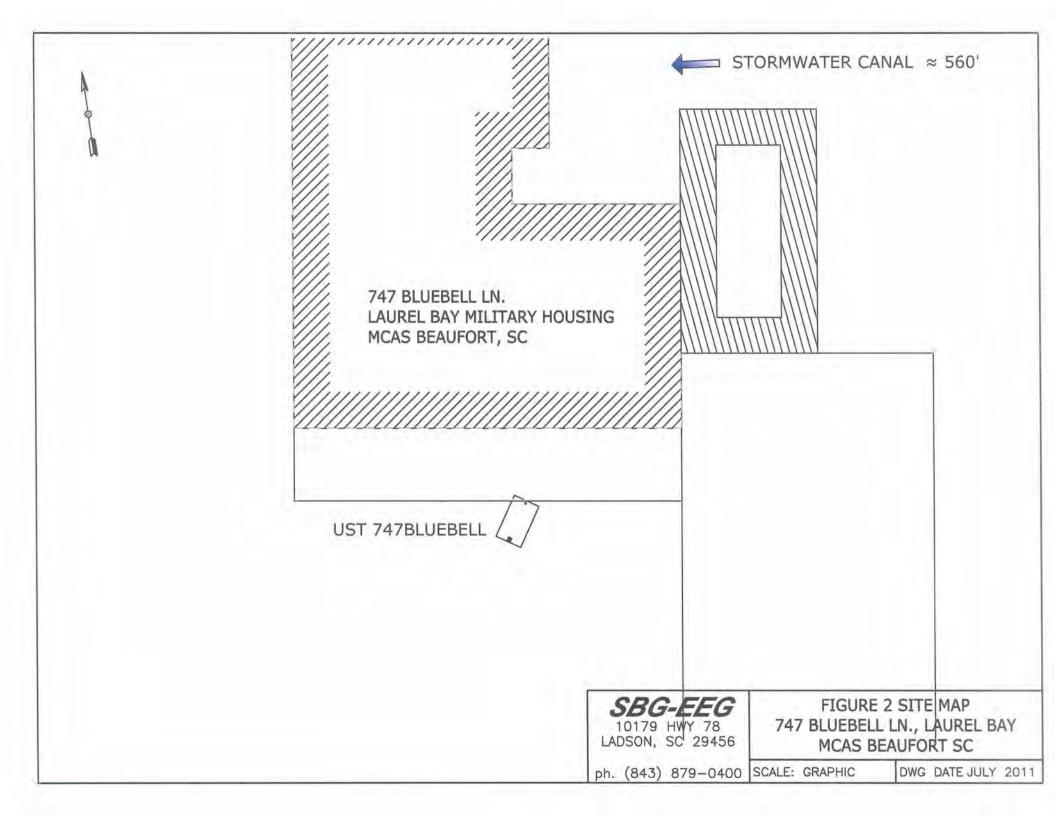
		1 65	110
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?	*X	
	*~560' stormwate	r can	al
	If yes, indicate type of receptor, distance, and direction on site map.		
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		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, el	ectri	city,
	If yes, indicate the type of utility, distance, and direction on the site map.	ic	
E.	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.	-	

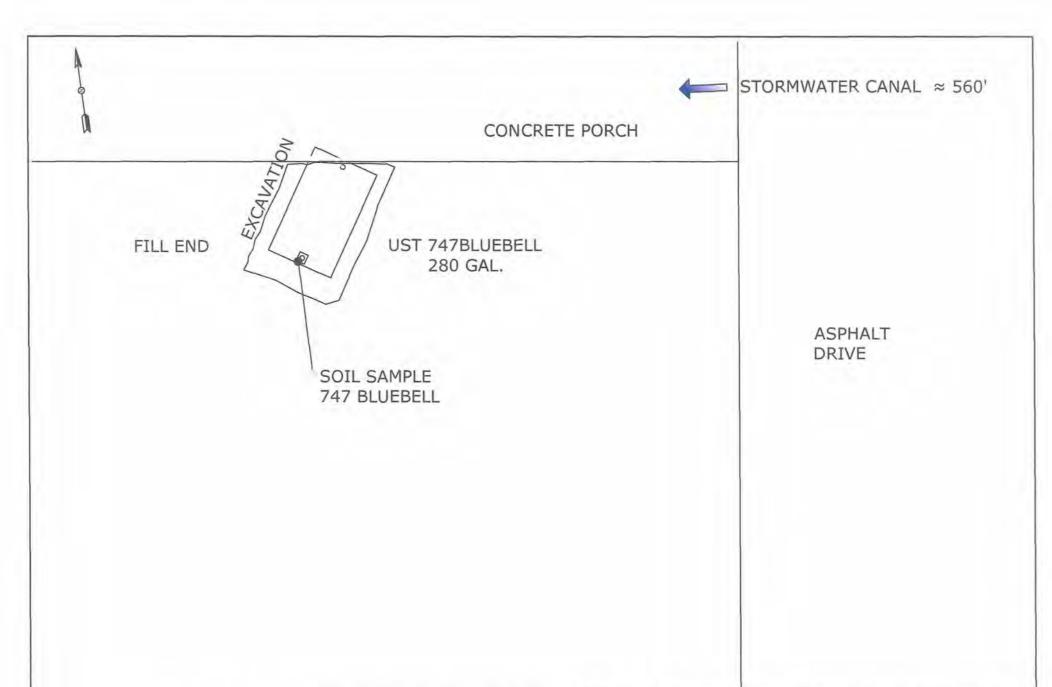
### XIII. SITE MAP

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)







TANK DEPTH BELOW GRADE 747BLUEBELL = 16"

SBG-EEG 10179 HWY 78 LADSON, SC 29456

FIGURE 3 UST SAMPLE LOCATIONS 747 BLUEBELL LN., LAUREL BAY MCAS BEAUFORT SC

ph. (843) 879-0400 SCALE: GRAPHIC

DWG DATE JULY 2011



Picture 1: Location of UST 747Bluebell.



Picture 2: UST 747Bluebell.

### 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.

			 	<del></del>		
CoC UST	747Bluebell					
Benzene	ND					
Toluene	0.00178 mg/}	ŧg				
Ethylbenzene	0.409 mg/kg					
Xylenes	0.137 mg/kg					
Naphthalene	11.7 mg/kg					
Benzo (a) anthracene	ND					
Benzo (b) fluoranthene	ND					
Benzo (k) fluoranthene	ND					
Chrysene						
Dibenz (a, h) anthracene	ND					
TPH (EPA 3550)						
CoC	:					
Benzene						
Toluene						
Ethylbenzene						
Xylenes						
Naphthalene						
Benzo (a) anthracene			 			
Benzo (b) fluoranthene						
Benzo (k) fluoranthene					_	
Chrysene						
Dibenz (a, h) anthracene						
TPH (EPA 3550)						

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

	ired thickness to the nearest 0.01 feet.						
CoC	RBSL	W-1	W-2	W -3	W -4		
	(µg/l)						
Free Product	None						
Thickness							
Benzene	5						
Toluene	1,000						
Ethylbenzene	700						
Xylenes	10,000						
Total BTEX	N/A		TOTAL COLUMN TO THE COLUMN TO				
MTBE	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: NUG0346

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

Authorized for release by: 07/19/2011 02:28:15 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.

Page 1 of 26 07/19/2011

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QC Sample Results	11
QC Association	19
Chronicle	21
Method Summary	23
Certification Summary	24
Chain of Custody	25

## Sample Summary

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

Project/Site: [none]

TestAmerica Job ID: NUG0346

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
NUG0346-01	308 Ash	Soil	06/27/11 13:15	07/02/11 08:30
NUG0346-02	318 Ash	Soil	06/28/11 12:15	07/02/11 08:30
NUG0346-03	321 Ash	Soil	06/29/11 12:45	07/02/11 08:30
NUG0346-04	747 Bluebell	Soil	06/30/11 11:15	07/02/11 08:30

## Definitions/Glossary

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

Project/Site: [none]

TestAmerica Job ID: NUG0346

#### Qualifiers

#### **GCMS Volatiles**

Qualifier	Qualifier Description	
J	Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).	
	Concentrations within this range are estimated.	
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.	

#### **GCMS** Semivolatiles

Qualifier	Qualifier Description	
J	Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).	
	Concentrations within this range are estimated.	

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
Ú.	Listed under the "D" column to designate that the result is reported on a dry weight basis.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

Project/Site: [none]

Client Sample ID: 308 Ash

Date Collected: 06/27/11 13:15 Date Received: 07/02/11 08:30 Lab Sample ID: NUG0346-01

Matrix: Soll

Percent Solids: 77.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND	1	0.00238	0.00131	mg/kg dry	- 8	06/27/11 13:15	07/06/11 18:21	1.00
Ethylbenzene	ND		0,00238	0.00117	mg/kg dry	0	06/27/11 13:15	07/06/11 18:21	1.00
Naphthalene	0.0104		0.00595	0.00202	mg/kg dry	0	06/27/11 13:15	07/06/11 18:21	1.00
Toluene	ND		0.00238	0.00106	mg/kg dry	355	06/27/11 13:15	07/06/11 18:21	1.00
Xylenes, total	ND		0.00595	0.00226	mg/kg dry	32	06/27/11 13:15	07/06/11 18:21	1.00
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4	92	_	67 - 138				06/27/11 13:15	07/06/11 18:21	1.00
Dibromofluoromethane	99		75 - 125				06/27/11 13:15	07/06/11 18:21	1.00
Toluene-d8	96		76 - 129				06/27/11 13:15	07/06/11 18:21	1.00
4-Bromofluorobenzene	100		67 - 147				06/27/11 13:15	07/06/11 18:21	1.00
Method: SW846 8270D - Pol	yaromatic Hydroca	rbons by El	PA 8270D						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0843	0.0176	mg/kg dry	23	07/05/11 13:00	07/06/11 06:31	1.00
Acenaphthylene	ND		0.0843	0.0252	mg/kg dry	\$5	07/05/11 13:00	07/06/11 06:31	1,00
Anthracene	ND		0.0843	0.0113	mg/kg dry	0	07/05/11 13:00	07/06/11 06:31	1.00
Benzo (a) anthracene	ND		0.0843	0.0138	mg/kg dry	0	07/05/11 13:00	07/06/11 06:31	1.00
Benzo (a) pyrene	ND		0.0843	0.0101	mg/kg dry	03	07/05/11 13:00	07/06/11 06:31	1.00
Benzo (b) fluoranthene	ND		0.0843	0.0478	mg/kg dry	0	07/05/11 13:00	07/06/11 06:31	1.00
Benzo (g,h,i) perylene	ND		0.0843	0.0113	mg/kg dry	0	07/05/11 13:00	07/06/11 06:31	1.00
Benzo (k) fluoranthene	ND		0.0843	0.0466	mg/kg dry	0	07/05/11 13:00	07/06/11 06:31	1.00
Chrysene	ND		0.0843	0.0390	mg/kg dry	0	07/05/11 13:00	07/06/11 06:31	1.00
Dibenz (a,h) anthracene	ND		0.0843	0.0189	mg/kg dry	0	07/05/11 13:00	07/06/11 06:31	1.00
Fluoranthene	ND		0.0843	0.0138	mg/kg dry	O	07/05/11 13:00	07/06/11 06:31	1.00
Fluorene	ND		0.0843	0.0252	mg/kg dry	.0	07/05/11 13:00	07/06/11 06:31	1.00
ndeno (1,2,3-cd) pyrene	ND		0.0843	0.0390	mg/kg dry	13-	07/05/11 13:00	07/06/11 06:31	1.00
Naphthalene	ND		0.0843	0.0176	mg/kg dry	305-	07/05/11 13:00	07/06/11 06:31	1.00
Phenanthrene	ND		0.0843	0.0126	mg/kg dry	135	07/05/11 13:00	07/06/11 06:31	1.00
Pyrene	ND		0.0843	0.0289	mg/kg dry	a	07/05/11 13:00	07/06/11 06:31	1.00
1-Methylnaphthalene	ND		0.0843	0.0151	mg/kg dry	0	07/05/11 13:00	07/06/11 06:31	1.00
2-Methylnaphthalene	ND		0.0843	0.0264	mg/kg dry	**	07/05/11 13:00	07/06/11 06:31	1.00
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	76		18 - 120				07/05/11 13:00	07/06/11 06:31	1.00
2-Fluorobiphenyl	56		14 - 120				07/05/11 13:00	07/06/11 06:31	1.00
Vitrobenzene-d5	53		17 - 120				07/05/11 13:00	07/06/11 06:31	1.00
Method: SW-846 - General C	hemistry Paramete	rs							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

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

Project/Site: [none]

Analyte

% Dry Solids

TestAmerica Job ID: NUG0346

Lab Sample ID: NUG0346-02

Matrix: Soil

Percent Solids: 83,9

#### Client Sample ID: 318 Ash Date Collected: 06/28/11 12:15

Date Received: 07/02/11 08:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00203	0.00112	mg/kg dry	Ö	06/28/11 12:15	07/06/11 18:53	1.00
Ethylbenzene	0.0132		0.00203	0.000994	mg/kg dry	÷	06/28/11 12:15	07/06/11 18:53	1.00
Naphthalene	0.0140		0.00507	0.00172	mg/kg dry	ø	06/28/11 12:15	07/06/11 18:53	1.00
Toluene	0.00122	J	0.00203	0.000902	mg/kg dry	0.	06/28/11 12:15	07/06/11 18:53	1.00
Xylenes, total	0.0120		0.00507	0.00193	mg/kg dry	0	06/28/11 12:15	07/06/11 18:53	1.00
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	84		67 - 138				06/28/11 12:15	07/06/11 18:53	1.00
Dibromofluoromethane	92		75 - 125				06/28/11 12:15	07/06/11 18:53	1.00
Toluene-d8	112		76 - 129				06/28/11 12:15	07/06/11 18:53	1.00
4-Bromofluorobenzene	328	ZX	67 - 147				06/28/11 12:15	07/06/11 18:53	1.00
Method: SW846 8270D - Polys	aromatic Hydroca	rbons by El	PA 8270D						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0794	0.0166	mg/kg dry	5	07/05/11 13:00	07/06/11 06:51	1.00
Acenaphthylene	ND		0.0794	0.0237	mg/kg dry	0	07/05/11 13:00	07/06/11 06:51	1.00
Anthracene	0.421		0.0794	0.0107	mg/kg dry	0	07/05/11 13:00	07/06/11 06:51	1.00
Benzo (a) anthracene	0.0581	J	0.0794	0.0130	mg/kg dry	0	07/05/11 13:00	07/06/11 06:51	1.00
Benzo (a) pyrene	ND		0.0794	0.00948	mg/kg dry	0	07/05/11 13:00	07/06/11 06:51	1.00
Benzo (b) fluoranthene	ND		0.0794	0.0450	mg/kg dry	*	07/05/11 13:00	07/06/11 06:51	1.00
Benzo (g,h,i) perylene	ND		0.0794	0.0107	mg/kg dry	0	07/05/11 13:00	07/06/11 06:51	1.00
Benzo (k) fluoranthene	ND		0.0794	0.0439	mg/kg dry	0	07/05/11 13:00	07/06/11 06:51	1,00
Chrysene	0.0834		0.0794	0.0367	mg/kg dry	0	07/05/11 13:00	07/06/11 06:51	1.00
Dibenz (a,h) anthracene	ND		0.0794	0.0178	mg/kg dry	0	07/05/11 13:00	07/06/11 06:51	1.00
Fluoranthene	0.181		0.0794	0.0130	mg/kg dry	3,3	07/05/11 13:00	07/06/11 06:51	1.00
luorene	1.41		0.0794	0.0237	mg/kg dry	10	07/05/11 13:00	07/06/11 06:51	1.00
ndeno (1,2,3-cd) pyrene	ND		0.0794	0.0367	mg/kg dry	13	07/05/11 13:00	07/06/11 06:51	1.00
Vaphthalene	0.157		0.0794	0.0166	mg/kg dry	12	07/05/11 13:00	07/06/11 06:51	1.00
Phenanthrene	3.46		0.0794	0.0119	mg/kg dry	325	07/05/11 13:00	07/06/11 06:51	1.00
Pyrene	0.449		0.0794	0.0273	mg/kg dry	0	07/05/11 13:00	07/06/11 06:51	1.00
-Methylnaphthalene	0.707		0.0794	0.0142	mg/kg dry	0	07/05/11 13:00	07/06/11 06:51	1.00
-Methylnaphthalene	0.810		0.0794	0.0249	mg/kg dry	Ď.	07/05/11 13:00	07/06/11 06:51	1.00
and an appropriate the same of			Limits				Prepared	Analyzed	Dil Fac
Surrogate	% Recovery	Qualifier	Limits					7.70/19	
Same The same of t	% Recovery 87	Qualifier	18 - 120				07/05/11 13:00	07/06/11 06:51	1.00
Surrogate	40.00.00.00.00.00.00.00.00.00.00.00.00.0	Qualifier	- C-				07/05/11 13:00 07/05/11 13:00		1.00

Analyzed

07/14/11 12:26

Dil Fac

RL

0.500

MDL Unit

0.500 %

Prepared

07/13/11 15:38

Result Qualifier

83.9

Project/Site: [none]

Client Sample ID: 321 Ash

Date Collected: 06/29/11 12:45 Date Received: 07/02/11 08:30 Lab Sample ID: NUG0346-03

