

**SUMMARY REPORT
176 WEST DOVE LANE (FORMERLY 1245 WEST DOVE 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**

JUNE 2021

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Prepared by:



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

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

Table of Contents

1.0	INTRODUCTION	1
1.1	BACKGROUND INFORMATION.....	1
1.2	UST REMOVAL AND ASSESSMENT PROCESS.....	2
2.0	SAMPLING ACTIVITIES AND RESULTS	3
2.1	UST REMOVAL AND SOIL SAMPLING	3
2.2	SOIL ANALYTICAL RESULTS.....	4
2.3	GROUNDWATER SAMPLING.....	4
2.4	GROUNDWATER ANALYTICAL RESULTS	5
3.0	PROPERTY STATUS.....	5
4.0	REFERENCES	5

Tables

Table 1	Laboratory Analytical Results - Soil
Table 2	Laboratory Analytical Results - Groundwater

Appendices

Appendix A	Multi-Media Selection Process for LBMH
Appendix B	UST Assessment Report
Appendix C	Laboratory Analytical Report - Groundwater
Appendix D	Regulatory Correspondence

List of Acronyms

bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
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 176 West Dove Lane (Formerly 1245 West Dove 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 USTs and conduct sampling activities to determine if, and to what extent, petroleum constituents may have impacted the surrounding environment. MCAS Beaufort coordinated with SCDHEC to develop removal procedures that were consistent with procedural requirements for regulated USTs. All tank removal activities and follow-on actions are conducted in coordination with SCDHEC. To date, all known USTs have been removed from all residential properties within the LBMH area.

1.2 UST Removal and Assessment Process

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

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

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

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

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

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 176 West Dove Lane (Formerly 1245 West Dove Lane). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1245 Dove Lane* (MCAS Beaufort, 2013). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Initial Groundwater Investigation Report – February and March 2017* (Resolution Consultants, 2017). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C.

2.1 UST Removal and Soil Sampling

On April 17, 2013, a single 280 gallon heating oil UST was removed from the concrete porch area at 176 West Dove Lane (Formerly 1245 West Dove Lane). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The UST was removed, cleaned, and shipped offsite for recycling. There was no visual evidence (i.e.,

staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depth to the base of the UST was 6' bgs and a single soil sample was collected from that depth. The sample was collected from the fill port side of the former UST to represent a worst case scenario.

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

2.2 Soil Analytical Results

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

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST location were used by MCAS Beaufort, in consultation with SCDHEC, to determine a path forward (i.e., additional sampling or NFA) for the property. The soil results collected from 176 West Dove Lane (Formerly 1245 West Dove Lane) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated August 24, 2016, SCDHEC requested an IGWA for 176 West Dove Lane (Formerly 1245 West Dove Lane) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

2.3 Groundwater Sampling

On March 9, 2017, a temporary monitoring well was installed at 176 West Dove Lane (Formerly 1245 West Dove 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 UST. The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – February and March 2017* (Resolution Consultants, 2017).

The sampling strategy for this phase of the investigation required a one-time sampling event of the temporarily installed monitoring well. Following well installation and development, groundwater samples were collected using low-flow methods and shipped to an offsite laboratory for analysis of the petroleum COPCs. Upon completion of groundwater sampling, the temporary well was abandoned in accordance with the South Carolina Well Standards and Regulations R.61-71 (SCDHEC, 2016). Field forms are provided in the *Initial Groundwater Investigation Report – February and March 2017* (Resolution Consultants, 2017).

2.4 Groundwater Analytical Results

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

The groundwater results collected from 176 West Dove Lane (Formerly 1245 West Dove Lane) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated that the groundwater was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

3.0 PROPERTY STATUS

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 176 West Dove Lane (Formerly 1245 West Dove Lane). This NFA determination was obtained in a letter dated July 27, 2017. SCDHEC's NFA letter is provided in Appendix D.

4.0 REFERENCES

Marine Corps Air Station Beaufort, 2013. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 1245 Dove Lane, Laurel Bay Military Housing Area*, October 2013.

Resolution Consultants, 2017. *Initial Groundwater Investigation Report – February and March 2017 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, June 2017.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2013. *Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 2.0*, April 2013.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2015. *Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.0*, May 2015.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2016. *Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.1*, February 2016.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2017. *R.61-92, Part 280, Underground Storage Tank Control Regulations*, March 2017.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2018. *Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service*, March 2018.

South Carolina Department of Health and Environmental Control Bureau of Water, 2016. *R.61-71, Well Standards*, June 2016.

Tables

Table 1
Laboratory Analytical Results - Soil
176 West Dove Lane (Formerly 1245 West Dove Lane)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Results Sample Collected 04/17/13
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)		
Benzene	0.003	ND
Ethylbenzene	1.15	ND
Naphthalene	0.036	ND
Toluene	0.627	ND
Xylenes, Total	13.01	ND
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)		
Benzo(a)anthracene	0.66	ND
Benzo(b)fluoranthene	0.66	0.0966
Benzo(k)fluoranthene	0.66	0.0195
Chrysene	0.66	0.119
Dibenz(a,h)anthracene	0.66	ND

Notes:

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

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Table 2
Laboratory Analytical Results - Groundwater
176 West Dove Lane (Formerly 1245 West Dove Lane)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Site-Specific Groundwater VISLs (µg/L) ⁽²⁾	Results Sample Collected 03/09/17
Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)			
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	ND
Naphthalene	25	29.33	ND
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	ND
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)			
Benzo(a)anthracene	10	NA	ND
Benzo(b)fluoranthene	10	NA	ND
Benzo(k)fluoranthene	10	NA	ND
Chrysene	10	NA	ND
Dibenz(a,h)anthracene	10	NA	ND

Notes:

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

⁽²⁾ Site-specific groundwater VISLs were calculated using the EPA JE Model Spreadsheets (Version 3.1, February 2004) and conservative modeling inputs representative of a small single-story house with an 8 foot ceiling. Site-specific groundwater VISLs were developed based on a target risk level of 1×10^{-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.

Bold font indicates the analyte was detected.

Bold font and shading indicates the concentration exceeds the SCDHEC RBSL and/or the Site-Specific Groundwater VISL.