Matrix: Soil

Percent Solids: 79.8

Analyte	latile Organic Comp Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DilF
Benzene	ND	GWY WY TO	0.00243	0.00134		25	06/29/11 12:45	07/06/11 19:25	1.0
Ethylbenzene	0.0620		0.00243	0.00119	mg/kg dry	45	06/29/11 12:45	07/06/11 19:25	1.0
Toluene	ND.		0.00243	0.00108	1.4	.0	06/29/11 12:45	07/06/11 19:25	1.0
Xylenes, total	0.0283		0.00608	0.00231		.6	06/29/11 12:45	07/06/11 19:25	1.0
Aylenes, total	0,0203		0.0000	0.00201	mg/ng dry		00/20/11 12.40	07700711 10.20	
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil F
1,2-Dichloroethane-d4	75		67 - 138				06/29/11 12:45	07/06/11 19:25	1.0
Dibromofluoromethane	78		75 - 125				06/29/11 12:45	07/06/11 19:25	1.
Toluene-d8	130	ZX	76 - 129				06/29/11 12:45	07/06/11 19:25	1.
4-Bromofluorobenzene	574	ZX	67 - 147				06/29/11 12:45	07/06/11 19:25	1.
Method: SW846 8260B - Vol	atile Organic Comp	ounds by E	PA Method 82	60B - RE	1				
Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil F
Naphthalene	4.12		0.317		mg/kg dry	0	06/29/11 12:45	07/12/11 15:42	50
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil F
1,2-Dichloroethane-d4	119	444000	67 - 138				06/29/11 12:45	07/12/11 15:42	50
Dibromofluoromethane	95		75 - 125				06/29/11 12:45	07/12/11 15:42	50
Toluene-d8	99		76 - 129				06/29/11 12:45	07/12/11 15:42	50
4-Bromofluorobenzene	106		67 - 147				06/29/11 12:45	07/12/11 15:42	50
Method: SW846 8270D - Pol Analyte	A CONTRACTOR OF THE PROPERTY O	rbons by El Qualifier	PA 8270D RL	MDL	Linit	D	Prepared	Analyzed	DilF
Acenaphthene	0.406	Qualifier	0.0820	0.0171	mg/kg dry	- 8	07/05/11 13:00	07/06/11 07:11	1.
Acenaphthylene	ND		0.0820	0.0245	mg/kg dry	-0-	07/05/11 13:00	07/06/11 07:11	1.
Anthracene	0.213		0.0820	0.0110	mg/kg dry	*	07/05/11 13:00	07/06/11 07:11	1.0
	0.120		0.0820	0.0135	mg/kg dry	*	07/05/11 13:00	07/06/11 07:11	1.
Benzo (a) anthracene		J	0.0820	0.00979	mg/kg dry	ō.	07/05/11 13:00	07/06/11 07:11	1.
Benzo (a) pyrene	0.0579	J	0.0820	0.0465	mg/kg dry	0	07/05/11 13:00	07/06/11 07:11	1.
Benzo (b) fluoranthene	0.0837 ND		0,0820	0.0110	mg/kg dry	0	07/05/11 13:00	07/06/11 07:11	1.
Benzo (g,h,i) perylene	ND		0,0020	0.0110				07/06/11 07:11	1.
Service Held House with a re-	0.0462		0.0020	0.0452			07/05/11 13:00	0//00/11/0/.11	14
The state of the s	0.0453	J	0.0820	0.0453	mg/kg dry	D.		07/06/44 07:44	4
Chrysene	0.128	J	0.0820	0.0380	mg/kg dry	13-	07/05/11 13:00	07/06/11 07:11	
Chrysene Dibenz (a,h) anthracene	0.128 ND	'n	0.0820 0.0820	0.0380 0.0184	mg/kg dry mg/kg dry	13- 83-	07/05/11 13:00 07/05/11 13:00	07/06/11 07:11	1.
Chrysene Dibenz (a,h) anthracene Tuoranthene	0.128 ND 0.311	J	0.0820 0.0820 0.0820	0.0380 0.0184 0.0135	mg/kg dry mg/kg dry mg/kg dry	83-	07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/06/11 07:11 07/06/11 07:11	1.
Chrysene Dibenz (a,h) anthracene Fluoranthene Fluorene	0.128 ND 0.311 1.33	J	0.0820 0.0820 0.0820 0.0820	0.0380 0.0184 0.0135 0.0245	mg/kg dry mg/kg dry mg/kg dry mg/kg dry	8	07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/06/11 07:11 07/06/11 07:11 07/06/11 07:11	1.
Chrysene Dibenz (a,h) anthracene Tuoranthene Tuorene Indeno (1,2,3-cd) pyrene	0.128 ND 0.311 1.33 ND	J	0.0820 0.0820 0.0820 0.0820 0.0820	0.0380 0.0184 0.0135 0.0245 0.0380	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	83-	07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11	1.0 1.0 1.0 1.0
Chrysene Dibenz (a,h) anthracene Fluoranthene Fluorene Indeno (1,2,3-cd) pyrene Japhthalene	0.128 ND 0.311 1.33 ND 0.670	J	0.0820 0.0820 0.0820 0.0820 0.0820 0.0820	0.0380 0.0184 0.0135 0.0245 0.0380 0.0171	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	8	07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11	1.0 1.0 1.0 1.0
Chrysene Dibenz (a,h) anthracene Fluoranthene Fluorene Indeno (1,2,3-cd) pyrene Japhthalene	0.128 ND 0.311 1.33 ND 0.670 3.17	J	0.0820 0.0820 0.0820 0.0820 0.0820 0.0820 0.0820	0.0380 0.0184 0.0135 0.0245 0.0380 0.0171 0.0122	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	0 0 0 0	07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11	1.4 1.4 1.4 1.4 1.4 1.4
chrysene libenz (a,h) anthracene luoranthene luorene ideno (1,2,3-cd) pyrene laphthalene henanthrene	0.128 ND 0.311 1.33 ND 0.670	J	0.0820 0.0820 0.0820 0.0820 0.0820 0.0820	0.0380 0.0184 0.0135 0.0245 0.0380 0.0171 0.0122	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	8	07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11	1. 1. 1. 1.
Chrysene Dibenz (a,h) anthracene Tuoranthene Duorene Indeno (1,2,3-cd) pyrene Daphthalene Chenanthrene Cyrene	0.128 ND 0.311 1.33 ND 0.670 3.17 0.468		0.0820 0.0820 0.0820 0.0820 0.0820 0.0820 0.0820 0.0820	0.0380 0.0184 0.0135 0.0245 0.0380 0.0171 0.0122	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	0 0 0 0	07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11	1. 1. 1. 1. 1. 1. Dil F
Chrysene Dibenz (a,h) anthracene Diuoranthene Diuorene Dideno (1,2,3-cd) pyrene Diaphthalene Denanthrene Dyrene Durrogate	0.128 ND 0.311 1.33 ND 0.670 3.17 0.468		0.0820 0.0820 0.0820 0.0820 0.0820 0.0820 0.0820 0.0820	0.0380 0.0184 0.0135 0.0245 0.0380 0.0171 0.0122	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	0 0 0 0	07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11	1 1 1 1 1 1 1 1
Chrysene Dibenz (a,h) anthracene Fluoranthene Fluorene Indeno (1,2,3-cd) pyrene Idaphthalene Phenanthrene Pyrene Fluorene Fluoren	0.128 ND 0.311 1.33 ND 0.670 3.17 0.468		0.0820 0.0820 0.0820 0.0820 0.0820 0.0820 0.0820 0.0820	0.0380 0.0184 0.0135 0.0245 0.0380 0.0171 0.0122	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	0 0 0 0	07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
chrysene libenz (a,h) anthracene lluoranthene lluorene ndeno (1,2,3-cd) pyrene laphthalene thenanthrene lyrene urrogate erphenyl-d14 -Fluorobiphenyl	0.128 ND 0.311 1.33 ND 0.670 3.17 0.468 % Recovery		0.0820 0.0820 0.0820 0.0820 0.0820 0.0820 0.0820 0.0820	0.0380 0.0184 0.0135 0.0245 0.0380 0.0171 0.0122	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	0 0 0 0	07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 Prepared 07/05/11 13:00	07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 Analyzed	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene Fluoranthene Fluorene Indeno (1,2,3-cd) pyrene Naphthalene Phenanthrene Pyrene Surrogate Ferphenyl-d14 P-Fluorobiphenyl Nitrobenzene-d5 Method: SW846 8270D - Poly	0.128 ND 0.311 1.33 ND 0.670 3.17 0.468 % Recovery 93 55	Qualifier	0.0820 0.0820 0.0820 0.0820 0.0820 0.0820 0.0820 5.0820 18 - 120 14 - 120 17 - 120	0.0380 0.0184 0.0135 0.0245 0.0380 0.0171 0.0122 0.0282	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	0 0 0 0	07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 Prepared 07/05/11 13:00 07/05/11 13:00	07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 Analyzed 07/06/11 07:11 07/06/11 07:11	1 1 1 1 1 1 1 1
Chrysene Dibenz (a,h) anthracene Fluoranthene Fluorene Indeno (1,2,3-cd) pyrene Blaphthalene Phenanthrene Pyrene Surrogate Ferphenyl-d14Fluorobīphenyl Jitrobenzene-d5	0.128 ND 0.311 1.33 ND 0.670 3.17 0.468  % Recovery 93 55 60 yaromatic Hydrocan	Qualifier	0.0820 0.0820 0.0820 0.0820 0.0820 0.0820 0.0820 5.0820 18 - 120 14 - 120 17 - 120	0.0380 0.0184 0.0135 0.0245 0.0380 0.0171 0.0122 0.0282	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	0 0 0 0	07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 Prepared 07/05/11 13:00 07/05/11 13:00	07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 07/06/11 07:11 Analyzed 07/06/11 07:11 07/06/11 07:11	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0

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

Project/Site: [none]

TestAmerica Job ID: NUG0346

Client Sample ID: 321 Ash

Date Collected: 06/29/11 12:45

Date Received: 07/02/11 08:30

Lab Sample ID: NUG0346-03

Matrix: Soil

Percent Solids: 79,8

Method: SW-846 - Genera	I Chemistry Paramete	ers							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	79.8		0.500	0.500	%		07/13/11 15:38	07/14/11 12:26	1.00

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

Project/Site: [none]

TestAmerica Job ID: NUG0346

Client Sample ID: 747 Bluebell

Date Collected: 06/30/11 11:15 Date Received: 07/02/11 08:30 Lab Sample ID: NUG0346-04

Matrix: Soil

Percent Solids: 75.3

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND	20.000	0,00218	0.00120	mg/kg dry	0	06/30/11 11:15	07/06/11 19:57	1.0
Toluene	0.00178	J	0.00218	0.000972	mg/kg dry	0	06/30/11 11:15	07/06/11 19:57	1.0
Xylenes, total	0.137		0.00546	0.00208	mg/kg dry	ō	06/30/11 11:15	07/06/11 19:57	1.0
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4	80		67 - 138				06/30/11 11:15	07/06/11 19:57	1.0
Dibromofluoromethane	85		75 - 125				06/30/11 11:15	07/06/11 19:57	1.0
Toluene-d8	150	ZX	76 - 129				06/30/11 11:15	07/06/11 19:57	1.0
4-Bromofluorobenzene	260	ZX	67 - 147				06/30/11 11:15	07/06/11 19:57	1.0
Method: SW846 8260B - Vola	atile Organic Comp	ounds by E	PA Method 82	260B - RE1	1				
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fa
Ethylbenzene	0.409		0.113	0.0552	mg/kg dry	0	06/30/11 11:15	07/12/11 15:14	50.0
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4	122		67 - 138				06/30/11 11:15	07/12/11 15:14	50.0
Dibromofluoromethane	95		75 - 125				06/30/11 11:15	07/12/11 15:14	50.0
Toluene-d8	98		76 - 129				06/30/11 11:15	07/12/11 15:14	50.
4-Bromofluorobenzene	109		67 - 147				06/30/11 11:15	07/12/11 15:14	50.0
Method: SW846 8260B - Vola	Charles and the control of the contr								
Analyte	4,53,40	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fa
Naphthalene	11.7		0.563	0.191	mg/kg dry	Ö	06/30/11 11:15	07/14/11 01:25	100
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	106		67 - 138				06/30/11 11:15	07/14/11 01:25	100
Control of the Contro								of authority from T. Co.	
	94	200	75 - 125				06/30/11 11:15	07/14/11 01:25	
Toluene-d8	67	ZX	76 - 129				06/30/11 11:15	07/14/11 01:25	100
Toluene-d8		ZX							100
Toluene-d8 4-Bromofluorobenzene Method: SW846 8270D - Poly	67 107 varomatic Hydrocal	bons by EF	76 - 129 67 - 147 PA 8270D - RE				06/30/11 11:15 06/30/11 11:15	07/14/11 01:25 07/14/11 01:25	100
Toluene-d8 4-Bromofluorobenzene Method: SW846 8270D - Poly Analyte	67 107 varomatic Hydrocal Result		76 - 129 67 - 147 PA 8270D - RE RL	MDL		D W	06/30/11 11:15 06/30/11 11:15 Prepared	07/14/11 01:25 07/14/11 01:25 Analyzed	100 100
Toluene-d8 4-Bromofluorobenzene Method: SW846 8270D - Poly Analyte Acenaphthene	/aromatic Hydrocal Result	bons by EF	76 - 129 67 - 147 PA 8270D - RE RL 0.869	MDL 0.182	mg/kg dry	3(5	06/30/11 11:15 06/30/11 11:15 Prepared 07/05/11 13:00	07/14/11 01:25 07/14/11 01:25 Analyzed 07/06/11 11:13	100 100 Dil Fac
Toluene-d8 4-Bromofluorobenzene Method: SW846 8270D - Poly Analyte Acenaphthene Acenaphthylene	yaromatic Hydrocal Result 1.93	bons by EF Qualifier	76 - 129 67 - 147 PA 8270D - RE RL 0.869 0.869	0.182 0.259	mg/kg dry mg/kg dry	0	06/30/11 11:15 06/30/11 11:15 Prepared 07/05/11 13:00 07/05/11 13:00	07/14/11 01:25 07/14/11 01:25 Analyzed 07/06/11 11:13 07/06/11 11:13	100 100 Dil Fac 10.0
Toluene-d8 4-Bromofluorobenzene Method: SW846 8270D - Poly Analyte Acenaphthene Acenaphthylene Anthracene	/aromatic Hydrocal Result 1.93 1.07 0.847	bons by EF	76 - 129 67 - 147 PA 8270D - RE RL 0.869 0.869 0.869	MDL 0.182 0.259 0.117	mg/kg dry mg/kg dry mg/kg dry	0	06/30/11 11:15 06/30/11 11:15 Prepared 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/14/11 01:25 07/14/11 01:25 Analyzed 07/06/11 11:13 07/06/11 11:13	100 100 100 10.0 10.0
Dibromofluoromethane Toluene-d8 4-Bromofluorobenzene Method: SW846 8270D - Poly Analyte Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene	/aromatic Hydrocal Result 1.93 1.07 0.847 ND	bons by EF Qualifier	76 - 129 67 - 147 PA 8270D - RE RL 0.869 0.869 0.869 0.869	0.182 0.259 0.117 0.143	mg/kg dry mg/kg dry mg/kg dry mg/kg dry	\$ 0 0 0	06/30/11 11:15 06/30/11 11:15 Prepared 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/14/11 01:25 07/14/11 01:25 Analyzed 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13	100 100 100 10.0 10.0 10.0
Toluene-d8 4-Bromofluorobenzene  Method: SW846 8270D - Poly Analyte Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene	/aromatic Hydrocal Result 1.93 1.07 0.847 ND	bons by EF Qualifier	76 - 129 67 - 147 PA 8270D - RE RL 0.869 0.869 0.869 0.869 0.869	0.182 0.259 0.117 0.143 0.104	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	0 0 0	06/30/11 11:15 06/30/11 11:15 Prepared 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/14/11 01:25 07/14/11 01:25 Analyzed 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13	Dil Fac 10.0 10.0 10.0 10.0 10.0
Toluene-d8 4-Bromofluorobenzene  Method: SW846 8270D - Poly Analyte Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene	/aromatic Hydrocal Result 1.93 1.07 0.847 ND ND	bons by EF Qualifier	76 - 129 67 - 147 PA 8270D - RE RL 0.869 0.869 0.869 0.869 0.869 0.869	MDL 0.182 0.259 0.117 0.143 0.104 0.493	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	0 0 0 0	06/30/11 11:15 06/30/11 11:15 Prepared 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/14/11 01:25 07/14/11 01:25 Analyzed 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13	Dil Fac 10.0 10.0 10.0 10.0 10.0 10.0
Toluene-d8 4-Bromofluorobenzene  Method: SW846 8270D - Poly Analyte Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (g,h,i) perylene	varomatic Hydrocal Result 1.93 1.07 0.847 ND ND ND	bons by EF Qualifier	76 - 129 67 - 147 PA 8270D - RE RL 0.869 0.869 0.869 0.869 0.869 0.869 0.869	MDL 0.182 0.259 0.117 0.143 0.104 0.493 0.117	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	0 0 0 0	06/30/11 11:15 06/30/11 11:15 Prepared 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/14/11 01:25 07/14/11 01:25 Analyzed 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13	Dil Fac 10.0 10.0 10.0 10.0 10.0 10.0 10.0
Toluene-d8 4-Bromofluorobenzene  Method: SW846 8270D - Poly Analyte Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (g,h,i) perylene Benzo (k) fluoranthene	7 107  Varomatic Hydrocal Result 1.93 1.07 0.847 ND ND ND ND ND	bons by EF Qualifier	76 - 129 67 - 147 PA 8270D - RE RL 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869	MDL 0.182 0.259 0.117 0.143 0.104 0.493 0.117 0.480	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	06/30/11 11:15 06/30/11 11:15 Prepared 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/14/11 01:25 07/14/11 01:25 Analyzed 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13	Dil Fac 10.0 10.0 10.0 10.0 10.0 10.0 10.0
Toluene-d8 4-Bromofluorobenzene  Method: SW846 8270D - Poly Analyte Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (g,h,i) perylene Benzo (k) fluoranthene Chrysene	yaromatic Hydrocal Result 1.93 1.07 0.847 ND ND ND ND	bons by EF Qualifier	76 - 129 67 - 147 PA 8270D - RE RL 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869	MDL 0.182 0.259 0.117 0.143 0.104 0.493 0.117 0.480 0.402	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	06/30/11 11:15 06/30/11 11:15 Prepared 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/14/11 01:25 07/14/11 01:25 Analyzed 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13	100 100 100 10.0 10.0 10.0 10.0 10.0 10
Method: SW846 8270D - Poly Analyte Acenaphthene Acenaphthylene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (g,h,i) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene	/aromatic Hydrocal Result 1.93 1.07 0.847 ND ND ND ND ND	bons by EF Qualifier	76 - 129 67 - 147 PA 8270D - RE RL 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869	MDL 0.182 0.259 0.117 0.143 0.104 0.493 0.117 0.480 0.402 0.195	mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	0 0 0 0 0 0	06/30/11 11:15 06/30/11 11:15 Prepared 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/14/11 01:25 07/14/11 01:25 Analyzed 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13	100 100 100 10.0 10.0 10.0 10.0 10.0 10
Method: SW846 8270D - Poly Analyte Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (g,h,i) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene Fluoranthene	Aromatic Hydrocal Result 1.93 1.07 0.847 ND	bons by EF Qualifier	76 - 129 67 - 147 PA 8270D - RE RL 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869	MDL 0.182 0.259 0.117 0.143 0.104 0.493 0.117 0.480 0.402 0.195 0.143	mg/kg dry	000000000000000000000000000000000000000	06/30/11 11:15 06/30/11 11:15 Prepared 07/05/11 13:00 07/05/11 13:00	07/14/11 01:25 07/14/11 01:25 07/14/11 01:25 Analyzed 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13	100 100 10.0 10.0 10.0 10.0 10.0 10.0 1
Method: SW846 8270D - Poly Analyte Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (g,h,i) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene Fluoranthene Fluorene	Aromatic Hydrocal Result 1.93 1.07 0.847 ND	bons by EF Qualifier	76 - 129 67 - 147 PA 8270D - RE RL 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869	MDL 0.182 0.259 0.117 0.143 0.104 0.493 0.117 0.480 0.402 0.195 0.143 0.259	mg/kg dry		06/30/11 11:15 06/30/11 11:15 Prepared 07/05/11 13:00 07/05/11 13:00	07/14/11 01:25 07/14/11 01:25 07/14/11 01:25 Analyzed 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13 07/06/11 11:13	100 100 10.0 10.0 10.0 10.0 10.0 10.0 1
Method: SW846 8270D - Poly Analyte Acenaphthene Acenaphthylene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (g,h,i) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene Eluoranthene Fluorene Indeno (1,2,3-cd) pyrene	Aromatic Hydrocal Result 1.93 1.07 0.847 ND	bons by EF Qualifier	76 - 129 67 - 147 PA 8270D - RE RL 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869	MDL 0.182 0.259 0.117 0.143 0.104 0.493 0.117 0.480 0.402 0.195 0.143 0.259 0.402	mg/kg dry	000000000000000000000000000000000000000	06/30/11 11:15 06/30/11 11:15  Prepared 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/14/11 01:25 07/14/11 01:25 07/14/11 01:25 Analyzed 07/06/11 11:13 07/06/11 11:13	1000 1000 1000 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00
Method: SW846 8270D - Poly Analyte Acenaphthene Acenaphthene Acenaphthylene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (g,h,i) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene Fluorenthene Fluorenthene Fluorene Indeno (1,2,3-cd) pyrene Naphthalene	7 107  7 107  7 107  7 107  7 10847  8 107	bons by EF Qualifier	76 - 129 67 - 147 PA 8270D - RE RL 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869	MDL 0.182 0.259 0.117 0.143 0.104 0.493 0.117 0.480 0.402 0.195 0.143 0.259 0.402 0.182	mg/kg dry		06/30/11 11:15 06/30/11 11:15  Prepared 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/14/11 01:25 07/14/11 01:25 07/14/11 01:25 Analyzed 07/06/11 11:13 07/06/11 11:13	100 100 100 10.0 10.0 10.0 10.0 10.0 10
Toluene-d8 4-Bromofluorobenzene  Method: SW846 8270D - Poly Analyte Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene	Aromatic Hydrocal Result 1.93 1.07 0.847 ND	Cualifier	76 - 129 67 - 147 PA 8270D - RE RL 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869	MDL 0.182 0.259 0.117 0.143 0.104 0.493 0.117 0.480 0.402 0.195 0.143 0.259 0.402 0.182 0.130	mg/kg dry	000000000000000000000000000000000000000	06/30/11 11:15 06/30/11 11:15  Prepared 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00 07/05/11 13:00	07/14/11 01:25 07/14/11 01:25 07/14/11 01:25 Analyzed 07/06/11 11:13 07/06/11 11:13	Dil Fac  10.0

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

Project/Site: [none]

TestAmerica Job ID: NUG0346

Client Sample ID: 747 Bluebell

Date Collected: 06/30/11 11:15 Date Received: 07/02/11 08:30 Lab Sample ID: NUG0346-04

Matrix: Soil

Percent Solids: 75.3

Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	88		18 - 120				07/05/11 13:00	07/06/11 11:13	10.0
2-Fluorobiphenyl	63		14 - 120				07/05/11 13:00	07/06/11 11:13	10.0
Nitrobenzene-d5	100		17 - 120				07/05/11 13:00	07/06/11 11:13	10.0
Method: SW846 8270D - Pol	yaromatic Hydrocar	bons by El	PA 8270D - RE2						
Method: SW846 8270D - Pol Analyte		bons by El Qualifier	PA 8270D - RE2 RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte		Allera Company		MDL	Unit mg/kg dry	_ <del>D</del>	Prepared 07/05/11 13:00	Analyzed 07/06/11 12:01	Dil Fac 20.0
Analyte 2-Methylnaphthalene	Result 48.5	Qualifier	RL	MDL			-		
	Result 48.5	Qualifier	RL	MDL	mg/kg dry		-		

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

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

Lab Sample ID: 11G0464-BLK1

Matrix: Soil

Analysis Batch: U012052

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 11G0464 P

	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet	_	07/06/11 11:37	07/06/11 14:36	1.00
Ethylbenzene	ND		0.00200	0.000980	mg/kg wet		07/06/11 11:37	07/06/11 14:36	1.00
Naphthalene	ND		0.00500	0.00170	mg/kg wet		07/06/11 11:37	07/06/11 14:36	1.00
Toluene	ND		0.00200	0.000890	mg/kg wet		07/06/11 11:37	07/06/11 14:36	1.00
Xylenes, total	ND		0.00500	0.00190	mg/kg wet		07/06/11 11:37	07/06/11 14:36	1.00

Blank Blank Surrogate % Recovery Qualifier Limits Prepared Analyzed Dil Fac 1,2-Dichloroethane-d4 93 67 - 138 07/06/11 11:37 07/06/11 14:36 1.00 75-125 Dibromofluoromethane 102 07/06/11 11:37 07/06/11 14:36 1.00 Toluene-d8 93 76 - 129 07/06/11 11:37 07/06/11 14:36 1.00 4-Bromofluorobenzene 98 67 - 147 07/06/11 11:37 07/06/11 14:36 1.00

Lab Sample ID: 11G0464-BS1

Matrix: Soil

Analysis Batch: U012052

Client Sample ID: Lab Control Sample Prep Type: Total

Prep Batch: 11G0464\_P

	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Benzene	50.0	53.6		ug/kg		107	78 - 126	
Ethylbenzene	50.0	57.4		ug/kg		115	79 - 130	
Naphthalene	50.0	43.6		ug/kg		87	72 - 150	
Toluene	50.0	56.2		ug/kg		112	76 - 126	
Xylenes, total	150	177		ug/kg		118	80 - 130	

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	86		67 - 138
Dibromofluoromethane	98		75 - 125
Toluene-d8	94		76 - 129
4-Bromofluorobenzene	88		67 - 147

Lab Sample ID: 11G0464-BSD1

Matrix: Soil

Analysis Batch: U012052

Client Sample ID: Lab Control Sample Dup

Prep Type: Total

Prep Batch: 11G0464 P

	Spike	LCS Dup	LCS Dup				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Benzene	50.0	52.0		ug/kg		104	78 - 126	3	50
Ethylbenzene	50.0	57.2		ug/kg		114	79 - 130	0.5	50
Naphthalene	50.0	43.2		ug/kg		86	72 - 150	1	50
Toluene	50.0	56.1		ug/kg		112	76 - 126	0.2	50
Xylenes, lotal	150	176		ug/kg		117	80 - 130	1	50

LCS Dup LCS Dup Surrogate % Recovery Qualifier Limits 1.2-Dichloroethane-d4 67 - 138 82 Dibromofluoromethane 93 75-125 Toluene-d8 95 76 - 129 4-Bromofluorobenzene 90 67 - 147

Project/Site: [none]

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

Lab Sample ID: 11G0464-MS1

Matrix: Soil

Analysis Batch: U012052

Client Sample ID: Matrix Spike Prep Type: Total

Prep Batch: 11G0464\_P

	Sample	Sample	Spike	Matrix Spike	Matrix Spi	ke			% Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Benzene	ND		0.0595	0.0539		mg/kg dry	10	91	42 - 141	
Ethylbenzene	ND		0.0595	0.0519		mg/kg dry	0	87	21 - 165	
Naphthalene	ND		0.0595	0.0126		mg/kg dry	0	21	10 - 160	
Toluene	ND		0.0595	0.0546		mg/kg dry	0	92	45 - 145	
Xylenes, total	ND		0.178	0.147		mg/kg dry	0	82	31 - 159	

67 - 147

Matrix Spike	Matrix Spike	•
% Recovery	Qualifier	Limits
84		67 - 138
92		75 - 125
99		76 - 129
	% Recovery 84 92	92

Lab Sample ID: 11G0464-MSD1

Matrix: Soil

4-Bromofluorobenzene

Analysis Batch: U012052

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total

Prep Batch: 11G0464\_P

	Sample	Sample	Spike	Natrix Spike Dup	Matrix Spi	ke Dur			% Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Benzene	ND		0.0595	0.0693		mg/kg dry	25	116	42 - 141	25	50
Ethylbenzene	ND		0.0595	0.0654		mg/kg dry	9	110	21 - 165	23	50
Naphthalene	ND		0.0595	0.0156		mg/kg dry	O	26	10 - 160	21	50
Toluene	ND		0.0595	0.0685		mg/kg dry	33	115	45 - 145	23	50
Xylenes, total	ND		0.178	0.187		mg/kg dry	0	105	31 - 159	24	50

Matrix	Snika	Diin	Matrix	Snika	Dun

Blank Blank

100

Surrogate	% Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	95		67 - 138
Dibromofluoromethane	108		75 - 125
Toluene-d8	107		76 - 129
4-Bromofluorobenzene	98		67 - 147

Lab Sample ID: 11G1211-BLK1

Matrix: Soil

Toluene-d8

4-Bromofluorobenzene

Analysis Batch: U012543

Client Sample ID: Method Blank Prep Type: Total

Prep Batch: 11G1211\_P

	- Diam.	E TOTAL							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		07/07/11 12:07	07/12/11 14:17	1.00
Ethylbenzene	ND		0.00200	0.000980	mg/kg wet		07/07/11 12:07	07/12/11 14:17	1.00
Naphthalene	ND		0.00500	0.00170	mg/kg wet		07/07/11 12:07	07/12/11 14:17	1.00
Toluene	ND		0.00200	0.000890	mg/kg wet		07/07/11 12:07	07/12/11 14:17	1.00
Xylenes, total	ND		0.00500	0.00190	mg/kg wet		07/07/11 12:07	07/12/11 14:17	1.00
	Blank	Blank							
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	122		67 - 138				07/07/11 12:07	07/12/11 14:17	1.00
Dibromofluoromethane	104		75 - 125				07/07/11 12:07	07/12/11 14:17	1.00

76 - 129

67 - 147

07/07/11 12:07 07/12/11 14:17

07/12/11 14:17

07/07/11 12:07

1.00

1.00

Project/Site: [none]

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

Lab Sample ID: 11G1211-BLK2

Matrix: Soil

Analysis Batch: U012543

Client Sample ID: Method Blank Prep Type: Total

Prep Batch: 11G1211\_P

	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0550	mg/kg wet		07/07/11 12:07	07/12/11 14:45	50.0
Ethylbenzene	ND		0.100	0.0490	mg/kg wet		07/07/11 12:07	07/12/11 14:45	50.0
Naphthalene	ND		0.250	0.0850	mg/kg wet		07/07/11 12:07	07/12/11 14:45	50.0
Toluene	ND		0.100	0.0445	mg/kg wet		07/07/11 12:07	07/12/11 14:45	50.0
Xylenes, total	ND		0.250	0.0950	mg/kg wet		07/07/11 12:07	07/12/11 14:45	50.0
	Blank	Blank							

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	122		67 - 138	07/07/11 12:07	07/12/11 14:45	50.0
Dibromofluoromethane	94		75 - 125	07/07/11 12:07	07/12/11 14:45	50.0
Toluene-d8	98		76 - 129	07/07/11 12:07	07/12/11 14:45	50.0
4-Bromofluorobenzene	103		67 - 147	07/07/11 12:07	07/12/11 14:45	50.0

Lab Sample ID: 11G1211-BS1

Matrix: Soil

Analysis Batch: U012543

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 11G1211\_P

	Spike	LCS	LCS				% Rec.
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits
Benzene	50.0	49.4		ug/kg	= -	99	78 - 126
Ethylbenzene	50.0	52.0		ug/kg		104	79 - 130
Naphthalene	50.0	56.5		ug/kg		113	72 - 150
Toluene	50.0	51.9		ug/kg		104	76 - 126
Xylenes, total	150	151		ug/kg		101	80 - 130

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	119		67 - 138
Dibromofluoromethane	105		75 - 125
Toluene-d8	98		76 - 129
4-Bromofluorobenzene	102		67 - 147

Lab Sample ID: 11G1211-BSD1

Matrix: Soil

Analysis Batch: U012543

Client Sample ID: Lab Control Sample Dup

Prep Type: Total

Prep Batch: 11G1211\_P

	Spike	LCS Dup	LCS Dup				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Benzene	50.0	48.1		ug/kg	-	96	78 - 126	3	50
Ethylbenzene	50.0	50.2		ug/kg		100	79 - 130	4	50
Naphthalene	50.0	55.5		ug/kg		111	72 - 150	2	50
Toluene	50.0	50.4		ug/kg		101	76 - 126	3	50
Xylenes, total	150	146		ug/kg		97	80 - 130	4	.50

LCS Dup LCS Dup

Surrogate	% Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	119		67 - 138
Dibromofluoromethane	105		75 - 125
Toluene-d8	99		76 - 129
4-Bromofluorobenzene	101		67 - 147

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

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

Lab Sample ID: 11G1211-MS1 Matrix: Soil

Analysis Batch: U012543

Client Sample ID: 321 Ash
Prep Type: Total
Prep Batch: 11G1211 P

Sample	Sample	Spike	Matrix Spike	Matrix Spi	ke			% Rec.	
Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits	
ND		3.17	2.62		mg/kg dry	\$	83	42 - 141	
0,0710		3.17	2.87		mg/kg dry	200	88	21 - 165	
4.12		3.17	7.91		mg/kg dry	0	119	10 - 160	
ND		3.17	2.74		mg/kg dry	0	87	45 - 145	
ND		9.51	8,17		mg/kg dry	10	86	31 - 159	
	Result ND 0,0710 4.12 ND	0.0710 4.12 ND	Result         Qualifier         Added           ND         3.17           0.0710         3.17           4.12         3.17           ND         3.17	Result         Qualifier         Added         Result           ND         3.17         2.62           0.0710         3.17         2.87           4.12         3.17         7.91           ND         3.17         2.74	Result Qualifier         Added Result Qualifier           ND         3.17         2.62           0.0710         3.17         2.87           4.12         3.17         7.91           ND         3.17         2.74	Result ND         Qualifier         Added A	Result Qualifier         Added Nesult Qualifier         Qualifier         Unit D mg/kg dry         D mg/kg dry           0.0710         3.17         2.87         mg/kg dry         ™           4.12         3.17         7.91         mg/kg dry         ™           ND         3.17         2.74         mg/kg dry         ™	Result Qualifier         Added Added         Result Qualifier         Unit D % Rec mg/kg dry         % Rec mg/kg dry           ND         3.17         2.62         mg/kg dry         % 83           0.0710         3.17         2.87         mg/kg dry         % 88           4.12         3.17         7.91         mg/kg dry         % 119           ND         3.17         2.74         mg/kg dry         % 87	Result Qualifier         Added Nesult Qualifier         Qualifier Unit D % Rec Limits           ND         3.17         2.62         mg/kg dry

Matrix Spike Matrix Spike Surrogate % Recovery Qualifier Limits 1,2-Dichloroethane-d4 116 67 - 138 Dibromofluoromethane 98 75 - 125 Toluene-d8 98 76 - 129 4-Bromofluorobenzene 107 67 - 147

Lab Sample ID: 11G1211-MSD1

Matrix: Soil

Analysis Batch: U012543

Client Sample ID: 321 Ash Prep Type: Total

Prep Batch: 11G1211\_P

	Sample	mple Sample Spike Ma		Matrix Spike Dup	Matrix Spike Dur			% Rec.			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Benzene	ND		3.17	2.53		mg/kg dry	5,2	80	42 - 141	3	50
Ethylbenzene	0.0710		3.17	2.79		mg/kg dry	102	86	21 - 165	3	50
Naphthalene	4.12		3.17	7.52		mg/kg dry	0	107	10 - 160	5	50
Toluene	ND		3.17	2.68		mg/kg dry	ø	84	45 - 145	2	50
Xylenes, total	ND		9.51	7.93		mg/kg dry	0	83	31 - 159	3	50

Matrix Spike Dup Matrix Spike Dup

Blank Blank

Surrogate	% Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	114		67 - 138
Dibromofluoromethane	100		75 - 125
Toluene-d8	100		76 - 129
4-Bromofluorobenzene	105		67 - 147

Lab Sample ID: 11G3394-BLK1

Matrix: Soil

Analysis Batch: U012524

Client Sample ID: Method Blank

Prep Type: Total Prep Batch: 11G3394\_P

	Diank	Dialik							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		07/13/11 18:39	07/13/11 23:20	1.00
Ethylbenzene	ND		0.00200	0.000980	mg/kg wet		07/13/11 18:39	07/13/11 23:20	1.00
Naphthalene	ND		0.00500	0.00170	mg/kg wet		07/13/11 18:39	07/13/11 23:20	1.00
Toluene	ND		0.00200	0.000890	mg/kg wet		07/13/11 18:39	07/13/11 23:20	1.00
Xylenes, total	ND.		0.00500	0.00190	mg/kg wet		07/13/11 18:39	07/13/11 23:20	1.00

	Blank	Blank				
Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	100		67 - 138	07/13/11 18:39	07/13/11 23:20	1.00
Dibromofluoromethane	78		75 - 125	07/13/11 18:39	07/13/11 23:20	1.00
Toluene-d8	102		76 - 129	07/13/11 18:39	07/13/11 23:20	1.00
4-Bromofluorobenzene	100		67 - 147	07/13/11 18:39	07/13/11 23:20	1.00

Project/Site: [none]

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

Lab Sample	ID: 11	G3394-BLK2
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Matrix: Soil

Analysis Batch: U012524

Client Sample ID: Method Blank Prep Type: Total Prep Batch: 11G3394 P

	Blank	Blank						L	
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0550	mg/kg wet		07/13/11 18:39	07/14/11 00:54	50.0
Ethylbenzene	ND		0.100	0.0490	mg/kg wet		07/13/11 18:39	07/14/11 00:54	50.0
Naphthalene	ND		0.250	0.0850	mg/kg wet		07/13/11 18:39	07/14/11 00:54	50.0
Toluene	ND		0.100	0.0445	mg/kg wet		07/13/11 18:39	07/14/11 00:54	50.0
Xylenes, total	ND		0.250	0.0950	mg/kg wet		07/13/11 18:39	07/14/11 00:54	50.0

Dil Fac
50.0
50.0
50.0
50.0

Lab Sample ID: 11G3394-BS1

Matrix: Soil

Analysis Batch: U012524

Client Sample ID: Lab Control Sample Prep Type: Total

Prep Batch: 11G3394 P

	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Benzene	50.0	51.9		ug/kg		104	78 - 126	
Ethylbenzene	50.0	55.4		ug/kg		111	79 - 130	
Naphthalene	50,0	58.6		ug/kg		117	72 - 150	
Toluene	50.0	53.7		ug/kg		107	76 - 126	
Xylenes, total	150	166		ug/kg		110	80 - 130	

100	100
LCS	LUS

Surrogate	% Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	100		67 - 138
Dibromofluoromethane	95		75 - 125
Toluene-d8	100		76 - 129
4-Bromofluorobenzene	101		67 - 147

Lab Sample ID: 11G3394-MS1

Matrix: Soil

Analysis Batch: U012524

Client Sample ID: 747 Bluebell Prep Type: Total

Prep Batch: 11G3394\_P

	Sample	Sample	Spike	Matrix Spike	Matrix Spi	ke			% Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits
Benzene	ND		6,64	7.28		mg/kg dry	D	110	42 - 141
Ethylbenzene	0.436		6.64	8,39		mg/kg dry	U	120	21 - 165
Naphthalene	11.7		6.64	21.5		mg/kg dry	O	148	10 - 160
Toluene	ND		6.64	7.66		mg/kg dry	0	115	45 - 145
Xylenes, total	ND		19.9	23.5		mg/kg dry	0	118	31 - 159

Matrix Spike Matrix Spike
---------------------------

Surrogate	% Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	82		67 - 138
Dibromofluoromethane	78		75 - 125
Toluene-d8	99		76 - 129
4-Bromofluorobenzene	106		67 - 147

Project/Site: [none]

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

Lab Sample ID: 11G3394-MSD1

Matrix: Soil

Analysis Batch: U012524

Client Sample ID: 747 Bluebell

Prep Type: Total

Prep Batch: 11G3394\_P

Analysis Daten. 0012024									ich parci	1. 1100	334_1
	Sample	Sample	Spike	Vlatrix Spike Dup	Matrix Spi	ke Duş			% Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Benzene	ND		6,64	6,60		mg/kg dry	0	99	42 - 141	10	50
Ethylbenzene	0.436		6.64	7.53		mg/kg dry	0	107	21 - 165	11	50
Naphthalene	11.7		6.64	20.8		mg/kg dry	0	136	10 - 160	4	50
Toluene	ND		6.64	7.24		mg/kg dry	0	109	45 - 145	6	50
Xylenes, total	ND		19.9	21.3		mg/kg dry	*	107	31 - 159	10	50

Matrix Spike Dup Matrix Spike Dup

Surrogate	% Recovery	Qualifier	Limits
1,2-Dichloroethane-d4	104		67 - 138
Dibromofluoromethane	90		75 - 125
Toluene-d8	101		76 - 129
4-Bromofluorobenzene	107		67 - 147

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

Lab Sample ID: 11G0601-BLK1

Matrix: Soil

Analysis Batch: 11G0601

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 11G0601\_P

	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0140	mg/kg wet		07/05/11 13:00	07/06/11 02:57	1.00
Acenaphthylene	ND		0.0670	0.0200	mg/kg wet		07/05/11 13:00	07/06/11 02:57	1.00
Anthracene	ND		0.0670	0.00900	mg/kg wet		07/05/11 13:00	07/06/11 02:57	1.00
Benzo (a) anthracene	ND		0.0670	0.0110	mg/kg wet		07/05/11 13:00	07/06/11 02:57	1.00
Benzo (a) pyrene	ND		0.0670	0.00800	mg/kg wet		07/05/11 13:00	07/06/11 02:57	1.00
Benzo (b) fluoranthene	ND		0.0670	0.0380	mg/kg wet		07/05/11 13:00	07/06/11 02:57	1.00
Benzo (g,h,i) perylene	ND		0.0670	0.00900	mg/kg wet		07/05/11 13:00	07/06/11 02:57	1.00
Benzo (k) fluoranthene	ND		0.0670	0.0370	mg/kg wet		07/05/11 13:00	07/06/11 02:57	1.00
Chrysene	ND		0.0670	0.0310	mg/kg wet		07/05/11 13:00	07/06/11 02:57	1.00
Dibenz (a,h) anthracene	ND		0.0670	0.0150	mg/kg wet		07/05/11 13:00	07/06/11 02:57	1.00
Fluoranthene	ND		0.0670	0.0110	mg/kg wet		07/05/11 13:00	07/06/11 02:57	1.00
Fluorene	ND		0.0670	0.0200	mg/kg wet		07/05/11 13:00	07/06/11 02:57	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0670	0.0310	mg/kg wet		07/05/11 13:00	07/06/11 02:57	1.00
Naphthalene	ND		0.0670	0.0140	mg/kg wet		07/05/11 13:00	07/06/11 02:57	1.00
Phenanthrene	ND		0.0670	0.0100	mg/kg wet		07/05/11 13:00	07/06/11 02:57	1.00
Pyrene	ND		0.0670	0.0230	mg/kg wet		07/05/11 13:00	07/06/11 02:57	1.00
1-Methylnaphthalene	ND		0.0670	0.0120	mg/kg wet		07/05/11 13:00	07/06/11 02:57	1.00
2-Methylnaphthalene	ND		0,0670	0.0210	mg/kg wet		07/05/11 13:00	07/06/11 02:57	1.00

Blank Blank

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	88		18 - 120	07/05/11 13:00	07/06/11 02:57	1.00
2-Fluorobiphenyl	60		14 - 120	07/05/11 13:00	07/06/11 02:57	1.00
Nitrobenzene-d5	57		17 - 120	07/05/11 13:00	07/06/11 02:57	1.00

Lab Sample ID: 11G0601-BS1

Matrix: Soil

Analysis Batch: 11G0601

Client Sample ID: Lab Control Sample Prep Type: Total

Prep Batch: 11G0601\_P

 Spike
 LCS LCS
 % Rec.