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - Not Applicable

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

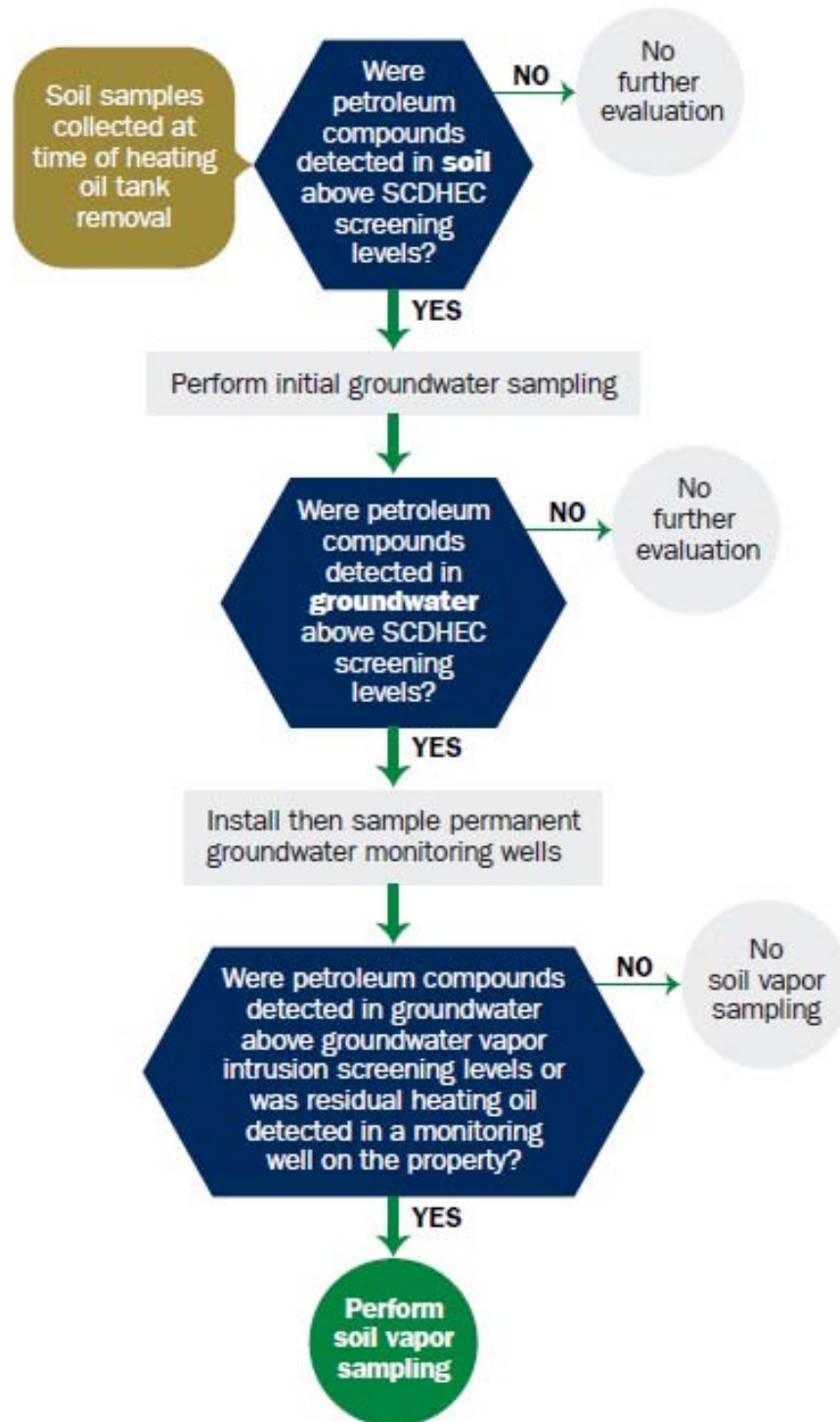
RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

Appendix A
Multi-Media Selection Process for LBMH



Appendix A - Multi-Media Selection Process for LBMH

Appendix B
UST Assessment Report

South Carolina Department of Health and Environmental Control (SCDHEC)
Underground Storage Tank (UST) Assessment Report

Date Received
State Use Only

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

RECEIVED

OCT 23 2013

SCDHEC - Bureau of
 Land & Waste Management

I. OWNERSHIP OF UST (S)

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

II. SITE IDENTIFICATION AND LOCATION

Permit I.D. #	
Laurel Bay Military Housing Area, Marine Corps Air Station, Beaufort, SC	
Facility Name or Company Site Identifier	
1245 Dove Lane, Laurel Bay Military Housing Area	
Street Address or State Road (as applicable)	
Beaufort,	Beaufort
City	County

III. INSURANCE INFORMATION

Insurance Statement

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

Is there now, or has there ever been an insurance policy or other financial mechanism that covers this UST release? **YES** _____ **NO** _____ (check one)

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

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

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

IV. REQUEST FOR SUPERB FUNDING

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

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

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

Name (Type or print.)

Signature

To be completed by Notary Public:

Sworn before me this _____ day of _____, 20____

(Name)

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

VI. UST INFORMATION

- A. Product...(ex. Gas, Kerosene).....
- B. Capacity...(ex. 1k, 2k).....
- C. Age.....
- D. Construction Material...(ex. Steel, FRP).....
- E. Month/Year of Last Use.....
- F. Depth (ft.) To Base of Tank.....
- G. Spill Prevention Equipment Y/N.....
- H. Overfill Prevention Equipment Y/N.....
- I. Method of Closure Removed/Filled.....
- J. Date Tanks Removed/Filled.....
- K. Visible Corrosion or Pitting Y/N.....
- L. Visible Holes Y/N.....

1245Dove				
Heating oil				
280 gal				
Late 1950s				
Steel				
Mid 1980s				
6'				
No				
No				
Removed				
4/17/2013				
Yes				
Yes				

- M. Method of disposal for any USTs removed from the ground (attach disposal manifests)
UST 1245Dove was removed from the ground and disposed at a
Subtitle "D" landfill. See Attachment "A."

- N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)
UST 1245Dove had been previously filled with sand by others.

- O. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST
Corrosion, pitting and holes were found throughout the tank.

VII. PIPING INFORMATION

A. Construction Material..(ex. Steel, FRP).....

B. Distance from UST to Dispenser.....

C. Number of Dispensers.....

D. Type of System Pressure or Suction.....

E. Was Piping Removed from the Ground? Y/N

F. Visible Corrosion or Pitting Y/N.....

G. Visible Holes Y/N.....

H. Age.....

I. If any corrosion, pitting, or holes were observed, describe the location and extent for each piping run.

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

1245Dove				
Steel & Copper				
N/A				
N/A				
Suction				
No				
Yes				
No				
Late 1950s				

VIII. BRIEF SITE DESCRIPTION AND HISTORY

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

IX. SITE CONDITIONS

	Yes	No	Unk
<p>A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells?</p> <p>If yes, indicate depth and location on the site map.</p>		X	
<p>B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells?</p> <p>If yes, indicate location on site map and describe the odor (strong, mild, etc.)</p>		X	
<p>C. Was water present in the UST excavation, soil borings, or trenches?</p> <p>If yes, how far below land surface (indicate location and depth)?</p>		X	
<p>D. Did contaminated soils remain stockpiled on site after closure?</p> <p>If yes, indicate the stockpile location on the site map.</p> <p>Name of DHEC representative authorizing soil removal:</p>		X	
<p>E. Was a petroleum sheen or free product detected on any excavation or boring waters?</p> <p>If yes, indicate location and thickness.</p>		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 #
1245 Dove	Excav at fill end	Soil	Sandy	6'	4/17/13 1415 hrs	P. Shaw	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

* = Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

Provide a detailed description of the methods used to collect and 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
<p>A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?</p> <p style="text-align: right;">*X</p> <p style="text-align: right;">*Stormwater drainage canal</p> <p>If yes, indicate type of receptor, distance, and direction on site map.</p>	*X	
<p>B. Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?</p> <p>If yes, indicate type of well, distance, and direction on site map.</p>		X
<p>C. Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?</p> <p>If yes, indicate type of structure, distance, and direction on site map.</p>		X
<p>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?</p> <p style="text-align: right;">*X</p> <p style="text-align: right;">*Sewer, water, electricity, cable, fiber optic & geothermal</p> <p>If yes, indicate the type of utility, distance, and direction on the site map.</p>	*X	
<p>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?</p> <p>If yes, indicate the area of contaminated soil on the site map.</p>		X

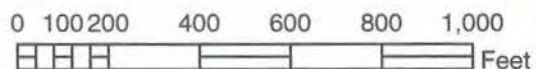
XIII. SITE MAP

You must supply a scaled 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)



1245 DOVE



SBG-EEG, Inc.