 Analyte
 Added
 Result Qualifier
 Unit
 D % Rec Limits

 Acenaphthene
 1.67
 1.26
 mg/kg wet
 76
 49 - 120

TestAmerica Nashville

Project/Site: [none]

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

Lab Sample ID: 11G0601-BS1

Matrix: Soil

Analysis Batch: 11G0601

Client Sample ID: Lab Control Sample Prep Type: Total

Prep Batch: 11G0601\_P

	Spike	LCS	LCS				% Rec.
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits
Acenaphthylene	1.67	1.28		mg/kg wet		77	52 - 120
Anthracene	1,67	1.39		mg/kg wet		84	58 - 120
Benzo (a) anthracene	1.67	1.41		mg/kg wet		85	57 - 120
Benzo (a) pyrene	1.67	1.55		mg/kg wet.		93	55 - 120
Benzo (b) fluoranthene	1.67	1.58		mg/kg wet		95	51 - 123
Benzo (g,h,i) perylene	1.67	1.44		mg/kg wet		87	49 - 121
Benzo (k) fluoranthene	1.67	1.34		mg/kg wet		80	42 - 129
Chrysene	1.67	1.41		mg/kg wet		85	55 _ 120
Dibenz (a,h) anthracene	1.67	1.43		mg/kg wet		86	50 - 123
Fluoranthene	1.67	1.41		mg/kg wet		85	58 - 120
Fluorene	1.67	1.34		mg/kg wet		81	54 - 120
Indeno (1,2,3-cd) pyrene	1.67	1.42		mg/kg wet		85	50 - 122
Naphthalene	1.67	1.23		mg/kg wet		74	28 - 120
Phenanthrene	1.67	1.36		mg/kg wet		82	56 - 120
Pyrene	1,67	1.38		mg/kg wet		83	56 - 120
1-Methylnaphthalene	1.67	0.929		mg/kg wet		56	36 - 120
2-Methylnaphthalene	1,67	1.11		mg/kg wet		66	36 - 120
14.7 (4.5)							

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
Terphenyl-d14	86		18 - 120
2-Fluorobiphenyl	62		14 - 120
Nitrobenzene-d5	50		17 - 120

Lab Sample ID: 11G0601-MS1

Matrix: Soil

Terphenyl-d14

Analysis Batch: 11G0601

Client Sample ID: Matrix Spike

Prep Type: Total

Prep Batch: 11G0601 P

Allary 515 Daton. 1100001									Top Daton. Troops
	Sample	Sample	Spike	Matrix Spike	Matrix Spil	ke			% Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits
Acenaphthene	ND		2.52	1.79		mg/kg dry	305	71	42 - 120
Acenaphthylene	ND		2.52	1.83		mg/kg dry	53	73	32 - 120
Anthracene	ND		2.52	2.03		mg/kg dry	D	81	10 - 200
Benzo (a) anthracene	0.0649		2.52	2.03		mg/kg dry	25	78	41 - 120
Benzo (a) pyrene	0.0679		2.52	2.14		mg/kg dry	475	82	33 - 121
Benzo (b) fluoranthene	0.0709		2.52	2.28		mg/kg dry	0	88	26 - 137
Benzo (g,h,i) perylene	ND		2.52	1.84		mg/kg dry	0	73	21 - 124
Benzo (k) fluoranthene	0.0605		2.52	1.83		mg/kg dry	-0	70	14 - 140
Chrysene	0.0639		2.52	2.05		mg/kg dry		79	28 - 123
Dibenz (a,h) anthracene	ND		2.52	1.90		mg/kg dry	*	75	25 - 127
Fluoranthene	0.0724		2.52	2.05		mg/kg dry	0	79	38 - 120
Fluorene	ND		2.52	1.93		mg/kg dry	\$	77	41 - 120
Indeno (1,2,3-cd) pyrene	ND		2.52	1.96		mg/kg dry	Ŏ.	78	25 - 123
Naphthalene	ND		2.52	1.75		mg/kg dry	0	70	25 - 120
Phenanthrene	ND		2.52	1.99		mg/kg dry	0	79	37 - 120
Pyrene	0.0768		2.52	2.08		mg/kg dry	C)-	80	29 - 125
1-Methylnaphthalene	ND		2.52	1.32		mg/kg dry	8/5	53	19 - 120
2-Methylnaphthalene	ND		2.52	1.57		mg/kg dry	0	63	11 - 120
	Matrix Spike	Matrix Spike							
Surrogate	% Recovery	Qualifier	Limits						

18 - 120

17-120

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

Project/Site: [none]

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

Lab Sample ID: 11G0601-MS1

Matrix: Soil

Surrogate
2-Fluorobiphenyl
Nitrobenzene-d5

Analysis Batch: 11G0601

Client Sample ID: Matrix Spike

Prep Type: Total

Prep Batch: 11G0601\_P

Matrix Spike	Matrix Spike	
% Recovery	Qualifier	Limits
54		14 - 120

49

Lab Sample ID: 11G0601-MSD1

Matrix: Soil

Analysis Batch: 11G0601

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total

Prep Batch: 11G0601 P

									. ob -		
	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spi	ke Dut			% Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Acenaphthene	ND		2.50	1.55		mg/kg dry	0	62	42 - 120	14	40
Acenaphthylene	ND		2.50	1.56		mg/kg dry	0	63	32 - 120	16	30
Anthracene	ND		2.50	1.73		mg/kg dry	0	69	10 - 200	16	50
Benzo (a) anthracene	0.0649		2.50	1.76		mg/kg dry	-0	68	41 - 120	14	30
Benzo (a) pyrene	0.0679		2.50	1.90		mg/kg dry	35	73	33 - 121	12	33
Benzo (b) fluoranthene	0.0709		2.50	2.14		mg/kg dry	3,3	83	26 - 137	6	42
Benzo (g,h,i) perylene	ND		2.50	1.63		mg/kg dry	13	65	21 - 124	12	32
Benzo (k) fluoranthene	0,0605		2.50	1.40		mg/kg dry	0	54	14 - 140	27	39
Chrysene	0.0639		2.50	1.73		mg/kg dry	405	67	28 - 123	17	34
Dibenz (a,h) anthracene	ND		2.50	1.64		mg/kg dry	4	65	25 - 127	15	31
Fluoranthene	0.0724		2.50	1.86		mg/kg dry	*	72	38 - 120	9	35
Fluorene	ND		2.50	1.63		mg/kg dry	\$P	65	41 - 120	17	37
Indeno (1,2,3-cd) pyrene	ND		2.50	1.67		mg/kg dry	Ø	67	25 - 123	16	32
Naphthalene	ND		2.50	1.59		mg/kg dry	O	63	25 - 120	10	42
Phenanthrene	ND		2.50	1.72		mg/kg dry	()	69	37 - 120	14	32
Pyrene	0.0768		2.50	1.89		mg/kg dry	钦	73	29 - 125	9	40
1-Methylnaphthalene	ND		2.50	1,21		mg/kg dry	-02	48	19 - 120	9	45
2-Methylnaphthalene	ND		2.50	1,44		mg/kg dry	53	57	11 - 120	9	50

Matrix Spike Dup Matrix Spike Dup

Surrogate	% Recovery	Qualifier	Limits
Terphenyl-d14	65		18 - 120
2-Fluorobiphenyl	46		14 - 120
Nitrobenzene-d5	46		17 - 120

#### Method: SW-846 - General Chemistry Parameters

Lab Sample ID: 11G2361-DUP1 Client Sample ID: Duplicate

Matrix: Soil

Analysis Batch: 11G2361

onent dampie ib. Dapheate
Prep Type: Total
Prep Batch: 11G2361_P

 Analyte
 Result % Dry Solids
 Qualifier
 Result Result % Dry Solids
 Qualifier
 Result Result % Dry Solids
 Qualifier % Dry Solids
 T2.9
 %
 D.2
 20

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

#### GCMS Volatiles

#### Analysis Batch: U012052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11G0464-BS1	Lab Control Sample	Total	Soil	SW846 8260B	11G0464_P
11G0464-BSD1	Lab Control Sample Dup	Total	Soil	SW846 8260B	11G0464_P
11G0464-BLK1	Method Blank	Total	Soil	SW846 8260B	11G0464_P
NUG0346-01	308 Ash	Total	Soil	SW846 8260B	11G0464_P
NUG0346-02	318 Ash	Total	Soil	SW846 8260B	11G0464_P
NUG0346-03	321 Ash	Total	Soil	SW846 8260B	11G0464_P
NUG0346-04	747 Bluebell	Total	Soil	SW846 8260B	11G0464_P
11G0464-MS1	Matrix Spike	Total	Soll	SW846 8260B	11G0464_P
11G0464-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8260B	11G0464_P

#### Analysis Batch: U012524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11G3394-BS1	Lab Control Sample	Total	Soil	SW846 8260B	11G3394_P
11G3394-BLK1	Method Blank	Total	Soil	SW846 8260B	11G3394_P
11G3394-BLK2	Method Blank	Total	Soil	SW846 8260B	11G3394_P
NUG0346-04 - RE2	747 Bluebell	Total	Soil	SW846 8260B	11G3394_P
11G3394-MS1	747 Bluebell	Total	Soil	SW846 8260B	11G3394_P
11G3394-MSD1	747 Bluebell	Total	Soil	SW846 8260B	11G3394_P

#### Analysis Batch: U012543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11G1211-BS1	Lab Control Sample	Total	Soil	SW846 8260B	11G1211_P
11G1211-BSD1	Lab Control Sample Dup	Total	Soil	SW846 8260B	11G1211_P
11G1211-BLK1	Method Blank	Total	Soil	SW846 8260B	11G1211_P
11G1211-BLK2	Method Blank	Total	Soil	SW846 8260B	11G1211_P
NUG0346-04 - RE1	747 Bluebell	Total	Soil	SW846 8260B	11G1211_P
NUG0346-03 - RE1	321 Ash	Total	Soil	SW846 8260B	11G1211_P
11G1211-MS1	321 Ash	Total	Soil	SW846 8260B	11G1211_P
11G1211-MSD1	321 Ash	Total	Soil	SW846 8260B	11G1211_P

#### Prep Batch: 11G0464\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11G0464-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11G0464-BSD1	Lab Control Sample Dup	Total	Soil	EPA 5035	
11G0464-BLK1	Method Blank	Total	Soil	EPA 5035	
NUG0346-01	308 Ash	Total	Soil	EPA 5035	
NUG0346-02	318 Ash	Total	Soil	EPA 5035	
NUG0346-03	321 Ash	Total	Soil	EPA 5035	
NUG0346-04	747 Bluebell	Total	Soil	EPA 5035	
11G0464-MS1	Matrix Spike	Total	Soil	EPA 5035	
11G0464-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 5035	

## Prep Batch: 11G1211\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11G1211-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11G1211-BSD1	Lab Control Sample Dup	Total	Soil	EPA 5035	
11G1211-BLK1	Method Blank	Total	Soil	EPA 5035	
11G1211-BLK2	Method Blank	Total	Soil	EPA 5035	
NUG0346-04 - RE1	747 Bluebell	Total	Soil	EPA 5035	
NUG0346-03 - RE1	321 Ash	Total	Soil	EPA 5035	
11G1211-MS1	321 Ash	Total	Soil	EPA 5035	
11G1211-MSD1	321 Ash	Total	Soil	EPA 5035	

Project/Site: [none]

#### GCMS Volatiles (Continued)

#### Prep Batch: 11G3394\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11G3394-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11G3394-BLK1	Method Blank	Total	Soil	EPA 5035	
11G3394-BLK2	Method Blank	Total	Soil	EPA 5035	
NUG0346-04 - RE2	747 Bluebell	Total	Soil	EPA 5035	
11G3394-MS1	747 Bluebell	Total	Soil	EPA 5035	
11G3394-MSD1	747 Bluebell	Total	Soil	EPA 5035	

#### GCMS Semivolatiles

#### Analysis Batch: 11G0601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11G0601-BLK1	Method Blank	Total	Soil	SW846 8270D	11G0601_P
11G0601-BS1	Lab Control Sample	Total	Soil	SW846 8270D	11G0601_P
11G0601-MS1	Matrix Spike	Total	Soil	SW846 8270D	11G0601_P
11G0601-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8270D	11G0601_P
NUG0346-01	308 Ash	Total	Soil	SW846 8270D	11G0601_P
NUG0346-02	318 Ash	Total	Soil	SW846 8270D	11G0601_P
NUG0346-03	321 Ash	Total	Soil	SW846 8270D	11G0601_P
NUG0346-03 - RE1	321 Ash	Total	Soil	SW846 8270D	11G0601_P
NUG0346-04 - RE1	747 Bluebell	Total	Soil	SW846 8270D	11G0601_P
NUG0346-04 - RE2	747 Bluebell	Total	Soil	SW846 8270D	11G0601_P

#### Prep Batch: 11G0601\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11G0601-BLK1	Method Blank	Total	Soil	EPA 3550C	
11G0601-BS1	Lab Control Sample	Total	Soil	EPA 3550C	
11G0601-MS1	Matrix Spike	Total	Soil	EPA 3550C	
11G0601-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 3550C	
NUG0346-01	308 Ash	Total	Soil	EPA 3550C	
NUG0346-02	318 Ash	Total	Soil	EPA 3550C	
NUG0346-03	321 Ash	Total	Soil	EPA 3550C	
NUG0346-03 - RE1	321 Ash	Total	Soil	EPA 3550C	
NUG0346-04 - RE1	747 Bluebell	Total	Soil	EPA 3550C	
NUG0346-04 - RE2	747 Bluebell	Total	Soil	EPA 3550C	

#### Extractions

## Analysis Batch: 11G2361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11G2361-DUP1	Duplicate	Total	Soil	SW-846	11G2361_P
NUG0346-01	308 Ash	Total	Soil	SW-846	11G2361_P
NUG0346-02	318 Ash	Total	Soil	SW-846	11G2361_P
NUG0346-03	321 Ash	Total	Soil	SW-846	11G2361_P
NUG0346-04	747 Bluebell	Total	Soil	SW-846	11G2361_P

#### Prep Batch: 11G2361\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11G2361-DUP1	Duplicate	Total	Soil	% Solids	
NUG0346-01	308 Ash	Total	Soil	% Solids	
NUG0346-02	318 Ash	Total	Soil	% Solids	
NUG0346-03	321 Ash	Total	Soil	% Solids	
NUG0346-04	747 Bluebell	Total	Soil	% Solids	

TestAmerica Nashville

Project/Site: [none]

Client Sample ID: 308 Ash

Date Collected: 06/27/11 13:15 Date Received: 07/02/11 08:30

Lab Sample ID: NUG0346-01

Matrix: Soll

Percent Solids: 77.8

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.926	11G0464_P	06/27/11 13:15	AAN	TAL NSH
Total	Analysis	SW846 8260B		1.00	U012052	07/06/11 18:21	MJH	TAL NSH
Total	Prep	EPA 3550C		0.979	11G0601_P	07/05/11 13:00	JJR	TAL NSH
Total	Analysis	SW846 8270D		1.00	11G0601	07/06/11 06:31	BES	TAL NSH
Total	Prep	% Solids		1.00	11G2361_P	07/13/11 15:38	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11G2361	07/14/11 12:26	AMS	TAL NSH

Client Sample ID: 318 Ash

Date Collected: 06/28/11 12:15 Date Received: 07/02/11 08:30

Lab Sample ID: NUG0346-02

Matrix: Soil

Percent Solids: 83.9

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.850	11G0464_P	06/28/11 12:15	AAN	TAL NSH
Total	Analysis	SW846 8260B		1.00	U012052	07/06/11 18:53	MJH	TAL NSH
Total	Prep	EPA 3550C		0.994	11G0601_P	07/05/11 13:00	JJR	TAL NSH
Total	Analysis	SW846 8270D		1.00	11G0601	07/06/11 06:51	BES	TAL NSH
Total	Prep	% Solids		1.00	11G2361_P	07/13/11 15:38	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11G2361	07/14/11 12:26	AMS	TAL NSH

Client Sample ID: 321 Ash

Date Collected: 06/29/11 12:45

Date Received: 07/02/11 08:30

Lab Sample ID: NUG0346-03

Matrix: Soil

Percent Solids: 79.8

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.971	11G0464_P	06/29/11 12:45	AAN	TAL NSH
Total	Analysis	SW846 8260B		1.00	U012052	07/06/11 19:25	MJH	TAL NSH
Total	Prep	EPA 5035	RE1	1.01	11G1211_P	06/29/11 12:45	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE1	50.0	U012543	07/12/11 15:42	MJH	TAL NSH
Total	Prep	EPA 3550C		0.977	11G0601_P	07/05/11 13:00	JJR	TAL NSH
Total	Analysis	SW846 8270D		1.00	11G0601	07/06/11 07:11	BES	TAL NSH
Total	Prep	EPA 3550C	RE1	0.977	11G0601_P	07/05/11 13:00	JJR	TAL NSH
Total	Analysis	SW846 8270D	RE1	5.00	11G0601	07/06/11 10:53	BES	TAL NSH
Total	Prep	% Solids		1.00	11G2361_P	07/13/11 15:38	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11G2361	07/14/11 12:26	AMS	TAL NSH

Client Sample ID: 747 Bluebell

Date Collected: 06/30/11 11:15 Date Received: 07/02/11 08:30

Lab Sample ID: NUG0346-04

Matrix: Soil

Percent Solids: 75.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.822	11G0464_P	06/30/11 11:15	AAN	TAL NSH
Total	Analysis	SW846 8260B		1.00	U012052	07/06/11 19:57	MJH	TAL NSH
Total	Prep	EPA 5035	RE1	0.847	11G1211_P	06/30/11 11:15	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE1	50.0	U012543	07/12/11 15:14	MJH	TAL NSH
Total	Prep	EPA 5035	RE2	0.847	11G3394_P	06/30/11 11:15	AAN	TAL NSH

#### Lab Chronicle

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

Project/Site: [none]

TestAmerica Job ID: NUG0346

Lab Sample ID: NUG0346-04

Matrix: Soil

Percent Solids: 75.3

## Client Sample ID: 747 Bluebell

Date Collected: 06/30/11 11:15 Date Received: 07/02/11 08:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total	Analysis	SW846 8260B	RE2	100	U012524	07/14/11 01:25	MJH	TAL NSH
Total	Prep	EPA 3550C	RE1	0.977	11G0601_P	07/05/11 13:00	JJR	TAL NSH
Total	Analysis	SW846 8270D	RE1	10.0	11G0601	07/06/11 11:13	BES	TAL NSH
Total	Prep	EPA 3550C	RE2	0.977	11G0601_P	07/05/11 13:00	JJR	TAL NSH
Total	Analysis	SW846 8270D	RE2	20.0	11G0601	07/06/11 12:01	BES	TAL NSH
Total	Prep	% Solids		1,00	11G2361_P	07/13/11 15:38	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11G2361	07/14/11 12:26	AMS	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: NUG0346

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:

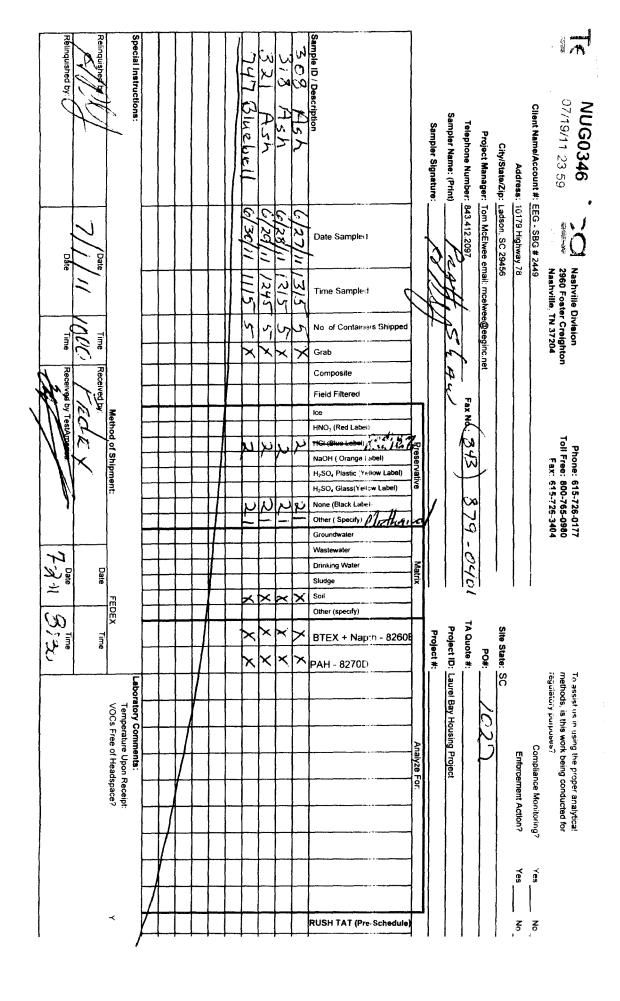
#### Laboratory References:

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

Project/Site: [none]

_aboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Nashville	A2LA	ISO/IEC 17025		0453.07
estAmerica Nashville	A2LA	WY UST		453.07
estAmerica Nashville	AIHA	IHLAP		100790
estAmerica Nashville	Alabama	State Program	4	41150
restAmerica Nashville	Alaska	Alaska UST	10	UST-087
estAmerica Nashville	Arizona	State Program	9	AZ0473
estAmerica Nashville	Arkansas	State Program	6	88-0737
estAmerica Nashville	CALA	CALA		3744
estAmerica Nashville	California	NELAC	9	1168CA
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	Kentucky UST	4	19
estAmerica Nashville	Kentucky	State Program	4	90038
estAmerica Nashville	Louisiana	NELAC	6	LA100011
estAmerica Nashville	Louisiana	NELAC	6	30613
estAmerica Nashville	Maryland	State Program	3	316
estAmerica Nashville	Massachusetts	State Program	1	M-TN032
estAmerica Nashville	Minnesota	NELAC	5	047-999-345
estAmerica Nashville	Mississippi	State Program	4	N/A
estAmerica Nashville	Montana	MT DEQ UST	8	NA
estAmerica Nashville	Nevada	State Program	9	TN00032
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	North Carolina DENR	4	387
estAmerica Nashville	North Dakota	State Program	8	R-146
estAmerica Nashville	Ohio	OVAP	5	CL0033
estAmerica Nashville	Oklahoma	State Program	6	9412
estAmerica Nashville	Oregon	NELAC	10	TN200001
estAmerica Nashville	Pennsylvania	NELAC	3	68-00585
estAmerica Nashville	Rhode Island	State Program	1	LAO00268
estAmerica Nashville	South Carolina	State Program	4	84009
estAmerica Nashville	South Carolina	State Program	4	84009
estAmerica Nashville	Tennessee	State Program	4	2008
estAmerica Nashville	Texas	NELAC	6	T104704077-09-TX
estAmerica Nashville	USDA	USDA		S-48469
estAmerica Nashville	Utah	NELAC	8	TAN
estAmerica Nashville	Virginia	NELAC Secondary AB	3	460152
estAmerica Nashville	Virginia	State Program	3	00323
estAmerica Nashville	Washington	State Program	10	C789
	Mara Marinia	West Virginia DEP	3	219
estAmerica Nashville	West Virginia	West Vilginia DEF	9	213

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.



## 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 747Bluebell, 747 Bluebell Lane, Laurel Bay Housing Area, MCAS Beaufort, S.C.

## **DISPOSAL LOCATION**

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

TYPE OF TANK	SIZE (GAL)
Steel	280

## **CLEANING/DISPOSAL METHOD**

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

## **DISPOSAL CERTIFICATION**

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

(Name) (Date)

# 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

OCT 2 3 20143

SC DHEC - Bureau of Land & Waste Management

## I. OWNERSHIP OF UST (S)

	mmanding Officer Attn: Ni , Individual, Public Agency, Other)	REAO (Craig Ehde)
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 Milit	ry Housing Area, Marine Corps Air Station, Beaufort,	SC_
Facility Name or Compar	Site Identifier	
747 Bluebell Lar	e, Laurel Bay Military Housing Area	
Street Address or State R	ad (as applicable)	
Beaufort,	Beaufort	
City	County	

Attachment 2

#### III. INSURANCE INFORMATION

Insurance S	Statement
The petroleum release reported to DHEC onqualify to receive state monies to pay for appropriate site allowed in the State Clean-up fund, written confirmation insurance policy is required. This section must be comp	of the existence or non-existence of an environmental
Is there now, or has there ever been an insurance pust release? YES NO (check one)	policy or other financial mechanism that covers this
If you answered YES to the above question	n, 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 FO	PERB Program. (Circle one.)
V. CERTIFICATION (7	Го be signed by the UST owner)
I certify that I have personally examined and am fan attached documents; and that based on my inquiry information, I believe that the submitted information	of those individuals responsible for obtaining this
Name (Type or print.)	
Signature	•
To be completed by Notary Public:	
Sworn before me this day of	, 20
(Name)	= 1
Notary Public for the state of	outh Carolina

VI. UST INFORMATION	747 Bluebell-1	747 Bluebell-2
Product(ex. Gas, Kerosene)	Heating oil	Heating oil
Capacity(ex. 1k, 2k)	280 gal	280 gal
Age	Late 1950s	Late 1950s
Construction Material(ex. Steel, FRP)	Steel	Steel
Month/Year of Last Use	Mid 80s	Mid 80s
Depth (ft.) To Base of Tank	5'7"	3'10"
Spill Prevention Equipment Y/N	No	No
Overfill Prevention Equipment Y/N	No	No
Method of Closure Removed/Filled	Removed	Removed
Date Tanks Removed/Filled	5/9/2013	5/9/2013
Visible Corrosion or Pitting Y/N	Yes	Yes
Visible Holes Y/N	Yes	Yes
Method of disposal for any USTs removed from th  UST 747Bluebell-1 was removed fr UST 747Bluebell-2 was removed fr Subtitle "D" landfill. See Attac	rom the ground rom the ground	d, cleaned & recycled.
Method of disposal for any liquid petroleum, sludg disposal manifests)		
Contaminated water was pumped from	om UST 747Blu	ebell-1 and disposed b

O.

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

## VII. PIPING INFORMATION

	747	747
		-1 Bluebell-2
	Steel	Steel
Construction Material(ex. Steel, FRP)	& Copper	& Copper
Distance from UST to Dispenser	N/A	N/A
Number of Dispensers	N/A	N/A
Type of System Pressure or Suction	Suction	Suction
Was Piping Removed from the Ground? Y/N	No	No
Visible Corrosion or Pitting Y/N	Yes	Yes
Visible Holes Y/N	No	No
Age	Late 1950s	Late 1950s
 If any corrosion, pitting, or holes were observed, or steel vent piping for both tanks copper supply and return piping	were corroc	
VIII. BRIEF SITE DESCR	onstructed o	f single wall steel
	onstructed o for heating.	f single wall steel These USTs were

# 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.		X	
if yes, indicate depth and location on the site map.	-		
B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells?		Х	
If yes, indicate location on site map and describe the odor (strong, mild, etc.)			
C. Was water present in the UST excavation, soil borings, or trenches?		Х	
If yes, how far below land surface (indicate location and depth)?			
D. Did contaminated soils remain stockpiled on site after closure?  If yes, indicate the stockpile location on the site map.		х	
Name of DHEC representative authorizing soil removal:			
Was a petroleum sheen or free product detected on any excavation or boring waters?	T	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#
nell-1	Excav at fill end	Soil	Sandy	5'7"	5/9/13 1345 hrs	P. Shaw	
747 Blue bell-2	Excav at fill end	Soil	Sandy	3'10"	5/9/13	P. Shaw	
8							
9							
10							
11							
12							
13		1					
14							
15							
16							
17							
18							
19							
20							

<sup>\* =</sup> 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.
·
·

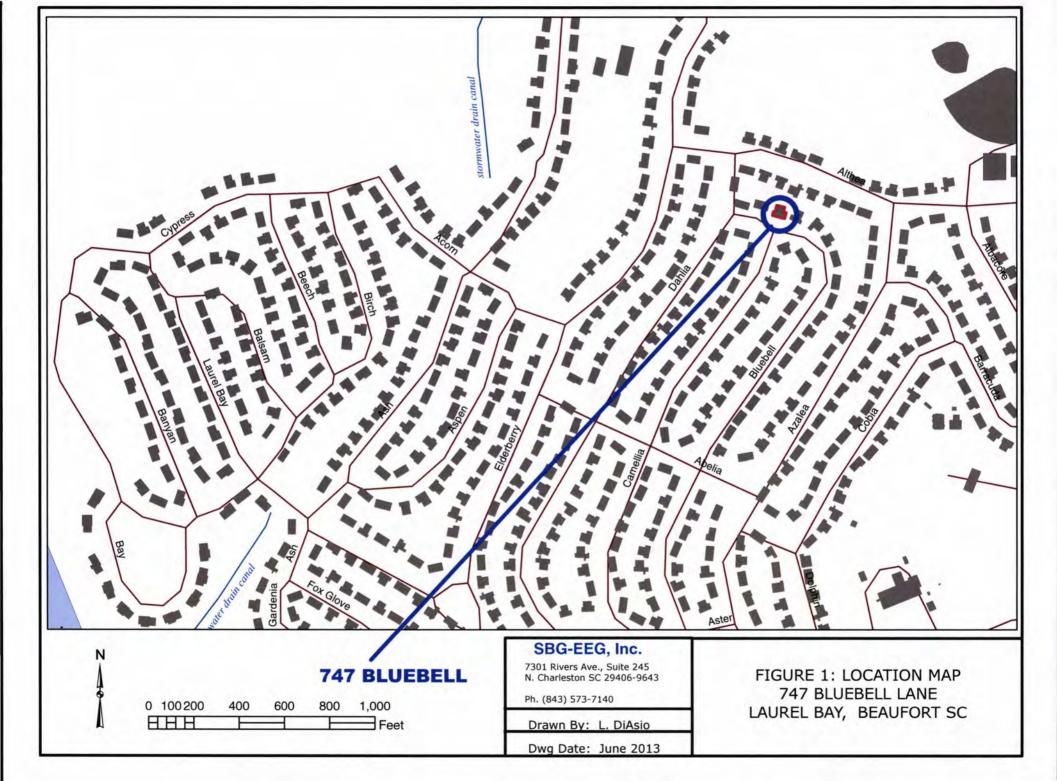
# XII. RECEPTORS

		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?	1 4	Х
	If yes, indicate type of receptor, distance, and direction on site map.	12	
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.		24
C.	Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?		Х
	If yes, indicate type of structure, distance, and direction on site map.		
D.	Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination?  *Sewer, water, electricity.	7	the same of the
	cable, fiber optic & If yes, indicate the type of utility, distance, and direction on the site map.	geoth	ermal
E.	Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete?		Х
	If yes, indicate the area of contaminated soil on the site map.		

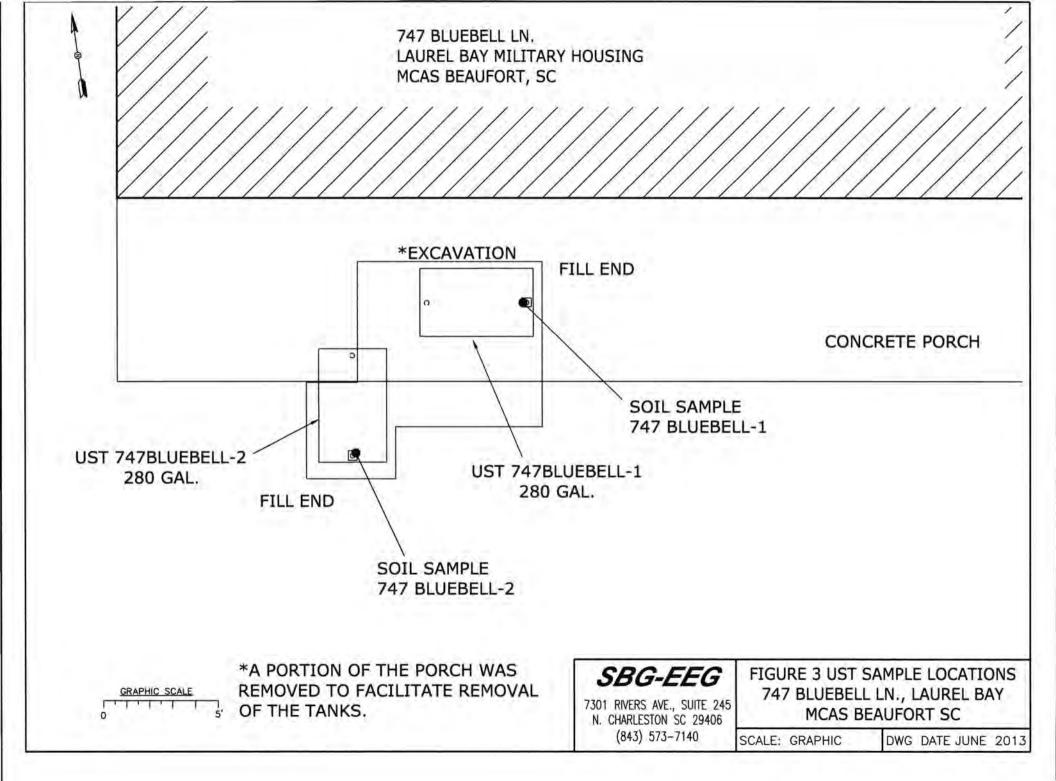
## XIII. SITE MAP

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

(Attach Site Map Here)



747 BLUEBELL LN. LAUREL BAY MILITARY HOUSING MCAS BEAUFORT, SC UST 747BLUEBELL-1 UST 747BLUEBELL-2 SBG-EEG FIGURE 2 SITE MAP TANK DEPTH BELOW GRADE 747 BLUEBELL LN., LAUREL BAY 7301 RIVERS AVE., SUITE 245 N. CHARLESTON SC 29406 747BLUEBELL-1 = 31" MCAS BEAUFORT SC 747BLUEBELL-2 = 10" (843) 573-7140 SCALE: GRAPHIC DWG DATE JUNE 2013

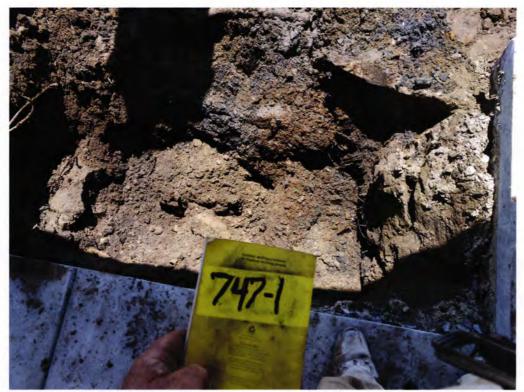




Picture 1: Location of UST 747Bluebell-1.



Picture 2: UST 747Bluebell-1 excavation.



Picture 3: UST 747Bluebell-1 excavation.



Picture 4: UST 747Bluebell-2 excavation.

#### XIV. SUMMARY OF ANALYSIS RESULTS

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

CoC UST	747Bluebell-1	747Bluebell-2	
Benzene	0.00314 mg/kg	0.00324 mg/kg	
Toluene	0.00238 mg/kg	0.00499 mg/kg	
Ethylbenzene	0.108 mg/kg	1.19 mg/kg	
Xylenes	0.0364 mg/kg	1.19 mg/kg	
Naphthalene	37.7 mg/kg	19.0 mg/kg	
Benzo (a) anthracene	0.164 mg/kg	ND	
Benzo (b) fluoranthene	0.126 mg/kg	ND	
Benzo (k) fluoranthene	0.0525 mg/kg	ND	4
Chrysene	0.138 mg/kg	ND	
Dibenz (a, h) anthracene	ND	ND	
TPH (EPA 3550)			
CoC			
Benzene			
Toluene			
Ethylbenzene			
Xylenes	101		
Naphthalene			
Naphthalene Benzo (a) anthracene			
Naphthalene Benzo (a) anthracene Benzo (b) fluoranthene			
Naphthalene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (k) fluoranthene			
Xylenes Naphthalene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (k) fluoranthene Chrysene Dibenz (a, h) anthracene			

#### 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			J 17	

#### 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)



Visit us at:

www.testamericainc.com

# **TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

### **ANALYTICAL REPORT**

TestAmerica Laboratories, Inc.

TestAmerica Nashville 2960 Foster Creighton Drive Nashville, TN 37204 Tel: (615)726-0177

TestAmerica Job ID: 490-26734-1

Client Project/Site: Laurel Bay Housing Project

For

Environmental Enterprise Group 10179 Highway 78 Ladson, South Carolina 29456

Attn: Mr. Tom McElwee

Kuth Hay

Authorized for release by: 5/30/2013 12:59:53 PM

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

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-26734-1

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#### **Sample Summary**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-26734-1

2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
490-26734-1	363 Aspen	Solid	05/06/13 14:15	05/15/13 08:30	
490-26734-2	312 Ash	Solid	05/07/13 11:35	05/15/13 08:30	
490-26734-3	747 Bluebell -1	Solid	05/09/13 13:45	05/15/13 08:30	
490-26734-4	747 Bluebell -2	Solid	05/09/13 14:15	05/15/13 08:30	

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#### **Case Narrative**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-26734-

Ė

Job ID: 490-26734-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-26734-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 5/15/2013 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.4° C.

#### GC/MS VOA

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batches 79620 and 79956. See LCS/LCSD

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: 312 Ash (490-26734-2), 747 Bluebell -1 (490-26734-3) and 747 Bluebell -2 (490-26734-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 80297 was outside control limits. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision met acceptance criteria.

No other analytical or quality issues were noted.

#### GC/MS Semi VOA

No analytical or quality issues were noted.

#### Organic Prep

Method(s) Moisture: The sample duplicate precision for the following sample associated with batch 55422 was outside control limits: (490-26694-2 DU). The associated Laboratory Control Sample / Laboratory Control Sample Duplicate (LCS/LCSD) precision met acceptance criteria.

No other analytical or quality issues were noted.

#### **VOA Prep**

No analytical or quality issues were noted.

TestAmerica Nashville 5/30/2013

#### **Definitions/Glossary**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-26734-1

#### Qualifiers

#### GC/MS VOA

Qualifier Description

X Surrogate is outside control limits

#### GC/MS Semi VOA

Qualifier	Qualifier Description
Qualifier	Qualifier Description

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

#### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
--------------	---

Eisted under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CNF Contains no Free Liquid

DER Duplicate error ratio (normalized absolute difference)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision level concentration
MDA Minimum detectable activity
EDL Estimated Detection Limit

MDC Minimum detectable concentration

MDL Method Detection Limit

ML Minimum Level (Dioxin)

ND Not detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

QC Quality Control
RER Relative error ratio

RL Reporting Limit or Requested Limit (Radiochemistry)

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

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-26734-1

H

Client Sample ID: 363 Aspen

Date Collected: 05/06/13 14:15 Date Received: 05/15/13 08:30

Nitrobenzene-d5 (Surr)

**General Chemistry** 

Analyte

**Percent Solids** 

Lab Sample ID: 490-26734-1

Matrix: Solid Percent Solids: 73.8

Method: 8260B - Volatile Orga Analyte		(GC/MS) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00297	0.000994		123	05/16/13 12:03	05/16/13 17:42	1
Ethylbenzene	ND		0.00297	0.000994	mg/Kg	131	05/16/13 12:03	05/16/13 17:42	1
Naphthalene	ND		0.00742	0.00252	200	335	05/16/13 12:03	05/16/13 17:42	1
Toluene	ND		0.00297	0.00110	mg/Kg	33	05/16/13 12:03	05/16/13 17:42	1
Xylenes, Total	ND		0.00742	0.000994	mg/Kg	B	05/16/13 12:03	05/16/13 17:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130				05/16/13 12:03	05/16/13 17:42	1
4-Bromofluorobenzene (Surr)	107		70 - 130				05/16/13 12:03	05/16/13 17:42	1
Dibromofluoromethane (Surr)	108		70 - 130				05/16/13 12:03	05/16/13 17:42	1
Toluene-d8 (Surr)	93		70 - 130				05/16/13 12:03	05/16/13 17:42	1
Method: 8270D - Semivolatile	Organic Compou	nds (GC/MS	3)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0905	0.0135	mg/Kg	EZ.	05/16/13 15:18	05/17/13 20:51	1
Acenaphthylene	ND		0.0905	0.0122	mg/Kg	KI.	05/16/13 15:18	05/17/13 20:51	1
Anthracene	ND		0.0905	0.0122	mg/Kg	D	05/16/13 15:18	05/17/13 20:51	1
Benzo[a]anthracene	ND		0.0905	0.0203	mg/Kg	ta	05/16/13 15:18	05/17/13 20:51	1
Benzo[a]pyrene	ND		0.0905	0.0162	mg/Kg	13	05/16/13 15:18	05/17/13 20:51	1
Benzo[b]fluoranthene	ND		0.0905	0.0162	mg/Kg	b	05/16/13 15:18	05/17/13 20:51	1
Benzo[g,h,i]perylene	ND		0.0905	0.0122	mg/Kg	Ω	05/16/13 15:18	05/17/13 20:51	1
Benzo[k]fluoranthene	ND		0.0905	0.0189	mg/Kg	Œ	05/16/13 15:18	05/17/13 20:51	1
1-Methylnaphthalene	ND		0.0905	0.0189	mg/Kg	10	05/16/13 15:18	05/17/13 20:51	1
Pyrene	ND		0.0905	0.0162	mg/Kg	13	05/16/13 15:18	05/17/13 20:51	1
Phenanthrene	ND		0.0905	0.0122	mg/Kg	0	05/16/13 15:18	05/17/13 20:51	1
Chrysene	ND		0.0905	0.0122	mg/Kg	10	05/16/13 15:18	05/17/13 20:51	1
Dibenz(a,h)anthracene	ND		0.0905	0.00946	mg/Kg	33	05/16/13 15:18	05/17/13 20:51	1
Fluoranthene	ND		0.0905	0.0122	mg/Kg	O	05/16/13 15:18	05/17/13 20:51	1
Fluorene	ND		0.0905	0.0162	mg/Kg	n	05/16/13 15:18	05/17/13 20:51	1
Indeno[1,2,3-cd]pyrene	ND		0.0905	0.0135	mg/Kg	Ø	05/16/13 15:18	05/17/13 20:51	1
Naphthalene	ND		0.0905	0.0122	mg/Kg	n	05/16/13 15:18	05/17/13 20:51	1
2-Methylnaphthalene	ND		0.0905	0.0216	mg/Kg	32	05/16/13 15:18	05/17/13 20:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	63		29 - 120				05/16/13 15:18	05/17/13 20:51	1
Terphenyl-d14 (Surr)	96		13 - 120				05/16/13 15:18	05/17/13 20:51	1