7301 Rivers Ave., Suite 245
N. Charleston SC 29406-9643

Ph. (843) 573-7140

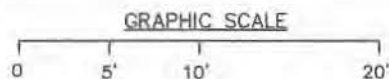
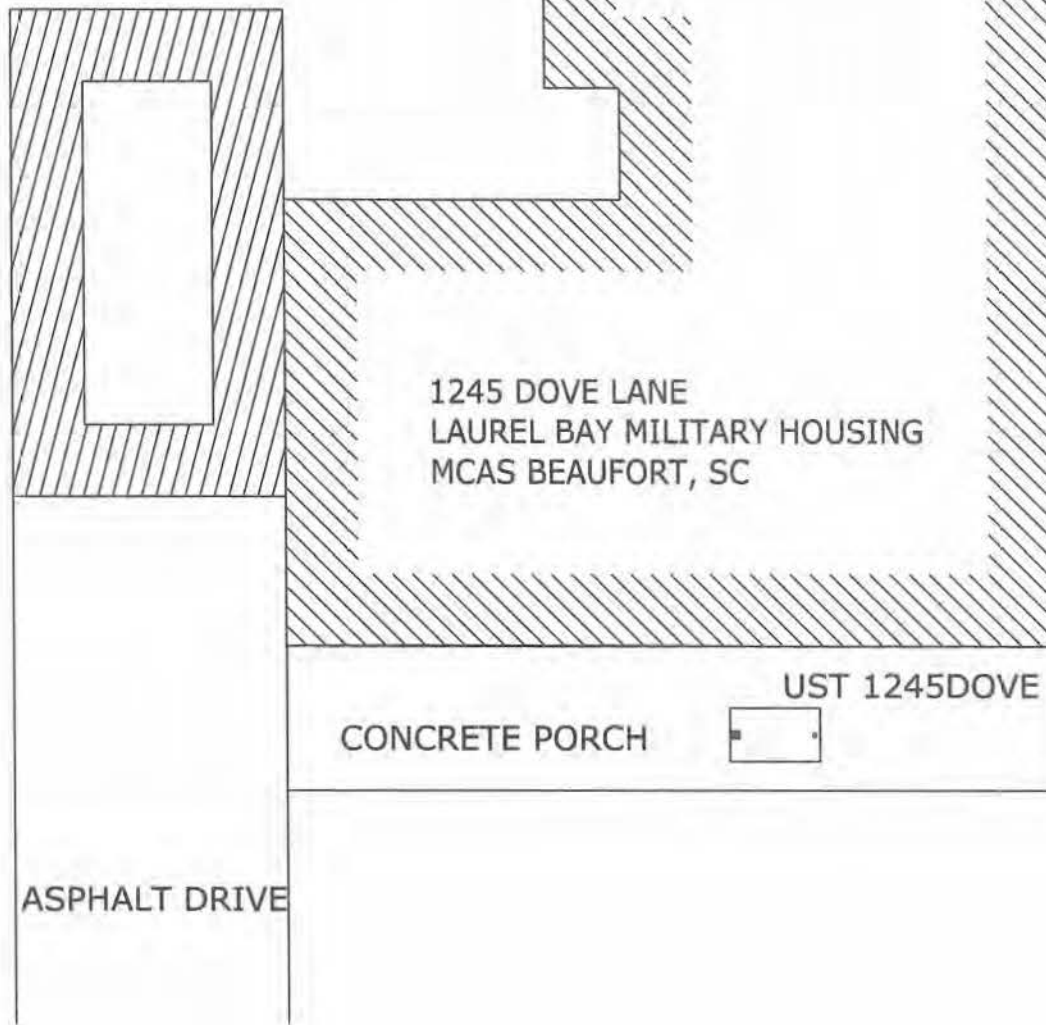
Drawn By: L. DiAsio

Dwg Date: May 2013

FIGURE 1: LOCATION MAP
1245 DOVE LANE
LAUREL BAY, BEAUFORT SC



STORMWATER CANAL \approx 425'



TANK DEPTH BELOW GRADE
1245DOVE = 36"

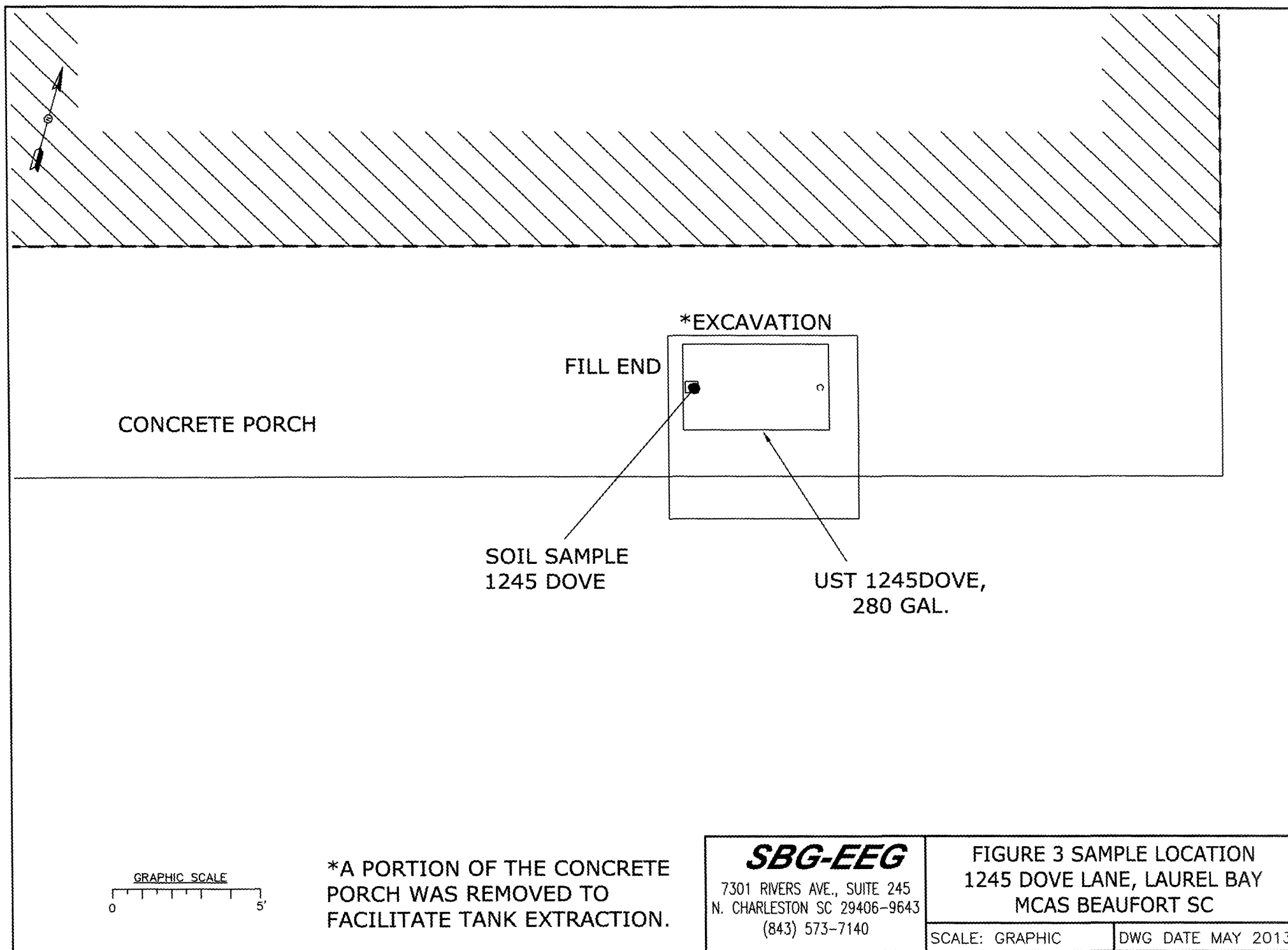
SBG-EEG

7301 RIVERS AVE., SUITE 245
N. CHARLESTON SC 29406-9643
(843) 573-7140

FIGURE 2 SITE MAP
1245 DOVE LANE, LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE MAY 2013





Picture 1: Location of UST 1245Dove.