05/17/13 20:51

Analyzed

05/16/13 15:10

Dil Fac

05/16/13 15:18

Prepared

27 - 120

RL

0.10

RL Unit

0.10 %

Result Qualifier

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-26734-1

Client Sample ID: 312 Ash

Date Collected: 05/07/13 11:35 Date Received: 05/15/13 08:30

2-Fluorobiphenyl (Surr)

Nitrobenzene-d5 (Surr)

**General Chemistry** 

Analyte

**Percent Solids** 

Terphenyl-d14 (Surr)

Lab Sample ID: 490-26734-2

Matrix: Solid

Percent Solids: 80.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00210	0.000704	mg/Kg	n	05/16/13 12:03	05/17/13 14:47	1
Ethylbenzene	0.0439		0.00210	0.000704	mg/Kg	337	05/16/13 12:03	05/17/13 14:47	1
Naphthalene	ND		0.00525	0.00179	mg/Kg	C.	05/16/13 12:03	05/17/13 14:47	1
Toluene	ND		0.00210	0.000777	mg/Kg	13	05/16/13 12:03	05/17/13 14:47	1
Xylenes, Total	0.428		0.00525	0.000704	mg/Kg	a	05/16/13 12:03	05/17/13 14:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		70 - 130				05/16/13 12:03	05/17/13 14:47	1
4-Bromofluorobenzene (Surr)	787	X	70 - 130				05/16/13 12:03	05/17/13 14:47	1
Dibromofluoromethane (Surr)	92		70 - 130				05/16/13 12:03	05/17/13 14:47	1
Toluene-d8 (Surr)	171	X	70 - 130				05/16/13 12:03	05/17/13 14:47	1
Method: 8270D - Semivolatile	Organic Compou	nds (GC/MS	6)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0882		0.0823	0.0123	mg/Kg	33	05/16/13 15:18	05/17/13 21:15	1
Acenaphthylene	0.0452	J	0.0823	0.0110	mg/Kg	308	05/16/13 15:18	05/17/13 21:15	1
Anthracene	ND		0.0823	0.0110	mg/Kg	X	05/16/13 15:18	05/17/13 21:15	1
Benzo[a]anthracene	0.0948		0.0823	0.0184	mg/Kg	\$2	05/16/13 15:18	05/17/13 21:15	1
Benzo[a]pyrene	0.0424	J	0.0823	0.0147	mg/Kg	\$\$	05/16/13 15:18	05/17/13 21:15	1
Benzo[b]fluoranthene	0.0652	J	0.0823	0.0147	mg/Kg	D.	05/16/13 15:18	05/17/13 21:15	1
Benzo[g,h,i]perylene	ND		0.0823	0.0110	mg/Kg	IX.	05/16/13 15:18	05/17/13 21:15	1
Benzo[k]fluoranthene	ND		0.0823	0.0172	mg/Kg	\$22	05/16/13 15:18	05/17/13 21:15	1
1-Methylnaphthalene	0.627		0.0823	0.0172	mg/Kg	125	05/16/13 15:18	05/17/13 21:15	1
Pyrene	0.255		0.0823	0.0147	mg/Kg	D	05/16/13 15:18	05/17/13 21:15	1
Phenanthrene	0.416		0.0823	0.0110	mg/Kg	n	05/16/13 15:18	05/17/13 21:15	1
Chrysene	0.0914		0.0823	0.0110	mg/Kg	DF.	05/16/13 15:18	05/17/13 21:15	1
Dibenz(a,h)anthracene	ND		0.0823	0.00859	mg/Kg	122	05/16/13 15:18	05/17/13 21:15	1
Fluoranthene	0.287		0.0823	0.0110	mg/Kg	Ø	05/16/13 15:18	05/17/13 21:15	1
Fluorene	0.174		0.0823	0.0147	mg/Kg	D	05/16/13 15:18	05/17/13 21:15	1
Indeno[1,2,3-cd]pyrene	ND		0.0823	0.0123	mg/Kg	iii.	05/16/13 15:18	05/17/13 21:15	1
Naphthalene	ND		0.0823	0.0110	mg/Kg	ū	05/16/13 15:18	05/17/13 21:15	1
2-Methylnaphthalene	0.707		0.0823	0.0196	mg/Kg	Ø	05/16/13 15:18	05/17/13 21:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
		CF-E 101. F.	77.						46000000

05/17/13 21:15

05/17/13 21:15

05/17/13 21:15

Analyzed

05/16/13 15:10

Dil Fac

05/16/13 15:18

05/16/13 15:18

05/16/13 15:18

Prepared

29 - 120

13 - 120

27 - 120

RL

0.10

**RL** Unit

0.10

52

64

51

80

Result Qualifier

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-26734-1

Client Sample ID: 747 Bluebell -1

Date Collected: 05/09/13 13:45 Date Received: 05/15/13 08:30

Analyte

**Percent Solids** 

Lab Sample ID: 490-26734-3

Matrix: Solid

Percent Solids: 75.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00314		0.00223	0.000746	mg/Kg	n	05/16/13 12:03	05/16/13 19:12	
Ethylbenzene	0.108		0.00223	0.000746	mg/Kg	22	05/16/13 12:03	05/16/13 19:12	
Naphthalene	37.7		8.31	2.83	mg/Kg	Ø	05/16/13 11:57	05/19/13 16:22	10
Toluene	0.00238		0.00223	0.000824	mg/Kg	n	05/16/13 12:03	05/16/13 19:12	1
Xylenes, Total	0.0364		0.00557	0.000746	mg/Kg	Ø	05/16/13 12:03	05/16/13 19:12	1
Surrogate %	Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		70 - 130				05/16/13 12:03	05/16/13 19:12	4
,2-Dichloroethane-d4 (Surr)	80		70 - 130				05/16/13 11:57	05/19/13 16:22	10
-Bromofluorobenzene (Surr)	988	X	70 - 130				05/16/13 12:03	05/16/13 19:12	1
-Bromofluorobenzene (Surr)	104		70 - 130				05/16/13 11:57	05/19/13 16:22	10
Dibromofluoromethane (Surr)	91		70 - 130				05/16/13 12:03	05/16/13 19:12	1
Dibromofluoromethane (Surr)	94		70 - 130				05/16/13 11:57	05/19/13 16:22	10
Toluene-d8 (Surr)	151	X	70 - 130				05/16/13 12:03	05/16/13 19:12	1
Toluene-d8 (Surr)	93		70 - 130				05/16/13 11:57	05/19/13 16:22	10
Method: 8270D - Semivolatile Organic (	Compou	nds (GC/MS	S)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cenaphthene	0.146		0.0870	0.0130	mg/Kg	33	05/16/13 15:18	05/17/13 21:38	1
cenaphthylene	ND		0.0870	0.0117	mg/Kg	Ø	05/16/13 15:18	05/17/13 21:38	1
Anthracene	0.0823	J	0.0870	0.0117	mg/Kg	30	05/16/13 15:18	05/17/13 21:38	1
Benzo[a]anthracene	0.164		0.0870	0.0195	mg/Kg	D	05/16/13 15:18	05/17/13 21:38	1
Benzo[a]pyrene	0.0777	J	0.0870	0.0156	mg/Kg	325	05/16/13 15:18	05/17/13 21:38	1
Benzo[b]fluoranthene	0.126		0.0870	0.0156	mg/Kg	13	05/16/13 15:18	05/17/13 21:38	1
Benzo[g,h,i]perylene	ND		0.0870	0.0117	mg/Kg	12	05/16/13 15:18	05/17/13 21:38	1
Benzo[k]fluoranthene	0.0525	J	0.0870	0.0182	mg/Kg	12	05/16/13 15:18	05/17/13 21:38	1
-Methylnaphthalene	1.42		0.0870	0.0182	mg/Kg	D	05/16/13 15:18	05/17/13 21:38	1
Pyrene	0.374		0.0870	0.0156	mg/Kg	33	05/16/13 15:18	05/17/13 21:38	1
Phenanthrene	0.342		0.0870	0.0117	mg/Kg	332	05/16/13 15:18	05/17/13 21:38	1
Chrysene	0.138		0.0870	0.0117	mg/Kg	301	05/16/13 15:18	05/17/13 21:38	1
Dibenz(a,h)anthracene	ND		0.0870	0.00909	mg/Kg	32	05/16/13 15:18	05/17/13 21:38	1
luoranthene	0.435		0.0870	0.0117	mg/Kg	12	05/16/13 15:18	05/17/13 21:38	1
Fluorene	0.243		0.0870	0.0156	mg/Kg	321	05/16/13 15:18	05/17/13 21:38	1
ndeno[1,2,3-cd]pyrene	ND		0.0870	0.0130	mg/Kg	22	05/16/13 15:18	05/17/13 21:38	1
Naphthalene	0.213		0.0870	0.0117	mg/Kg	33	05/16/13 15:18	05/17/13 21:38	1
2-Methylnaphthalene	2.25		0.0870	0.0208	mg/Kg	12	05/16/13 15:18	05/17/13 21:38	1
Surrogate %	Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	68		29 - 120				05/16/13 15:18	05/17/13 21:38	1
Terphenyl-d14 (Surr)	100		13 - 120				05/16/13 15:18	05/17/13 21:38	1
Nitrobenzene-d5 (Surr)	63		27 - 120				05/16/13 15:18	05/17/13 21:38	1

Analyzed

05/16/13 15:10

Prepared

RL

0.10

**RL** Unit

0.10 %

Result Qualifier

76

Dil Fac

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-26734-1

Matrix: Solid

Lab Sample ID: 490-26734-4

Percent Solids: 74.3

Client	t Samp	le ID:	747 B	luebell	-2
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Method: 8260B - Volatile Organic Compounds (GC/MS)

Date Collected: 05/09/13 14:15 Date Received: 05/15/13 08:30

Percent Solids

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00324		0.00230	0.000772	mg/Kg	17	05/16/13 12:03	05/16/13 19:43	1
Ethylbenzene	1.19		0.146	0.0496	mg/Kg	32	05/16/13 11:57	05/17/13 18:51	1
Naphthalene	19.0		3.65	1.24	mg/Kg	333	05/16/13 11:57	05/19/13 16:53	10
Toluene	0.00499		0.00230	0.000852	mg/Kg	n	05/16/13 12:03	05/16/13 19:43	1
Xylenes, Total	1.19		0.365	0.0496	mg/Kg	α	05/16/13 11:57	05/17/13 18:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		70 - 130				05/16/13 12:03	05/16/13 19:43	1
1,2-Dichloroethane-d4 (Surr)	80		70 - 130				05/16/13 11:57	05/17/13 18:51	1
1,2-Dichloroethane-d4 (Surr)	78		70 - 130				05/16/13 11:57	05/19/13 16:53	10
4-Bromofluorobenzene (Surr)	660	X	70 - 130				05/16/13 12:03	05/16/13 19:43	1
4-Bromofluorobenzene (Surr)	89		70 - 130				05/16/13 11:57	05/17/13 18:51	1
4-Bromofluorobenzene (Surr)	106		70 - 130				05/16/13 11:57	05/19/13 16:53	10
Dibromofluoromethane (Surr)	91		70 - 130				05/16/13 12:03	05/16/13 19:43	1
Dibromofluoromethane (Surr)	88		70 - 130				05/16/13 11:57	05/17/13 18:51	1
Dibromofluoromethane (Surr)	93		70 - 130				05/16/13 11:57	05/19/13 16:53	10
Toluene-d8 (Surr)	171	X	70 - 130				05/16/13 12:03	05/16/13 19:43	1
Toluene-d8 (Surr)	95		70 - 130				05/16/13 11:57	05/17/13 18:51	1
Toluene-d8 (Surr)	92		70 - 130				05/16/13 11:57	05/19/13 16:53	10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.697		0.0900	0.0134	mg/Kg	DI DI	05/16/13 15:18	05/17/13 22:02	1
Acenaphthylene	ND		0.0900	0.0121	mg/Kg	CJ.	05/16/13 15:18	05/17/13 22:02	1
Anthracene	ND		0.0900	0.0121	mg/Kg	Ω	05/16/13 15:18	05/17/13 22:02	1
Benzo[a]anthracene	ND		0.0900	0.0201	mg/Kg	12	05/16/13 15:18	05/17/13 22:02	1
Benzo[a]pyrene	ND		0.0900	0.0161	mg/Kg	12	05/16/13 15:18	05/17/13 22:02	1
Benzo[b]fluoranthene	ND		0.0900	0.0161	mg/Kg	D	05/16/13 15:18	05/17/13 22:02	1
Benzo[g,h,i]perylene	ND		0.0900	0.0121	mg/Kg	D	05/16/13 15:18	05/17/13 22:02	1
Benzo[k]fluoranthene	ND		0.0900	0.0188	mg/Kg	n	05/16/13 15:18	05/17/13 22:02	1
1-Methylnaphthalene	8.66		0.450	0.0940	mg/Kg	E	05/16/13 15:18	05/19/13 00:25	5
Pyrene	0.159		0.0900	0.0161	mg/Kg	123	05/16/13 15:18	05/17/13 22:02	1
Phenanthrene	2.17		0.0900	0.0121	mg/Kg	ICI.	05/16/13 15:18	05/17/13 22:02	1
Chrysene	ND		0.0900	0.0121	mg/Kg	Ø	05/16/13 15:18	05/17/13 22:02	1
Dibenz(a,h)anthracene	ND		0.0900	0.00940	mg/Kg	Ø	05/16/13 15:18	05/17/13 22:02	1
Fluoranthene	0.0645	J	0.0900	0.0121	mg/Kg	E	05/16/13 15:18	05/17/13 22:02	1
Fluorene	1.24		0.0900	0.0161	mg/Kg	a	05/16/13 15:18	05/17/13 22:02	1
Indeno[1,2,3-cd]pyrene	ND		0.0900	0.0134	mg/Kg	D	05/16/13 15:18	05/17/13 22:02	1
Naphthalene	2.57		0.0900	0.0121	mg/Kg	123	05/16/13 15:18	05/17/13 22:02	1
2-Methylnaphthalene	12.6		0.450	0.107	mg/Kg	Ø	05/16/13 15:18	05/19/13 00:25	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	67		29 - 120				05/16/13 15:18	05/17/13 22:02	1
Terphenyl-d14 (Surr)	94		13 - 120				05/16/13 15:18	05/17/13 22:02	1
Nitrobenzene-d5 (Surr)	66		27 - 120				05/16/13 15:18	05/17/13 22:02	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac

TestAmerica Nashville

05/16/13 15:10

0.10 %

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project

Lab Sample ID: MB 490-79620/6

Matrix: Solid

Analysis Batch: 79620

TestAmerica Job ID: 490-26734-1

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

Client Sample ID: Method Blank

rep	Type:	Total/NA
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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			05/16/13 12:06	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			05/16/13 12:06	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			05/16/13 12:06	1
Toluene	ND		0.00200	0.000740	mg/Kg			05/16/13 12:06	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			05/16/13 12:06	1

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 130		05/16/13 12:06	1
4-Bromofluorobenzene (Surr)	104		70 - 130		05/16/13 12:06	1
Dibromofluoromethane (Surr)	104		70 - 130		05/16/13 12:06	1
Toluene-d8 (Surr)	94		70 - 130		05/16/13 12:06	1

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

Lab Sample ID: LCS 490-79620/3 Matrix: Solid

Analysis Batch: 79620

	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.0500	0.05872		mg/Kg		117	75 - 127
Ethylbenzene	0.0500	0.05764		mg/Kg		115	80 - 134
Naphthalene	0.0500	0.05380		mg/Kg		108	69 - 150
Toluene	0.0500	0.05403		mg/Kg		108	80 - 132
Xylenes, Total	0.150	0.1796		mg/Kg		120	80 - 137

LCS	LCS
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Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		70 - 130
4-Bromofluorobenzene (Surr)	97		70 - 130
Dibromofluoromethane (Surr)	104		70 - 130
Toluene-d8 (Surr)	94		70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Matrix: Solid Analysis Batch: 79620

Lab Sample ID: LCSD 490-79620/4

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.0500	0.05947		mg/Kg		119	75 - 127	1	50
Ethylbenzene	0.0500	0.05763		mg/Kg		115	80 - 134	0	50
Naphthalene	0.0500	0.05352		mg/Kg		107	69 - 150	1	50
Toluene	0.0500	0.05463		mg/Kg		109	80 - 132	1	50
Xylenes, Total	0.150	0.1789		mg/Kg		119	80 - 137	0	50

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	102		70 - 130
Toluene-d8 (Surr)	93		70 - 130

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-26734-1

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

MR MR

Lab Sample ID: MB 490-79956/6

Matrix: Solid

Analysis Batch: 79956

Client Sample	ID: Method Blank
D.	Towner Total/AlA

Prep Type: Total/NA

	2	

	111									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.00200	0.000670	mg/Kg			05/17/13 12:45	1	
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			05/17/13 12:45	1	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			05/17/13 12:45	1	١
Toluene	ND		0.00200	0.000740	mg/Kg			05/17/13 12:45	1	ĺ
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			05/17/13 12:45	1	



	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	82		70 - 130		05/17/13 12:45	1
4-Bromofluorobenzene (Surr)	110		70 - 130		05/17/13 12:45	1
Dibromofluoromethane (Surr)	95		70 - 130		05/17/13 12:45	1
Toluene-d8 (Surr)	95		70 - 130		05/17/13 12:45	1



Lab Sample ID: MB 490-79956/7			Client Sample ID: Method E	llank
Toluene-d8 (Surr)	95	70 - 130	05/17/13 12:45	1
Dibromofluoromethane (Surr)	95	70 - 130	05/17/13 12:45	1
4-Bromofluorobenzene (Surr)	110	70 - 130	05/17/13 12:45	7

Matrix: Solid

Analysis Batch: 79956

Prep Type: Total/NA

	INID	INID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0335	mg/Kg			05/17/13 13:15	1
Ethylbenzene	ND		0.100	0.0335	mg/Kg			05/17/13 13:15	1
Naphthalene	ND		0.250	0.0850	mg/Kg			05/17/13 13:15	1
Toluene	ND		0.100	0.0370	mg/Kg			05/17/13 13:15	1
Xylenes, Total	ND		0.250	0.0335	mg/Kg			05/17/13 13:15	1

MB	MB

	MB	INID				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		70 - 130		05/17/13 13:15	1
4-Bromofluorobenzene (Surr)	110		70 - 130		05/17/13 13:15	1
Dibromofluoromethane (Surr)	96		70 - 130		05/17/13 13:15	1
Toluene-d8 (Surr)	94		70 - 130		05/17/13 13:15	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Lab Sample ID: LCS 490-79956/3

Matrix: Solid

Analysis Batch: 79956

	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.0500	0.06033		mg/Kg		121	75 - 127
Ethylbenzene	0.0500	0.06110		mg/Kg		122	80 - 134
Naphthalene	0.0500	0.06232		mg/Kg		125	69 - 150
Toluene	0.0500	0.05735		mg/Kg		115	80 - 132
Xylenes, Total	0.150	0.1848		mg/Kg		123	80 - 137

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	87		70 - 130
4-Bromofluorobenzene (Surr)	108		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130
Toluene-d8 (Surr)	94		70 - 130

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-26734-1

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

LCSD LCSD %Recovery Qualifier

85

107

95

95

Lab Sample ID: LCSD 490-79956/4 Matrix: Solid

Client Sample ID: Lab Control Sample Dup

121

mg/Kg

80 - 137

Prep Type: Total/NA

2

Analysis Batch: 79956

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.0500	0.05957		mg/Kg		119	75 - 127	1	50
Ethylbenzene	0.0500	0.06060		mg/Kg		121	80 - 134	1	50
Naphthalene	0.0500	0.06294		mg/Kg		126	69 - 150	1	50
Toluene	0.0500	0.05728		mg/Kg		115	80 - 132	0	50

0.150

Limits

70 - 130

70 - 130

70 - 130 70 - 130 0.1819

Lab Sample ID: MB 490-80297/6

Matrix: Solid

Xylenes, Total

Toluene-d8 (Surr)

Xylenes, Total

Surrogate

Analysis Batch: 80297

1,2-Dichloroethane-d4 (Surr)

4-Bromofluorobenzene (Surr)

Dibromofluoromethane (Surr)

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

MB MB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 0.00200 0.000680 mg/Kg 05/19/13 14:20 Benzene ND ND 0.00200 05/19/13 14:20 Ethylbenzene 0.000680 mg/Kg ND Naphthalene 0.00500 0.00170 mg/Kg 05/19/13 14:20 Toluene ND 0.00200 0.000740 mg/Kg 05/19/13 14:20

0.00500

0.000680 mg/Kg

MR MR

ND

7777				
%Recovery Qu	ualifier Limits	Prepared	Analyzed	Dil Fac
85	70 - 130		05/19/13 14:20	1
110	70 - 130		05/19/13 14:20	1
96	70 - 130		05/19/13 14:20	1
93	70 - 130		05/19/13 14:20	1
	85 110 96	85 70 - 130 110 70 - 130 96 70 - 130	85 70 - 130 110 70 - 130 96 70 - 130	85     70 - 130     05/19/13 14:20       110     70 - 130     05/19/13 14:20       96     70 - 130     05/19/13 14:20

Client Sample ID: Method Blank

05/19/13 14:20

Prep Type: Total/NA

Matrix: Solid Analysis Batch: 80297

Lab Sample ID: MB 490-80297/7

MB	MB							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		0.100	0.0340	mg/Kg			05/19/13 14:50	1
ND		0.100	0.0340	mg/Kg			05/19/13 14:50	1
ND		0.250	0.0850	mg/Kg			05/19/13 14:50	1
ND		0.100	0.0370	mg/Kg			05/19/13 14:50	1
ND		0.250	0.0340	mg/Kg			05/19/13 14:50	1
	Result ND ND ND	ND ND ND	Result         Qualifier         RL           ND         0.100           ND         0.100           ND         0.250           ND         0.100	Result Qualifier         RL         MDL           ND         0.100         0.0340           ND         0.100         0.0340           ND         0.250         0.0850           ND         0.100         0.0370	Result         Qualifier         RL         MDL         Unit           ND         0.100         0.0340         mg/Kg           ND         0.100         0.0340         mg/Kg           ND         0.250         0.0850         mg/Kg           ND         0.100         0.0370         mg/Kg	Result         Qualifier         RL         MDL         Unit         D           ND         0.100         0.0340         mg/Kg           ND         0.100         0.0340         mg/Kg           ND         0.250         0.0850         mg/Kg           ND         0.100         0.0370         mg/Kg	Result         Qualifier         RL         MDL         Unit         D         Prepared           ND         0.100         0.0340         mg/Kg           ND         0.100         0.0340         mg/Kg           ND         0.250         0.0850         mg/Kg           ND         0.100         0.0370         mg/Kg	Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed           ND         0.100         0.0340         mg/Kg         05/19/13 14:50           ND         0.100         0.0340         mg/Kg         05/19/13 14:50           ND         0.250         0.0850         mg/Kg         05/19/13 14:50           ND         0.100         0.0370         mg/Kg         05/19/13 14:50

	WB	MID				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		70 - 130		05/19/13 14:50	1
4-Bromofluorobenzene (Surr)	109		70 - 130		05/19/13 14:50	1
Dibromofluoromethane (Surr)	98		70 - 130		05/19/13 14:50	1
Toluene-d8 (Surr)	92		70 - 130		05/19/13 14:50	1

LCS LCS

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-26734-1

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

Lab Sample ID: LCS 490-80297/3

Matrix: Solid

Analysis Batch: 80297

Client Sample ID:	<b>Lab Control Sample</b>
	Prep Type: Total/NA

	opine						,	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.0500	0.05567		mg/Kg		111	75 - 127	
Ethylbenzene	0.0500	0.05748		mg/Kg		115	80 - 134	
Naphthalene	0.0500	0.05815		mg/Kg		116	69 - 150	
Toluene	0.0500	0.05382		mg/Kg		108	80 - 132	
Xylenes, Total	0.150	0.1736		mg/Kg		116	80 - 137	

Limits

70 - 130

70 - 130

70 - 130

70 - 130

Lab Sample ID: LCSD 490-80297/4

Matrix: Solid

Toluene-d8 (Surr)

Surrogate

Analysis Batch: 90207

1,2-Dichloroethane-d4 (Surr)

4-Bromofluorobenzene (Surr)

Dibromofluoromethane (Surr)

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

Spike	LCSD	LCSD				%Rec.		RPD
Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
0.0500	0.05699		mg/Kg		114	75 - 127	2	50
0.0500	0.05824		mg/Kg		116	80 - 134	1	50
0.0500	0.06003		mg/Kg		120	69 - 150	3	50
0.0500	0.05415		mg/Kg		108	80 - 132	1	50
0.150	0.1748		mg/Kg		117	80 - 137	1	50
	Added 0.0500 0.0500 0.0500 0.0500	Added         Result           0.0500         0.05699           0.0500         0.05824           0.0500         0.06003           0.0500         0.05415	Added         Result         Qualifier           0.0500         0.05699           0.0500         0.05824           0.0500         0.06003           0.0500         0.05415	Added         Result         Qualifier         Unit           0.0500         0.05699         mg/Kg           0.0500         0.05824         mg/Kg           0.0500         0.06003         mg/Kg           0.0500         0.05415         mg/Kg	Added         Result         Qualifier         Unit         D           0.0500         0.05699         mg/Kg           0.0500         0.05824         mg/Kg           0.0500         0.06003         mg/Kg           0.0500         0.05415         mg/Kg	Added         Result Qualifier         Unit         D         %Rec           0.0500         0.05699         mg/Kg         114           0.0500         0.05824         mg/Kg         116           0.0500         0.06003         mg/Kg         120           0.0500         0.05415         mg/Kg         108	Added         Result Qualifier         Unit         D         %Rec with         Limits           0.0500         0.05699         mg/Kg         114         75 - 127           0.0500         0.05824         mg/Kg         116         80 - 134           0.0500         0.06003         mg/Kg         120         69 - 150           0.0500         0.05415         mg/Kg         108         80 - 132	Added         Result         Qualifier         Unit         D         %Rec         Limits         RPD           0.0500         0.05699         mg/Kg         114         75 - 127         2           0.0500         0.05824         mg/Kg         116         80 - 134         1           0.0500         0.06003         mg/Kg         120         69 - 150         3           0.0500         0.05415         mg/Kg         108         80 - 132         1

LCS LCS %Recovery Qualifier

> 86 107

> > 96

94

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	86		70 - 130
4-Bromofluorobenzene (Surr)	107		70 - 130
Dibromofluoromethane (Surr)	95		70 - 130
Toluene-d8 (Surr)	94		70 - 130

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

Lab Sample ID: MB 490-79810/1-A

Matrix: Solid

Analysis Batch: 80035

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 79810

rinalysis batom cocco	МВ	мв						1000	24 7 2 2 7 3 7 4 7
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg		05/16/13 15:18	05/17/13 18:55	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		05/16/13 15:18	05/17/13 18:55	1
Anthracene	ND		0.0670	0.00900	mg/Kg		05/16/13 15:18	05/17/13 18:55	1
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		05/16/13 15:18	05/17/13 18:55	1
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		05/16/13 15:18	05/17/13 18:55	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		05/16/13 15:18	05/17/13 18:55	1
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		05/16/13 15:18	05/17/13 18:55	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		05/16/13 15:18	05/17/13 18:55	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		05/16/13 15:18	05/17/13 18:55	1
Pyrene	ND		0.0670	0.0120	mg/Kg		05/16/13 15:18	05/17/13 18:55	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		05/16/13 15:18	05/17/13 18:55	1

TestAmerica Nashville

5/30/2013

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-26734-1

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

MB MB

68

94

63

Qualifier

Lab Sample ID: MB 490-79810/1-A Matrix: Solid

Analysis Batch: 80035

<b>Client Sample</b>	ID: Method	Blank
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Prep Type: Total/NA

Prep Batch: 79810

		MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		0.0670	0.00900	mg/Kg		05/16/13 15:18	05/17/13 18:55	1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		05/16/13 15:18	05/17/13 18:55	1
Fluoranthene	ND		0.0670	0.00900	mg/Kg		05/16/13 15:18	05/17/13 18:55	1
Fluorene	ND		0.0670	0.0120	mg/Kg		05/16/13 15:18	05/17/13 18:55	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		05/16/13 15:18	05/17/13 18:55	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		05/16/13 15:18	05/17/13 18:55	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		05/16/13 15:18	05/17/13 18:55	1

Limits

29 - 120

13 - 120

27 - 120

Dil Fac Prepared Analyzed 05/16/13 15:18 05/17/13 18:55 05/16/13 15:18 05/17/13 18:55 05/16/13 15:18 05/17/13 18:55

Lab Sample ID: LCS 490-79810/2-A

Matrix: Solid

Surrogate

Analysis Batch: 80035

2-Fluorobiphenyl (Surr)

Nitrobenzene-d5 (Surr)

Terphenyl-d14 (Surr)

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 79810

Analysis batch. 00033							rieh t			
	Spike	LCS	LCS				%Rec.			
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Acenaphthylene	1.67	1.355		mg/Kg		81	38 - 120			
Anthracene	1.67	1.379		mg/Kg		83	46 - 124			
Benzo[a]anthracene	1.67	1.345		mg/Kg		81	45 - 120			
Benzo[a]pyrene	1.67	1.373		mg/Kg		82	45 - 120			
Benzo[b]fluoranthene	1.67	1.393		mg/Kg		84	42 - 120			
Benzo[g,h,i]perylene	1.67	1.342		mg/Kg		81	38 - 120			
Benzo[k]fluoranthene	1.67	1.359		mg/Kg		82	42 - 120			
1-Methylnaphthalene	1.67	1.121		mg/Kg		67	32 - 120			
Pyrene	1.67	1.428		mg/Kg		86	43 - 120			
Phenanthrene	1.67	1.298		mg/Kg		78	45 - 120			
Chrysene	1.67	1.347		mg/Kg		81	43 - 120			
Dibenz(a,h)anthracene	1.67	1.404		mg/Kg		84	32 - 128			
Fluoranthene	1.67	1.407		mg/Kg		84	46 - 120			
Fluorene	1.67	1.373		mg/Kg		82	42 - 120			
Indeno[1,2,3-cd]pyrene	1.67	1.353		mg/Kg		81	41 - 121			
Naphthalene	1.67	1.016		mg/Kg		61	32 - 120			
2-Methylnaphthalene	1.67	1.125		mg/Kg		67	28 - 120			

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	71		29 - 120
Terphenyl-d14 (Surr)	97		13 - 120
Nitrobenzene-d5 (Surr)	58		27 120

Lab Sample ID: 490-26699-B-1-B MS

Matrix: Solid

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 79810

Analysis Batch: 80035									Prep
AND THE STREET	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthylene	ND		1.63	1.186		mg/Kg		73	25 - 120
Anthracene	ND		1.63	1.188		mg/Kg		73	28 - 125

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-26734-1

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

Lab Sample ID: 490-26699-B-1-B MS

Matrix: Solid

Analysis Batch: 80035

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 79810

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzo[a]anthracene	ND		1.63	1.147		mg/Kg		71	23 - 120	
Benzo[a]pyrene	ND		1.63	1.146		mg/Kg		70	15 - 128	
Benzo[b]fluoranthene	ND		1.63	1.178		mg/Kg		72	12 - 133	
Benzo[g,h,i]perylene	ND		1.63	1.071		mg/Kg		66	22 - 120	
Benzo[k]fluoranthene	ND		1.63	1.123		mg/Kg		69	28 - 120	
1-Methylnaphthalene	ND		1.63	1.005		mg/Kg		62	10 - 120	
Pyrene	ND		1.63	1.272		mg/Kg		78	20 - 123	
Phenanthrene	ND		1.63	1.134		mg/Kg		70	21 - 122	
Chrysene	ND		1.63	1.175		mg/Kg		72	20 - 120	
Dibenz(a,h)anthracene	ND		1.63	1.129		mg/Kg		69	12 - 128	
Fluoranthene	ND		1.63	1.192		mg/Kg		73	10 - 143	
Fluorene	ND		1.63	1.165		mg/Kg		72	20 - 120	
Indeno[1,2,3-cd]pyrene	ND		1.63	1.085		mg/Kg		67	22 - 121	
Naphthalene	ND		1.63	0.9189		mg/Kg		57	10 - 120	
2-Methylnaphthalene	ND		1.63	0.9899		mg/Kg		61	13 - 120	
	440	MC								

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	46		29 - 120
Terphenyl-d14 (Surr)	66		13 - 120
Nitrobenzene-d5 (Surr)	43		27 - 120

Lab Sample ID: 490-26699-B-1-C MSD

Matrix: Solid

Analysis Batch: 80035

Cliont	Cample	ID.	Matrix	Cnika	Duplicate
Gilent	Sample	ID.	Manix	SDIKE	Duplicate

Prep Type: Total/NA

Prep Batch: 79810

The state of the s	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthylene	ND		1.63	1.406		mg/Kg		86	25 - 120	17	50
Anthracene	ND		1.63	1.415		mg/Kg		87	28 - 125	17	49
Benzo[a]anthracene	ND		1.63	1.388		mg/Kg		85	23 - 120	19	50
Benzo[a]pyrene	ND		1.63	1.391		mg/Kg		85	15 - 128	19	50
Benzo[b]fluoranthene	ND		1.63	1.501		mg/Kg		92	12 - 133	24	50
Benzo[g,h,i]perylene	ND		1.63	1.330		mg/Kg		82	22 - 120	22	50
Benzo[k]fluoranthene	ND		1.63	1.302		mg/Kg		80	28 - 120	15	45
1-Methylnaphthalene	ND		1.63	1.173		mg/Kg		72	10 - 120	15	50
Pyrene	ND		1.63	1.498		mg/Kg		92	20 - 123	16	50
Phenanthrene	ND		1.63	1.349		mg/Kg		83	21 - 122	17	50
Chrysene	ND		1.63	1.380		mg/Kg		85	20 - 120	16	49
Dibenz(a,h)anthracene	ND		1.63	1.411		mg/Kg		87	12 - 128	22	50
Fluoranthene	ND		1.63	1.400		mg/Kg		86	10 - 143	16	50
Fluorene	ND		1.63	1.364		mg/Kg		84	20 - 120	16	50
Indeno[1,2,3-cd]pyrene	ND		1.63	1.341		mg/Kg		82	22 - 121	21	50
Naphthalene	ND		1.63	1.104		mg/Kg		68	10 - 120	18	50
2-Methylnaphthalene	ND		1.63	1.167		mg/Kg		72	13 - 120	16	50

		742 4000	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	58		29 - 120
Terphenyl-d14 (Surr)	81		13 - 120

TestAmerica Nashville

Page 15 of 25

5/30/2013

DU DU

90

Result Qualifier

Unit

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-26734-1

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

Lab Sample ID: 490-26699-B-1-C MSD Matrix: Solid

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 79810

MSD MSD

Sample Sample

Result Qualifier

%Recovery Qualifier

Limits 27 - 120

**Method: Moisture - Percent Moisture** 

Lab Sample ID: 490-26694-A-2 DU

Matrix: Solid

Analyte

Percent Solids

Surrogate

Analysis Batch: 79806

Analysis Batch: 80035

Nitrobenzene-d5 (Surr)

Client Sample ID: Duplicate Prep Type: Total/NA

D

RPD

RPD Limit 20

#### **QC Association Summary**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project

Method Blank

TestAmerica Job ID: 490-26734-1

8260B

#### GC/MS VOA

Analysis Batch: 79620
-----------------------

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-26734-1	363 Aspen	Total/NA	Solid	8260B	79702
490-26734-3	747 Bluebell -1	Total/NA	Solid	8260B	79702
490-26734-4	747 Bluebell -2	Total/NA	Solid	8260B	79702
LCS 490-79620/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-79620/4	Lab Control Sample Dun	Total/NA	Solid	8260B	

Total/NA

Solid



#### MB 490-79620/6 Prep Batch: 79702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-26734-1	363 Aspen	Total/NA	Solid	5035	
490-26734-2	312 Ash	Total/NA	Solid	5035	
490-26734-3	747 Bluebell -1	Total/NA	Solid	5035	
490-26734-4	747 Bluebell -2	Total/NA	Solid	5035	



#### Prep Batch: 79709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-26734-3	747 Bluebell -1	Total/NA	Solid	5035	
490-26734-4	747 Bluebell -2	Total/NA	Solid	5035	

#### Analysis Batch: 79956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-26734-2	312 Ash	Total/NA	Solid	8260B	79702
490-26734-4	747 Bluebell -2	Total/NA	Solid	8260B	79709
LCS 490-79956/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-79956/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-79956/6	Method Blank	Total/NA	Solid	8260B	
MB 490-79956/7	Method Blank	Total/NA	Solid	8260B	

#### Analysis Batch: 80297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-26734-3	747 Bluebell -1	Total/NA	Solid	8260B	79709
490-26734-4	747 Bluebell -2	Total/NA	Solid	8260B	79709
LCS 490-80297/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-80297/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-80297/6	Method Blank	Total/NA	Solid	8260B	
MB 490-80297/7	Method Blank	Total/NA	Solid	8260B	

#### GC/MS Semi VOA

#### Prep Batch: 79810

and a second					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-26699-B-1-B MS	Matrix Spike	Total/NA	Solid	3550C	
490-26699-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	
490-26734-1	363 Aspen	Total/NA	Solid	3550C	
490-26734-2	312 Ash	Total/NA	Solid	3550C	
490-26734-3	747 Bluebell -1	Total/NA	Solid	3550C	
490-26734-4	747 Bluebell -2	Total/NA	Solid	3550C	
LCS 490-79810/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 490-79810/1-A	Method Blank	Total/NA	Solid	3550C	

#### **QC Association Summary**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-26734-1

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#### GC/MS Semi VOA (Continued)

#### Analysis Batch: 80035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-26699-B-1-B MS	Matrix Spike	Total/NA	Solid	8270D	79810
490-26699-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8270D	79810
490-26734-1	363 Aspen	Total/NA	Solid	8270D	79810
490-26734-2	312 Ash	Total/NA	Solid	8270D	79810
490-26734-3	747 Bluebell -1	Total/NA	Solid	8270D	79810
490-26734-4	747 Bluebell -2	Total/NA	Solid	8270D	79810
LCS 490-79810/2-A	Lab Control Sample	Total/NA	Solid	8270D	79810
MB 490-79810/1-A	Method Blank	Total/NA	Solid	8270D	79810

#### Analysis Batch: 80184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-26734-4	747 Bluebell -2	Total/NA	Solid	8270D	79810

#### **General Chemistry**

#### Analysis Batch: 79806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-26694-A-2 DU	Duplicate	Total/NA	Solid	Moisture	
490-26734-1	363 Aspen	Total/NA	Solid	Moisture	
490-26734-2	312 Ash	Total/NA	Solid	Moisture	
490-26734-3	747 Bluebell -1	Total/NA	Solid	Moisture	
490-26734-4	747 Bluebell -2	Total/NA	Solid	Moisture	

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#### **Lab Chronicle**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-26734-1

Client Sample ID: 363 Aspen

Date Collected: 05/06/13 14:15 Date Received: 05/15/13 08:30

Lab Sample ID: 490-26734-1

Matrix: Solid

Percent Solids: 73.8

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			79702	05/16/13 12:03	ML	TAL NSH
Total/NA	Analysis	8260B		1	79620	05/16/13 17:42	KK	TAL NSH
Total/NA	Prep	3550C			79810	05/16/13 15:18	AK	TAL NSH
Total/NA	Analysis	8270D		1	80035	05/17/13 20:51	JS	TAL NSH
Total/NA	Analysis	Moisture		1	79806	05/16/13 15:10	CC	TAL NSH