Picture 2: UST 1245Dove 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	1245Dove						
Benzene		ND						
Toluene		ND						
Ethylbenzene		ND						
Xylenes		ND						
Naphthalene		ND						
Benzo (a) anthracene		ND						
Benzo (b) fluoranthene		0.0966 mg/kg						
Benzo (k) fluoranthene		0.0195 mg/kg						
Chrysene		0.119 mg/kg						
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.

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				
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 Drive
Nashville, TN 37204
Tel: (615)726-0177

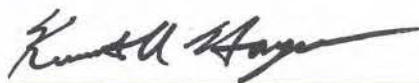
TestAmerica Job ID: 490-25044-1

Client Project/Site: EEG Laurel Bay Site

For:

Environmental Enterprise Group
10179 Highway 78
Ladson, South Carolina 29456

Attn: Mr. Tom McElwee



Authorized for release by:
4/30/2013 4:38:58 PM

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

LINKS

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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.



Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Case Narrative	4
Definitions	5
Client Sample Results	6
QC Sample Results	12
QC Association	18
Chronicle	20
Method Summary	22
Certification Summary	23
Chain of Custody	24
Receipt Checklists	27



Sample Summary

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

TestAmerica Job ID: 490-25044-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-25044-1	1212 Cardinal	Solid	04/15/13 15:15	04/24/13 08:15
490-25044-2	1266 Dove	Solid	04/16/13 15:15	04/24/13 08:15
490-25044-3	1424 Albatross	Solid	04/17/13 15:45	04/24/13 08:15
490-25044-4	1285 Dove	Solid	04/16/13 14:45	04/24/13 08:15
490-25044-5	1245 Dove	Solid	04/17/13 14:15	04/24/13 08:15
490-25044-6	1445 Dove	Solid	04/18/13 13:45	04/24/13 08:15

TestAmerica Nashville

Case Narrative

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

TestAmerica Job ID: 490-25044-1

Job ID: 490-25044-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-25044-1

Comments

No additional comments.

Receipt

The samples were received on 4/24/2013 8:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2° C.

GC/MS VOA

Method(s) 8260B: The method blank for batch 74897 contained naphthalene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 8260B: Internal standard responses were outside of acceptance limits for the following sample(s): 1212 Cardinal (490-25044-1), 1245 Dove (490-25044-5). The sample(s) shows evidence of matrix interference.

Method(s) 8260B: The following sample(s) was diluted due to the nature of the sample matrix: 1212 Cardinal (490-25044-1), 1245 Dove (490-25044-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: 1245 Dove (490-25044-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No other analytical or quality issues were noted.

GC/MS Semi VOA

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

VOA Prep

No analytical or quality issues were noted.

Definitions/Glossary

TestAmerica Job ID: 490-25044-1

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

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
#	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
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)

5

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-25044-1

Client Sample ID: 1212 Cardinal

Date Collected: 04/15/13 15:15

Date Received: 04/24/13 08:15

Lab Sample ID: 490-25044-1

Matrix: Solid

Percent Solids: 79.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00237	0.000794	mg/Kg	☐	04/24/13 18:04	04/26/13 14:01	1
Ethylbenzene	ND		0.00237	0.000794	mg/Kg	☐	04/24/13 18:04	04/26/13 14:01	1
Naphthalene	ND		0.374	0.127	mg/Kg	☐	04/24/13 17:29	04/26/13 15:02	1
Toluene	ND		0.00237	0.000877	mg/Kg	☐	04/24/13 18:04	04/26/13 14:01	1
Xylenes, Total	ND		0.00592	0.000794	mg/Kg	☐	04/24/13 18:04	04/26/13 14:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		70 - 130	04/24/13 18:04	04/26/13 14:01	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 130	04/24/13 17:29	04/26/13 15:02	1
4-Bromofluorobenzene (Surr)	127		70 - 130	04/24/13 18:04	04/26/13 14:01	1
4-Bromofluorobenzene (Surr)	94		70 - 130	04/24/13 17:29	04/26/13 15:02	1
Dibromofluoromethane (Surr)	111		70 - 130	04/24/13 18:04	04/26/13 14:01	1
Dibromofluoromethane (Surr)	92		70 - 130	04/24/13 17:29	04/26/13 15:02	1
Toluene-d8 (Surr)	107		70 - 130	04/24/13 18:04	04/26/13 14:01	1
Toluene-d8 (Surr)	99		70 - 130	04/24/13 17:29	04/26/13 15:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0846	0.0126	mg/Kg	☐	04/25/13 08:27	04/25/13 18:19	1
Acenaphthylene	ND		0.0846	0.0114	mg/Kg	☐	04/25/13 08:27	04/25/13 18:19	1
Anthracene	ND		0.0846	0.0114	mg/Kg	☐	04/25/13 08:27	04/25/13 18:19	1
Benzo[a]anthracene	ND		0.0846	0.0189	mg/Kg	☐	04/25/13 08:27	04/25/13 18:19	1
Benzo[a]pyrene	ND		0.0846	0.0151	mg/Kg	☐	04/25/13 08:27	04/25/13 18:19	1
Benzo[b]fluoranthene	ND		0.0846	0.0151	mg/Kg	☐	04/25/13 08:27	04/25/13 18:19	1
Benzo[g,h,i]perylene	ND		0.0846	0.0114	mg/Kg	☐	04/25/13 08:27	04/25/13 18:19	1
Benzo[k]fluoranthene	ND		0.0846	0.0177	mg/Kg	☐	04/25/13 08:27	04/25/13 18:19	1
1-Methylnaphthalene	ND		0.0846	0.0177	mg/Kg	☐	04/25/13 08:27	04/25/13 18:19	1
Pyrene	ND		0.0846	0.0151	mg/Kg	☐	04/25/13 08:27	04/25/13 18:19	1
Phenanthrene	ND		0.0846	0.0114	mg/Kg	☐	04/25/13 08:27	04/25/13 18:19	1
Chrysene	0.0644	J	0.0846	0.0114	mg/Kg	☐	04/25/13 08:27	04/25/13 18:19	1
Dibenz(a,h)anthracene	ND		0.0846	0.00884	mg/Kg	☐	04/25/13 08:27	04/25/13 18:19	1
Fluoranthene	ND		0.0846	0.0114	mg/Kg	☐	04/25/13 08:27	04/25/13 18:19	1
Fluorene	ND		0.0846	0.0151	mg/Kg	☐	04/25/13 08:27	04/25/13 18:19	1
Indeno[1,2,3-cd]pyrene	ND		0.0846	0.0126	mg/Kg	☐	04/25/13 08:27	04/25/13 18:19	1
Naphthalene	ND		0.0846	0.0114	mg/Kg	☐	04/25/13 08:27	04/25/13 18:19	1
2-Methylnaphthalene	ND		0.0846	0.0202	mg/Kg	☐	04/25/13 08:27	04/25/13 18:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	51		29 - 120	04/25/13 08:27	04/25/13 18:19	1
Terphenyl-d14 (Surr)	71		13 - 120	04/25/13 08:27	04/25/13 18:19	1
Nitrobenzene-d5 (Surr)	54		27 - 120	04/25/13 08:27	04/25/13 18:19	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	79		0.10	0.10	%			04/25/13 08:25	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-25044-1

Client Sample ID: 1266 Dove

Date Collected: 04/16/13 15:15

Date Received: 04/24/13 08:15

Lab Sample ID: 490-25044-2

Matrix: Solid

Percent Solids: 97.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00221	0.000741	mg/Kg	☐	04/24/13 18:04	04/25/13 13:56	1
Ethylbenzene	ND		0.00221	0.000741	mg/Kg	☐	04/24/13 18:04	04/25/13 13:56	1
Naphthalene	ND		0.00553	0.00188	mg/Kg	☐	04/24/13 18:04	04/25/13 13:56	1
Toluene	ND		0.00221	0.000819	mg/Kg	☐	04/24/13 18:04	04/25/13 13:56	1
Xylenes, Total	ND		0.00553	0.000741	mg/Kg	☐	04/24/13 18:04	04/25/13 13:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	04/24/13 18:04	04/25/13 13:56	1
4-Bromofluorobenzene (Surr)	108		70 - 130	04/24/13 18:04	04/25/13 13:56	1
Dibromofluoromethane (Surr)	97		70 - 130	04/24/13 18:04	04/25/13 13:56	1
Toluene-d8 (Surr)	100		70 - 130	04/24/13 18:04	04/25/13 13:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0679	0.0101	mg/Kg	☐	04/25/13 08:27	04/25/13 19:24	1
Acenaphthylene	ND		0.0679	0.00912	mg/Kg	☐	04/25/13 08:27	04/25/13 19:24	1
Anthracene	ND		0.0679	0.00912	mg/Kg	☐	04/25/13 08:27	04/25/13 19:24	1
Benzo[a]anthracene	0.381		0.0679	0.0152	mg/Kg	☐	04/25/13 08:27	04/25/13 19:24	1
Benzo[a]pyrene	0.717		0.0679	0.0122	mg/Kg	☐	04/25/13 08:27	04/25/13 19:24	1
Benzo[b]fluoranthene	1.19		0.0679	0.0122	mg/Kg	☐	04/25/13 08:27	04/25/13 19:24	1
Benzo[g,h,i]perylene	0.752		0.0679	0.00912	mg/Kg	☐	04/25/13 08:27	04/25/13 19:24	1
Benzo[k]fluoranthene	0.415		0.0679	0.0142	mg/Kg	☐	04/25/13 08:27	04/25/13 19:24	1
1-Methylnaphthalene	ND		0.0679	0.0142	mg/Kg	☐	04/25/13 08:27	04/25/13 19:24	1
Pyrene	0.229		0.0679	0.0122	mg/Kg	☐	04/25/13 08:27	04/25/13 19:24	1
Phenanthrene	ND		0.0679	0.00912	mg/Kg	☐	04/25/13 08:27	04/25/13 19:24	1
Chrysene	0.714		0.0679	0.00912	mg/Kg	☐	04/25/13 08:27	04/25/13 19:24	1
Dibenz(a,h)anthracene	0.0482 J		0.0679	0.00709	mg/Kg	☐	04/25/13 08:27	04/25/13 19:24	1
Fluoranthene	0.127		0.0679	0.00912	mg/Kg	☐	04/25/13 08:27	04/25/13 19:24	1
Fluorene	ND		0.0679	0.0122	mg/Kg	☐	04/25/13 08:27	04/25/13 19:24	1
Indeno[1,2,3-cd]pyrene	0.490		0.0679	0.0101	mg/Kg	☐	04/25/13 08:27	04/25/13 19:24	1
Naphthalene	ND		0.0679	0.00912	mg/Kg	☐	04/25/13 08:27	04/25/13 19:24	1
2-Methylnaphthalene	ND		0.0679	0.0162	mg/Kg	☐	04/25/13 08:27	04/25/13 19:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	64		29 - 120	04/25/13 08:27	04/25/13 19:24	1
Terphenyl-d14 (Surr)	86		13 - 120	04/25/13 08:27	04/25/13 19:24	1
Nitrobenzene-d5 (Surr)	59		27 - 120	04/25/13 08:27	04/25/13 19:24	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	97		0.10	0.10	%			04/25/13 08:25	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-25044-1

Client Sample ID: 1424 Albatross

Date Collected: 04/17/13 15:45

Date Received: 04/24/13 08:15

Lab Sample ID: 490-25044-3

Matrix: Solid

Percent Solids: 83.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00193	0.000648	mg/Kg	☐	04/24/13 18:04	04/25/13 14:27	1
Ethylbenzene	ND		0.00193	0.000648	mg/Kg	☐	04/24/13 18:04	04/25/13 14:27	1
Naphthalene	ND		0.00483	0.00164	mg/Kg	☐	04/24/13 18:04	04/25/13 14:27	1
Toluene	ND		0.00193	0.000715	mg/Kg	☐	04/24/13 18:04	04/25/13 14:27	1
Xylenes, Total	ND		0.00483	0.000648	mg/Kg	☐	04/24/13 18:04	04/25/13 14:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 130	04/24/13 18:04	04/25/13 14:27	1
4-Bromofluorobenzene (Surr)	111		70 - 130	04/24/13 18:04	04/25/13 14:27	1
Dibromofluoromethane (Surr)	99		70 - 130	04/24/13 18:04	04/25/13 14:27	1
Toluene-d8 (Surr)	99		70 - 130	04/24/13 18:04	04/25/13 14:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0799	0.0119	mg/Kg	☐	04/25/13 08:27	04/25/13 19:46	1
Acenaphthylene	ND		0.0799	0.0107	mg/Kg	☐	04/25/13 08:27	04/25/13 19:46	1
Anthracene	ND		0.0799	0.0107	mg/Kg	☐	04/25/13 08:27	04/25/13 19:46	1
Benzo[a]anthracene	ND		0.0799	0.0179	mg/Kg	☐	04/25/13 08:27	04/25/13 19:46	1
Benzo[a]pyrene	ND		0.0799	0.0143	mg/Kg	☐	04/25/13 08:27	04/25/13 19:46	1
Benzo[b]fluoranthene	ND		0.0799	0.0143	mg/Kg	☐	04/25/13 08:27	04/25/13 19:46	1
Benzo[g,h,i]perylene	ND		0.0799	0.0107	mg/Kg	☐	04/25/13 08:27	04/25/13 19:46	1
Benzo[k]fluoranthene	ND		0.0799	0.0167	mg/Kg	☐	04/25/13 08:27	04/25/13 19:46	1
1-Methylnaphthalene	ND		0.0799	0.0167	mg/Kg	☐	04/25/13 08:27	04/25/13 19:46	1
Pyrene	ND		0.0799	0.0143	mg/Kg	☐	04/25/13 08:27	04/25/13 19:46	1
Phenanthrene	ND		0.0799	0.0107	mg/Kg	☐	04/25/13 08:27	04/25/13 19:46	1
Chrysene	ND		0.0799	0.0107	mg/Kg	☐	04/25/13 08:27	04/25/13 19:46	1
Dibenz(a,h)anthracene	ND		0.0799	0.00834	mg/Kg	☐	04/25/13 08:27	04/25/13 19:46	1
Fluoranthene	ND		0.0799	0.0107	mg/Kg	☐	04/25/13 08:27	04/25/13 19:46	1
Fluorene	ND		0.0799	0.0143	mg/Kg	☐	04/25/13 08:27	04/25/13 19:46	1
Indeno[1,2,3-cd]pyrene	ND		0.0799	0.0119	mg/Kg	☐	04/25/13 08:27	04/25/13 19:46	1
Naphthalene	ND		0.0799	0.0107	mg/Kg	☐	04/25/13 08:27	04/25/13 19:46	1
2-Methylnaphthalene	ND		0.0799	0.0191	mg/Kg	☐	04/25/13 08:27	04/25/13 19:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	62		29 - 120	04/25/13 08:27	04/25/13 19:46	1
Terphenyl-d14 (Surr)	82		13 - 120	04/25/13 08:27	04/25/13 19:46	1
Nitrobenzene-d5 (Surr)	58		27 - 120	04/25/13 08:27	04/25/13 19:46	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83		0.10	0.10	%			04/25/13 08:25	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-25044-1