Client Sample ID: 312 Ash

Date Collected: 05/07/13 11:35 Date Received: 05/15/13 08:30

Lab Sample ID: 490-26734-2

Matrix: Solid

Percent Solids: 80.5

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			79702	05/16/13 12:03	ML	TAL NSH
Total/NA	Analysis	8260B		1	79956	05/17/13 14:47	KK	TAL NSH
Total/NA	Prep	3550C			79810	05/16/13 15:18	AK	TAL NSH
Total/NA	Analysis	8270D		1	80035	05/17/13 21:15	JS	TAL NSH
Total/NA	Analysis	Moisture		1	79806	05/16/13 15:10	CC	TAL NSH

Client Sample ID: 747 Bluebell -1

Date Collected: 05/09/13 13:45 Date Received: 05/15/13 08:30

Lab Sample ID: 490-26734-3

Matrix: Solid

Percent Solids: 75.8

Prep Analysis	5035				or Analyzed	Analyst	Lab
Analysis				79702	05/16/13 12:03	ML	TAL NSH
Analysis	8260B		1	79620	05/16/13 19:12	KK	TAL NSH
Prep	5035			79709	05/16/13 11:57	ML	TAL NSH
Analysis	8260B		10	80297	05/19/13 16:22	KK	TAL NSH
Prep	3550C			79810	05/16/13 15:18	AK	TAL NSH
Analysis	8270D		1	80035	05/17/13 21:38	JS	TAL NSH
Analysis	Moisture		1	79806	05/16/13 15:10	CC	TAL NSH
	Analysis Prep Analysis	Analysis 8260B Prep 3550C Analysis 8270D	Analysis 8260B Prep 3550C Analysis 8270D	Analysis         8260B         10           Prep         3550C           Analysis         8270D         1	Analysis       8260B       10       80297         Prep       3550C       79810         Analysis       8270D       1       80035	Analysis       8260B       10       80297       05/19/13 16:22         Prep       3550C       79810       05/16/13 15:18         Analysis       8270D       1       80035       05/17/13 21:38	Analysis       8260B       10       80297       05/19/13 16:22       KK         Prep       3550C       79810       05/16/13 15:18       AK         Analysis       8270D       1       80035       05/17/13 21:38       JS

Client Sample ID: 747 Bluebell -2

Date Collected: 05/09/13 14:15 Date Received: 05/15/13 08:30

Lab Sample ID: 490-26734-4

Matrix: Solid

Percent Solids: 74.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			79702	05/16/13 12:03	ML	TAL NSH
Total/NA	Analysis	8260B		1	79620	05/16/13 19:43	KK	TAL NSH
Total/NA	Prep	5035			79709	05/16/13 11:57	ML	TAL NSH
Total/NA	Analysis	8260B		1	79956	05/17/13 18:51	KK	TAL NSH
Total/NA	Prep	5035			79709	05/16/13 11:57	ML	TAL NSH
Total/NA	Analysis	8260B		10	80297	05/19/13 16:53	KK	TAL NSH
Total/NA	Prep	3550C			79810	05/16/13 15:18	AK	TAL NSH
Total/NA	Analysis	8270D		1	80035	05/17/13 22:02	JS	TAL NSH

#### **Lab Chronicle**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-26734-1

Client Sample ID: 747 Bluebell -2

Date Collected: 05/09/13 14:15 Date Received: 05/15/13 08:30

Laboratory References:

Lab Sample ID: 490-26734-4

Matrix: Solid

Percent Solids: 74.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			79810	05/16/13 15:18	AK	TAL NSH
Total/NA	Analysis	8270D		5	80184	05/19/13 00:25	JS	TAL NSH
Total/NA	Analysis	Moisture		1	79806	05/16/13 15:10	СС	TAL NSH

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

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#### **Method Summary**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-26734-1

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

#### **Protocol References:**

EPA = US Environmental Protection Agency

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

#### Laboratory References

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

#### **Certification Summary**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-26734-1

#### ž.

Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
	ACIL		393	10-30-13
A2LA	ISO/IEC 17025		0453.07	12-31-13
Alabama	State Program	4	41150	05-31-13
Alaska (UST)	State Program	10	UST-087	07-24-13
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-13 *
California	NELAP	9	1168CA	10-31-13
Connecticut	State Program	1	PH-0220	12-31-13
lorida	NELAP	4	E87358	06-30-13
linois	NELAP	5	200010	12-09-13
owa	State Program	7	131	05-01-14
Cansas	NELAP	7	E-10229	10-31-13
Kentucky (UST)	State Program	4	19	09-15-13
ouisiana	NELAP	6	30613	06-30-13
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-13
Minnesota	NELAP	5	047-999-345	12-31-13
Mississippi	State Program	4	N/A	06-30-13
Montana (UST)	State Program	8	NA	01-01-15
levada	State Program	9	TN00032	07-31-13
lew Hampshire	NELAP	1	2963	10-10-13
lew Jersey	NELAP	2	TN965	06-30-13
lew York	NELAP	2	11342	04-01-14
Iorth Carolina DENR	State Program	4	387	12-31-13
lorth Dakota	State Program	8	R-146	06-30-13
Ohio VAP	State Program	5	CL0033	01-19-14
Dregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-13
Rhode Island	State Program	1	LAO00268	12-30-13
South Carolina	State Program	4	84009 (001)	05-31-14 *
South Carolina	State Program	4	84009 (002)	02-23-14
ennessee	State Program	4	2008	02-23-14
exas	NELAP	6	T104704077-09-TX	08-31-13
JSDA	Federal		S-48469	11-02-13
Itah	NELAP	8	TAN	06-30-13
/irginia	NELAP	3	460152	06-14-13
Vashington	State Program	10	C789	07-19-13
West Virginia DEP	State Program	3	219	02-28-14
Visconsin	State Program	5	998020430	08-31-13
Nyoming (UST)	A2LA	8	453.07	12-31-13

TestAmerica Nashville

5/30/2013

<sup>\*</sup> Expired certification is currently pending renewal and is considered valid.

#### COOLER RECEIPT FORM

### Charleston



Cooler Received/O	pened On <u>5/15/2013</u>	@ 0830		490-26734 Chain of
1. Tracking #	1833	(last 4 digits, FedEx)		
Courier: FedEx	IR Gun ID 120	80142		
2. Temperature of	rep. sample or temp	blank when opened:	Degrees Celsius	
3. If Item #2 tempe	rature is 0°C or less,	was the representative samp	le or temp blank fro	zen? YES. NO. NA
4. Were custody se	eals on outside of co	oler? One fr	2	YES NO NA
If yes, how man	ny and where:	one to	0101	
5. Were the seals i	intact, signed, and da	ted correctly?		YES. NONA
6. Were custody pa	apers Inside cooler?			YES NONA
certify that I open	ed the cooler and ans	swered questions 1-6 (intial)	€HT	
7. Were custody se	eals on containers:	YES Q	and Intact	YESNO.
Were these sign	ed and dated correct	ly?		YESNONA
8. Packing mat'l us	sed? Bubblewrap P	lastic bag Peanuts Vermic	ulite Foam Insert	Paper Other None
9. Cooling process	s:	(ce) Ice-pack Ice	(direct contact) D	ry ice Other Non
10. Did all containe	ers arrive in good cor	ndition (unbroken)?		YES NO NA
11. Were all contai	ner labels complete (	#, date, signed, pres., etc)?		YES NO NA
12. Did all containe	er labels and tags agr	ree with custody papers?		ESNONA
13a. Were VOA via	is received?			YES NO NA
b. Was there any	y observable headspa	ace present in any VOA vial?		YESNO. NA
14. Was there a Tri	ip Blank in this cooler	r? YES. NONA If	multiple coolers, se	quence #
certify that I unloa	ided the cooler and a	nswered questions 7-14 (inti-		111
15a. On pres'd bot	tles, did pH test strip	s suggest preservation reach	ned the correct pH le	evel? YESNONA
b. Did the bottle	labels indicate that t	the correct preservatives wer	re used	YES NO NA
16. Was residual cl	hlorine present?			YESNO. NA
certify that I check	ked for chlorine and p	oH as per SOP and answered	questions 15-16 (in	tial)
17. Were custody p	papers properly filled	out (ink, signed, etc)?		WES NO NA
18. Did you sign th	e custody papers in t	the appropriate place?		YESNONA
19. Were correct co	ontainers used for the	e analysis requested?		(ES)NONA
20. Was sufficient a	amount of sample se	nt in each container?		(ES)NONA
certify that I entere	ed this project into LI	MS and answered questions	17-20 (intial)	Al
certify that I attach	ned a label with the u	nique LIMS number to each	container (intial)	At
. Mana Abana Nam	Conformence	at looks VEC NA Was	NCM concrete do V	Es (NO) #

	Yes No	Yes No							Pre-Schedule: Standard TAT Tat Drebnits Far Results Send QC with report							>			
To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?	Compliance Monitoring?	Enforcement Action?		1035		Project ID: Laurel Bay Housing Project		Analyze For.								Laboratory Comments: Temperature Upon Receipt: L & H.			
			Site State: SC	PO#:	TA Quote #:	Project ID:	Project #:		0828 - Hapth - 8260 D0728 - HA9	X X	XX	XX	XX				Time	Time 7:30	
Phone: 615-726-0177 Toll Free: 800-765-0980 Fax: 615-726-3404					Fax No.: 843-879-0401		1	Preservative S Matrix	Field Filtered Ice Ice Ince Ince Ince Ince Ince Ince I	2 2 X	2					Method of Shinment: FEDEX	Date	Date Date Date Date Date	
Nashville Division 2960 Foster Creighton Nashville, TN 37204	2449	y 78	9456	Project Manager: Tom McElwee email: mcelwee@eeginc.net		S TUASTRIL		+	Time Sampled  No. of Containers Shipped  Grab  Composite	X S SH	1135 5 X	1345 5 4	1415 5 7				13 0900	te Time Re	1
O LESTING	: EEG - SBG #	Address: 10179 Highway 78	City/State/Zip: Ladson, SC 29456	: Tom McElwee	: 843.412.2097	Chri	the state of	11	Date Sampled	5/6/13	5/1/3	5/6/13	5/16/5				Date	Date	
THE LEADER IN ENVIRONMENTAL TESTING	Client Name/Account #: EEG - SBG # 2449	Address:	City/State/Zip:	Project Manager:	Telephone Number: 843.412.2097	Sampler Name: (Print)	Sampler Signature:		Paguble ID / Description	9 763 ASDEN	5 3/2 Ash	3 747 Bluebell-1	747 Blueball-2			Special Instructions:	Religanizated By	Relipquished by:	5/:

#### **Login Sample Receipt Checklist**

Client: Environmental Enterprise Group

Job Number: 490-26734-1

Login Number: 26734

List Source: TestAmerica Nashville

List Number: 1 Creator: Himelick, John

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

N/A

Residual Chlorine Checked.

#### 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 747Bluebell-1; 747 Bluebell Lane, Laurel Bay Housing Area, MCAS Beaufort, S.C.

#### **DISPOSAL LOCATION**

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

TYPE OF TANK	SIZE (GAL)
Steel	280

#### **CLEANING/DISPOSAL METHOD**

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

### **DISPOSAL CERTIFICATION**

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

(Name) (Date)



# **NON-HAZARDOUS MANIFEST**

NON-HAZARDOUS MANIFEST  3. Generator's Mailing Address: MCAS BEAUFORT										
	1. Generator's US EPA	ID No.	Manifest Doc	No.	2. Page 1		7/634			
LAUREL BAY HOUSING BEAUFORT, SC 29904	Gene	erator's Site Address	(If different than r	nailing):	10000	est Number /MNA B. State	01519141 Generator's ID			
	379-0411									
5. Transporter 1 Company Name		6. US EF	A ID Number		C. State Transporter's ID  D. Transporter's Phone 743 532-150  E. State Transporter's ID  F. Transporter's Phone					
7. Transporter 2 Company Name	1	8. US EF	A ID Number							
7. Transporter 2 Company Name		8. USE	A ID Number							
9. Designated Facility Name and Site	e Address	10. US E	PA ID Number		1. Hanspi	orter s i none				
HICKORY HILL LANDFILL					G. State F	acility ID				
2621 LOW COUNTRY DRIVE RIDGELAND, SC 29936					H. State F	acility Phone	843-987-4643			
11. Description of Waste Materials			12. C	ontainers Type	13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments			
a. HEATING OIL TANK FILLED	WITH SAND		No.	Туре	Quantity	WC/VOI.	~ 6			
	m = 10205556		1	204	10.80	TON	7/934			
b. WM Pro	file # 102655SC									
WM Profile #				JAMES 4						
с.			100	-		-				
WM Profile #			Miss				(A)			
d.										
2/4/25/4/25				KI TO						
J. Additional Descriptions for Mate			K. Dispo	sal Location						
			iti bispo	30, 10001,011						
			Cell Grid	_			Level			
15. Special Handling Instructions and UST'S FROM	-: 2)36		N 5)	747	Blueb		6) 1464 CAR			
Purchase Order #	400	EMERGENCY	CONTACT / PH	HONE NO.:						
GENERATOR'S CERTIFICATE:     Hereby certify that the above-descr     accurately described, classified and p							w, have been fully and			
Printed Name Timothy	whatex	Signature "On b		noth	o, le	Hooks	Month Day			
17. Transporter 1 Acknowledgemen	t of Receipt of Materials	Signature	00/	A	/	-0	Month Day			
Drintod Namo	ShAW	Signature	14/	24			8 14			
Printed Name PRAH	t of Receipt of Materials	Signature		(			Month Day			
Printed Name  18. Transporter 2 Acknowledgemen  Printed Name		Signature								
18. Transporter 2 Acknowledgemen	d treatment facility, that t and licenses on the dates	to the best of my kn s listed above.	- 172			vas managed	in compliance with all			

Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY Gold- TRANSPORTER #1 COPY

### Appendix C Laboratory Analytical Report - Initial Groundwater



# **Volatile Organic Compounds by GC/MS**

Client: AECOM - Resolution Consultants

Description: BEALB747TW02WG20151117

Laboratory ID: QK18003-009

Matrix: Aqueous

Date Sampled:11/17/2015 1220 Date Received: 11/18/2015

5030B

1

Run Prep Method Analytical Method Dilution Analysis Date Analyst

8260B

**Prep Date** Batch 90375

	CAS	Analytical							
Parameter	Number	Method	Result	Q	LOQ	LOD	DL	Units F	Run
Benzene	71-43-2	8260B	0.45	U	5.0	0.45	0.21	ug/L	1
Ethylbenzene	100-41-4	8260B	1.3	J	5.0	0.51	0.21	ug/L	1
Naphthalene	91-20-3	8260B	31	В	5.0	0.96	0.14	ug/L	1
Toluene	108-88-3	8260B	0.47	J	5.0	0.48	0.24	ug/L	1
Xylenes (total)	1330-20-7	8260B	0.80	J	5.0	0.57	0.32	ug/L	1

11/23/2015 1558 JM1

Run 1 A Q % Recovery	Acceptance Limits	
92	75-120	
95	70-120	
100	85-120	
93	85-115	
	92 95 100	Q         % Recovery         Limits           92         75-120           95         70-120           100         85-120

PQL = Practical quantitation limit ND = Not detected at or above the MDL B = Detected in the method blank J = Estimated result < PQL and ≥ MDL E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

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"

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

Description: BEALB747TW02WG20151117

Laboratory ID: QK18003-009

Matrix: Aqueous

Date Sampled:11/17/2015 1220 Date Received: 11/18/2015

Run Prep Method Analytical Method Dilution Analysis Date Analyst **Prep Date** Batch

1	3520C	8270D (SIM)	1	11/25/	2015 1639 JCG	11/19/2015 15	536 90053		
Parame	eter		Nu	CAS mber	Analytical Method	Result Q	LOQ	LOD	

	CAS	Analytical						
Parameter	Number	Method	Result	Q	LOQ	LOD	DL	Units Run
Benzo(a)anthracene	56-55-3	8270D (SIM)	0.040	U	0.20	0.040	0.019	ug/L 1
Benzo(b)fluoranthene	205-99-2	8270D (SIM)	0.040	U	0.20	0.040	0.019	ug/L 1
Benzo(k)fluoranthene	207-08-9	8270D (SIM)	0.040	U	0.20	0.040	0.024	ug/L 1
Chrysene	218-01-9	8270D (SIM)	0.040	U	0.20	0.040	0.021	ug/L 1
Dibenzo(a,h)anthracene	53-70-3	8270D (SIM)	0.080	U	0.20	0.080	0.040	ug/L 1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Methylnaphthalene-d10		113	15-139
Fluoranthene-d10		100	23-154

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 P = The RPD between two GC columns exceeds 40%

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 ≥ MDL

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 Laboratory Analytical Report - Permanent Well Groundwater



# **Volatile Organic Compounds by GC/MS**

Client: AECOM - Resolution Consultants

Description: BEALB747MW01WG20170323

Analytical Method Dilution

102

106

Laboratory ID: SC25010-001

Matrix: Aqueous

Date Sampled:03/23/2017 1040

5030B

Date Received: 03/25/2017

Run Prep Method

1,2-Dichloroethane-d4

Toluene-d8

Analysis Date Analyst **Prep Date** Batch 03/28/2017 1452 TML 38220

Parameter			CAS nber	Analytical Method	Result	Q	LOQ	LOD	DL	Units R	un
Benzene		71-	43-2	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Ethylbenzene		100-4	41-4	8260B	2.1		1.0	0.80	0.40	ug/L	1
Naphthalene		91-	20-3	8260B	22		1.0	0.80	0.40	ug/L	1
Toluene		108-8	38-3	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Xylenes (total)		1330-	20-7	8260B	0.70	J	1.0	0.80	0.40	ug/L	1
Surrogate	Q	Run 1 % Recovery	Acceptar Limit								
Bromofluorobenzene		102	85-11	4							
Dibromofluoromethane		106	80-119	9							

81-118

89-112

PQL = Practical quantitation limit ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

H = Out of holding time

Q = Surrogate failure N = Recovery is out of criteria L = LCS/LCSD failure

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

S = MS/MSD failure Page: 6 of 67

# Semivolatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Laboratory ID: SC25010-001

Description: BEALB747MW01WG20170323

Matrix: Aqueous

Date Sampled: 03/23/2017 1040 Date Received: 03/25/2017

Run Prep Method Analytical Method Dilution **Analysis Date Analyst Prep Date Batch** 1 3520C 8270D 04/04/2017 1251 RBH 03/30/2017 1010 38407

	CAS	Analytical							
Parameter	Number	Method	Result	Q	LOQ	LOD	DL	Units F	Run
Benzo(a)anthracene	56-55-3	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Chrysene	218-01-9	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	0.10	U	0.20	0.10	0.040	ug/L	1

Surrogate	Q	% Recovery	Limits
Nitrobenzene-d5		48	44-120
2-Fluorobiphenyl		61	44-119
Terphenyl-d14		58	50-134

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 P = The RPD between two GC columns exceeds 40%

H = Out of holding time

Q = Surrogate failure N = Recovery is out of criteria L = LCS/LCSD failure

J = Estimated result < PQL and ≥ MDL Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

S = MS/MSD failure Page: 7 of 67

# Appendix E 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
	/ CO I Italieu I ullis 5

# 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 <a href="mailto:petruslb@dhec.sc.gov">petruslb@dhec.sc.gov</a> 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 Monitoring Well Investigation recommendation (15 addresses)					
130 Banyan Drive	473 Dogwood Drive				
256 Beech Street	747 Blue Bell Lane				
285 Birch Drive	749 Blue Bell Lane				
292 Birch Drive	775 Althea Street				
330 Ash Street	1034 Foxglove Street				
331 Ash Street	1104 Iris Lane				
335 Ash Street	1124 Iris Lane				
342 Ash Street					
100					

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
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



December 11, 2017

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

RE: Approved Response to Comments

Draft Final Revision 1 Groundwater Assessment Report March and April 2017

Laurel Bay Military Housing Area

Dear Mr. Drawdy:

The South Carolina Department of Health and Environmental Control (DHEC) received the above referenced report on November 2, 2017. 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).

DHEC has reviewed the report. Based on this review, DHEC has not generated any additional comments.

Please note that DHEC's decision is based on information provided by the Marine Corps Air Station (MCAS) to date. Any information found to be contradictory to this decision may require additional action. Furthermore, DHEC retains the right to request further investigation if deemed necessary. If you have any questions, please contact me at petruslb@dhec.sc.gov or 803-898-0294.

Sincerely,

Laurel Petrus

LIRK

Department of Defense Corrective Action Section

Cc:

**EQC Region 8** 

Shawn Dolan, Resolution Consultants Bryan Beck, NAVFAC MIDLANT