Client Sample ID: 1285 Dove

Date Collected: 04/16/13 14:45

Date Received: 04/24/13 08:15

Lab Sample ID: 490-25044-4

Matrix: Solid

Percent Solids: 94.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00228	0.000763	mg/Kg	☒	04/24/13 18:04	04/25/13 14:58	1
Ethylbenzene	0.000885	J	0.00228	0.000763	mg/Kg	☒	04/24/13 18:04	04/25/13 14:58	1
Naphthalene	0.00261	J	0.00569	0.00194	mg/Kg	☒	04/24/13 18:04	04/25/13 14:58	1
Toluene	0.00151	J	0.00228	0.000842	mg/Kg	☒	04/24/13 18:04	04/25/13 14:58	1
Xylenes, Total	0.00263	J	0.00569	0.000763	mg/Kg	☒	04/24/13 18:04	04/25/13 14:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 130	04/24/13 18:04	04/25/13 14:58	1
4-Bromofluorobenzene (Surr)	105		70 - 130	04/24/13 18:04	04/25/13 14:58	1
Dibromofluoromethane (Surr)	102		70 - 130	04/24/13 18:04	04/25/13 14:58	1
Toluene-d8 (Surr)	101		70 - 130	04/24/13 18:04	04/25/13 14:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0702	0.0105	mg/Kg	☒	04/25/13 08:27	04/25/13 20:07	1
Acenaphthylene	ND		0.0702	0.00943	mg/Kg	☒	04/25/13 08:27	04/25/13 20:07	1
Anthracene	ND		0.0702	0.00943	mg/Kg	☒	04/25/13 08:27	04/25/13 20:07	1
Benzo[a]anthracene	ND		0.0702	0.0157	mg/Kg	☒	04/25/13 08:27	04/25/13 20:07	1
Benzo[a]pyrene	ND		0.0702	0.0126	mg/Kg	☒	04/25/13 08:27	04/25/13 20:07	1
Benzo[b]fluoranthene	ND		0.0702	0.0126	mg/Kg	☒	04/25/13 08:27	04/25/13 20:07	1
Benzo[g,h,i]perylene	ND		0.0702	0.00943	mg/Kg	☒	04/25/13 08:27	04/25/13 20:07	1
Benzo[k]fluoranthene	ND		0.0702	0.0147	mg/Kg	☒	04/25/13 08:27	04/25/13 20:07	1
1-Methylnaphthalene	0.204		0.0702	0.0147	mg/Kg	☒	04/25/13 08:27	04/25/13 20:07	1
Pyrene	ND		0.0702	0.0126	mg/Kg	☒	04/25/13 08:27	04/25/13 20:07	1
Phenanthrene	0.0948		0.0702	0.00943	mg/Kg	☒	04/25/13 08:27	04/25/13 20:07	1
Chrysene	ND		0.0702	0.00943	mg/Kg	☒	04/25/13 08:27	04/25/13 20:07	1
Dibenz[a,h]anthracene	ND		0.0702	0.00734	mg/Kg	☒	04/25/13 08:27	04/25/13 20:07	1
Fluoranthene	ND		0.0702	0.00943	mg/Kg	☒	04/25/13 08:27	04/25/13 20:07	1
Fluorene	0.0417	J	0.0702	0.0126	mg/Kg	☒	04/25/13 08:27	04/25/13 20:07	1
Indeno[1,2,3-cd]pyrene	ND		0.0702	0.0105	mg/Kg	☒	04/25/13 08:27	04/25/13 20:07	1
Naphthalene	0.0773		0.0702	0.00943	mg/Kg	☒	04/25/13 08:27	04/25/13 20:07	1
2-Methylnaphthalene	0.335		0.0702	0.0168	mg/Kg	☒	04/25/13 08:27	04/25/13 20:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	54		29 - 120	04/25/13 08:27	04/25/13 20:07	1
Terphenyl-d14 (Surr)	85		13 - 120	04/25/13 08:27	04/25/13 20:07	1
Nitrobenzene-d5 (Surr)	48		27 - 120	04/25/13 08:27	04/25/13 20:07	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	95		0.10	0.10	%			04/25/13 08:25	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-25044-1

Client Sample ID: 1245 Dove

Date Collected: 04/17/13 14:15

Date Received: 04/24/13 08:15

Lab Sample ID: 490-25044-5

Matrix: Solid

Percent Solids: 91.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00240	0.000803	mg/Kg	☐	04/24/13 18:04	04/26/13 14:31	1
Ethylbenzene	ND		0.00240	0.000803	mg/Kg	☐	04/24/13 18:04	04/26/13 14:31	1
Naphthalene	ND		0.344	0.117	mg/Kg	☐	04/24/13 17:29	04/26/13 15:33	1
Toluene	ND		0.00240	0.000887	mg/Kg	☐	04/24/13 18:04	04/26/13 14:31	1
Xylenes, Total	ND		0.00599	0.000803	mg/Kg	☐	04/24/13 18:04	04/26/13 14:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	04/24/13 18:04	04/26/13 14:31	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 130	04/24/13 17:29	04/26/13 15:33	1
4-Bromofluorobenzene (Surr)	151	X	70 - 130	04/24/13 18:04	04/26/13 14:31	1
4-Bromofluorobenzene (Surr)	107		70 - 130	04/24/13 17:29	04/26/13 15:33	1
Dibromofluoromethane (Surr)	99		70 - 130	04/24/13 18:04	04/26/13 14:31	1
Dibromofluoromethane (Surr)	94		70 - 130	04/24/13 17:29	04/26/13 15:33	1
Toluene-d8 (Surr)	104		70 - 130	04/24/13 18:04	04/26/13 14:31	1
Toluene-d8 (Surr)	101		70 - 130	04/24/13 17:29	04/26/13 15:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0720	0.0107	mg/Kg	☐	04/25/13 08:27	04/25/13 20:28	1
Acenaphthylene	0.0552	J	0.0720	0.00967	mg/Kg	☐	04/25/13 08:27	04/25/13 20:28	1
Anthracene	ND		0.0720	0.00967	mg/Kg	☐	04/25/13 08:27	04/25/13 20:28	1
Benzo[a]anthracene	ND		0.0720	0.0161	mg/Kg	☐	04/25/13 08:27	04/25/13 20:28	1
Benzo[a]pyrene	0.382		0.0720	0.0129	mg/Kg	☐	04/25/13 08:27	04/25/13 20:28	1
Benzo[b]fluoranthene	0.0966		0.0720	0.0129	mg/Kg	☐	04/25/13 08:27	04/25/13 20:28	1
Benzo[g,h,i]perylene	0.187		0.0720	0.00967	mg/Kg	☐	04/25/13 08:27	04/25/13 20:28	1
Benzo[k]fluoranthene	0.0195	J	0.0720	0.0150	mg/Kg	☐	04/25/13 08:27	04/25/13 20:28	1
1-Methylnaphthalene	ND		0.0720	0.0150	mg/Kg	☐	04/25/13 08:27	04/25/13 20:28	1
Pyrene	ND		0.0720	0.0129	mg/Kg	☐	04/25/13 08:27	04/25/13 20:28	1
Phenanthrene	ND		0.0720	0.00967	mg/Kg	☐	04/25/13 08:27	04/25/13 20:28	1
Chrysene	0.119		0.0720	0.00967	mg/Kg	☐	04/25/13 08:27	04/25/13 20:28	1
Dibenz(a,h)anthracene	ND		0.0720	0.00752	mg/Kg	☐	04/25/13 08:27	04/25/13 20:28	1
Fluoranthene	ND		0.0720	0.00967	mg/Kg	☐	04/25/13 08:27	04/25/13 20:28	1
Fluorene	ND		0.0720	0.0129	mg/Kg	☐	04/25/13 08:27	04/25/13 20:28	1
Indeno[1,2,3-cd]pyrene	0.163		0.0720	0.0107	mg/Kg	☐	04/25/13 08:27	04/25/13 20:28	1
Naphthalene	ND		0.0720	0.00967	mg/Kg	☐	04/25/13 08:27	04/25/13 20:28	1
2-Methylnaphthalene	ND		0.0720	0.0172	mg/Kg	☐	04/25/13 08:27	04/25/13 20:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	63		29 - 120	04/25/13 08:27	04/25/13 20:28	1
Terphenyl-d14 (Surr)	89		13 - 120	04/25/13 08:27	04/25/13 20:28	1
Nitrobenzene-d5 (Surr)	63		27 - 120	04/25/13 08:27	04/25/13 20:28	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10	0.10	%			04/25/13 08:25	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-25044-1

Client Sample ID: 1445 Dove

Date Collected: 04/18/13 13:45

Date Received: 04/24/13 08:15

Lab Sample ID: 490-25044-6

Matrix: Solid

Percent Solids: 73.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00260	0.000871	mg/Kg	☐	04/24/13 18:04	04/25/13 15:59	1
Ethylbenzene	ND		0.00260	0.000871	mg/Kg	☐	04/24/13 18:04	04/25/13 15:59	1
Naphthalene	0.00373	J	0.00650	0.00221	mg/Kg	☐	04/24/13 18:04	04/25/13 15:59	1
Toluene	ND		0.00260	0.000962	mg/Kg	☐	04/24/13 18:04	04/25/13 15:59	1
Xylenes, Total	0.00150	J	0.00650	0.000871	mg/Kg	☐	04/24/13 18:04	04/25/13 15:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 130	04/24/13 18:04	04/25/13 15:59	1
4-Bromofluorobenzene (Surr)	101		70 - 130	04/24/13 18:04	04/25/13 15:59	1
Dibromofluoromethane (Surr)	99		70 - 130	04/24/13 18:04	04/25/13 15:59	1
Toluene-d8 (Surr)	101		70 - 130	04/24/13 18:04	04/25/13 15:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0897	0.0134	mg/Kg	☐	04/25/13 08:27	04/25/13 20:50	1
Acenaphthylene	ND		0.0897	0.0121	mg/Kg	☐	04/25/13 08:27	04/25/13 20:50	1
Anthracene	ND		0.0897	0.0121	mg/Kg	☐	04/25/13 08:27	04/25/13 20:50	1
Benzo[a]anthracene	ND		0.0897	0.0201	mg/Kg	☐	04/25/13 08:27	04/25/13 20:50	1
Benzo[a]pyrene	ND		0.0897	0.0161	mg/Kg	☐	04/25/13 08:27	04/25/13 20:50	1
Benzo[b]fluoranthene	ND		0.0897	0.0161	mg/Kg	☐	04/25/13 08:27	04/25/13 20:50	1
Benzo[g,h,i]perylene	ND		0.0897	0.0121	mg/Kg	☐	04/25/13 08:27	04/25/13 20:50	1
Benzo[k]fluoranthene	ND		0.0897	0.0188	mg/Kg	☐	04/25/13 08:27	04/25/13 20:50	1
1-Methylnaphthalene	ND		0.0897	0.0188	mg/Kg	☐	04/25/13 08:27	04/25/13 20:50	1
Pyrene	ND		0.0897	0.0161	mg/Kg	☐	04/25/13 08:27	04/25/13 20:50	1
Phenanthrene	ND		0.0897	0.0121	mg/Kg	☐	04/25/13 08:27	04/25/13 20:50	1
Chrysene	ND		0.0897	0.0121	mg/Kg	☐	04/25/13 08:27	04/25/13 20:50	1
Dibenz(a,h)anthracene	ND		0.0897	0.00938	mg/Kg	☐	04/25/13 08:27	04/25/13 20:50	1
Fluoranthene	ND		0.0897	0.0121	mg/Kg	☐	04/25/13 08:27	04/25/13 20:50	1
Fluorene	ND		0.0897	0.0161	mg/Kg	☐	04/25/13 08:27	04/25/13 20:50	1
Indeno[1,2,3-cd]pyrene	ND		0.0897	0.0134	mg/Kg	☐	04/25/13 08:27	04/25/13 20:50	1
Naphthalene	ND		0.0897	0.0121	mg/Kg	☐	04/25/13 08:27	04/25/13 20:50	1
2-Methylnaphthalene	ND		0.0897	0.0214	mg/Kg	☐	04/25/13 08:27	04/25/13 20:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	62		29 - 120	04/25/13 08:27	04/25/13 20:50	1
Terphenyl-d14 (Surr)	84		13 - 120	04/25/13 08:27	04/25/13 20:50	1
Nitrobenzene-d5 (Surr)	62		27 - 120	04/25/13 08:27	04/25/13 20:50	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	74		0.10	0.10	%			04/25/13 08:25	1

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-25044-1

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

Lab Sample ID: 490-24870-B-6-D MS

Matrix: Solid

Analysis Batch: 74897

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 74420

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.00646		0.0743	0.05936		mg/Kg	☐	71	31 - 143
Ethylbenzene	0.00854		0.0743	0.05727		mg/Kg	☐	66	23 - 161
Naphthalene	0.00257	J	0.0743	0.04694		mg/Kg	☐	60	10 - 176
Toluene	0.0230		0.0743	0.07316		mg/Kg	☐	68	30 - 155
Xylenes, Total	0.0208		0.223	0.1677		mg/Kg	☐	66	25 - 162

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		70 - 130
4-Bromofluorobenzene (Surr)	101		70 - 130
Dibromofluoromethane (Surr)	106		70 - 130
Toluene-d8 (Surr)	105		70 - 130

Lab Sample ID: 490-24870-B-6-E MSD

Matrix: Solid

Analysis Batch: 74897

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 74420

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.00646		0.0470	0.04173		mg/Kg	☐	75	31 - 143	35	50
Ethylbenzene	0.00854		0.0470	0.04077		mg/Kg	☐	69	23 - 161	34	50
Naphthalene	0.00257	J	0.0470	0.03342		mg/Kg	☐	66	10 - 176	34	50
Toluene	0.0230		0.0470	0.05052		mg/Kg	☐	59	30 - 155	37	50
Xylenes, Total	0.0208		0.141	0.1199		mg/Kg	☐	70	25 - 162	33	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		70 - 130
4-Bromofluorobenzene (Surr)	102		70 - 130
Dibromofluoromethane (Surr)	107		70 - 130
Toluene-d8 (Surr)	103		70 - 130

Lab Sample ID: MB 490-74897/6

Matrix: Solid

Analysis Batch: 74897

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			04/25/13 12:24	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			04/25/13 12:24	1
Naphthalene	0.001870	J	0.00500	0.00170	mg/Kg			04/25/13 12:24	1
Toluene	ND		0.00200	0.000740	mg/Kg			04/25/13 12:24	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			04/25/13 12:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		70 - 130		04/25/13 12:24	1
4-Bromofluorobenzene (Surr)	105		70 - 130		04/25/13 12:24	1
Dibromofluoromethane (Surr)	104		70 - 130		04/25/13 12:24	1
Toluene-d8 (Surr)	100		70 - 130		04/25/13 12:24	1

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-25044-1

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

Lab Sample ID: LCS 490-74897/3

Matrix: Solid

Analysis Batch: 74897

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Benzene	0.0500	0.05017		mg/Kg		100	75 - 127
Ethylbenzene	0.0500	0.05219		mg/Kg		104	80 - 134
Naphthalene	0.0500	0.04807		mg/Kg		96	69 - 150
Toluene	0.0500	0.05082		mg/Kg		102	80 - 132
Xylenes, Total	0.150	0.1599		mg/Kg		107	80 - 137

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	109		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	106		70 - 130
Toluene-d8 (Surr)	102		70 - 130

Lab Sample ID: LCSD 490-74897/4

Matrix: Solid

Analysis Batch: 74897

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
Benzene	0.0500	0.05957		mg/Kg		119	75 - 127	17	50
Ethylbenzene	0.0500	0.06259		mg/Kg		125	80 - 134	18	50
Naphthalene	0.0500	0.05698		mg/Kg		114	69 - 150	17	50
Toluene	0.0500	0.06004		mg/Kg		120	80 - 132	17	50
Xylenes, Total	0.150	0.1907		mg/Kg		127	80 - 137	18	50

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	107		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	104		70 - 130
Toluene-d8 (Surr)	103		70 - 130

Lab Sample ID: MB 490-75266/6

Matrix: Solid

Analysis Batch: 75266

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.00200	0.000670	mg/Kg			04/26/13 13:00	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			04/26/13 13:00	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			04/26/13 13:00	1
Toluene	ND		0.00200	0.000740	mg/Kg			04/26/13 13:00	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			04/26/13 13:00	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	104		70 - 130		04/26/13 13:00	1
4-Bromofluorobenzene (Surr)	107		70 - 130		04/26/13 13:00	1
Dibromofluoromethane (Surr)	104		70 - 130		04/26/13 13:00	1
Toluene-d8 (Surr)	101		70 - 130		04/26/13 13:00	1

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-25044-1

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

Lab Sample ID: MB 490-75266/7

Matrix: Solid

Analysis Batch: 75266

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.100	0.0335	mg/Kg			04/26/13 13:30	1
Ethylbenzene	ND		0.100	0.0335	mg/Kg			04/26/13 13:30	1
Naphthalene	ND		0.250	0.0850	mg/Kg			04/26/13 13:30	1
Toluene	ND		0.100	0.0370	mg/Kg			04/26/13 13:30	1
Xylenes, Total	ND		0.250	0.0335	mg/Kg			04/26/13 13:30	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	107		70 - 130		04/26/13 13:30	1
4-Bromofluorobenzene (Surr)	105		70 - 130		04/26/13 13:30	1
Dibromofluoromethane (Surr)	106		70 - 130		04/26/13 13:30	1
Toluene-d8 (Surr)	101		70 - 130		04/26/13 13:30	1

Lab Sample ID: LCS 490-75266/3

Matrix: Solid

Analysis Batch: 75266

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits	
		Result	Qualifier					
Benzene	0.0500	0.05080		mg/Kg		102	75 - 127	
Ethylbenzene	0.0500	0.05095		mg/Kg		102	80 - 134	
Naphthalene	0.0500	0.04657		mg/Kg		93	69 - 150	
Toluene	0.0500	0.04965		mg/Kg		99	80 - 132	
Xylenes, Total	0.150	0.1559		mg/Kg		104	80 - 137	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	109		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	106		70 - 130
Toluene-d8 (Surr)	102		70 - 130

Lab Sample ID: LCSD 490-75266/4

Matrix: Solid

Analysis Batch: 75266

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits		RPD	Limit
		Result	Qualifier							
Benzene	0.0500	0.05110		mg/Kg		102	75 - 127	1	50	
Ethylbenzene	0.0500	0.05242		mg/Kg		105	80 - 134	3	50	
Naphthalene	0.0500	0.04727		mg/Kg		95	69 - 150	1	50	
Toluene	0.0500	0.05145		mg/Kg		103	80 - 132	4	50	
Xylenes, Total	0.150	0.1604		mg/Kg		107	80 - 137	3	50	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	107		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	105		70 - 130
Toluene-d8 (Surr)	102		70 - 130

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-25044-1

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

Lab Sample ID: MB 490-74873/1-A

Matrix: Solid

Analysis Batch: 74973

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 74873

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acenaphthene	ND		0.0670	0.0100	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Anthracene	ND		0.0670	0.00900	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Pyrene	ND		0.0670	0.0120	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Chrysene	ND		0.0670	0.00900	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Fluoranthene	ND		0.0670	0.00900	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Fluorene	ND		0.0670	0.0120	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		04/25/13 08:27	04/25/13 17:36	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorobiphenyl (Surr)	61		29 - 120	04/25/13 08:27	04/25/13 17:36	1
Terphenyl-d14 (Surr)	78		13 - 120	04/25/13 08:27	04/25/13 17:36	1
Nitrobenzene-d5 (Surr)	58		27 - 120	04/25/13 08:27	04/25/13 17:36	1

Lab Sample ID: LCS 490-74873/2-A

Matrix: Solid

Analysis Batch: 74973

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 74873

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Acenaphthylene	1.67	1.283		mg/Kg		77	38 - 120
Anthracene	1.67	1.373		mg/Kg		82	46 - 124
Benzo[a]anthracene	1.67	1.331		mg/Kg		80	45 - 120
Benzo[a]pyrene	1.67	1.350		mg/Kg		81	45 - 120
Benzo[b]fluoranthene	1.67	1.361		mg/Kg		82	42 - 120
Benzo[g,h,i]perylene	1.67	1.374		mg/Kg		82	38 - 120
Benzo[k]fluoranthene	1.67	1.337		mg/Kg		80	42 - 120
1-Methylnaphthalene	1.67	1.215		mg/Kg		73	32 - 120
Pyrene	1.67	1.438		mg/Kg		86	43 - 120
Phenanthrene	1.67	1.341		mg/Kg		80	45 - 120
Chrysene	1.67	1.267		mg/Kg		76	43 - 120
Dibenz(a,h)anthracene	1.67	1.447		mg/Kg		87	32 - 128
Fluoranthene	1.67	1.332		mg/Kg		80	46 - 120
Fluorene	1.67	1.300		mg/Kg		78	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	1.387		mg/Kg		83	41 - 121
Naphthalene	1.67	1.107		mg/Kg		66	32 - 120
2-Methylnaphthalene	1.67	1.253		mg/Kg		75	28 - 120

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-25044-1

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

Lab Sample ID: LCS 490-74873/2-A

Matrix: Solid

Analysis Batch: 74973

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 74873

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl (Surr)	68		29 - 120
Terphenyl-d14 (Surr)	98		13 - 120
Nitrobenzene-d5 (Surr)	64		27 - 120

Lab Sample ID: 490-25044-1 MS

Matrix: Solid

Analysis Batch: 74973

Client Sample ID: 1212 Cardinal

Prep Type: Total/NA

Prep Batch: 74873

Analyte	Sample Sample		Spike	MS MS		Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Added	Result	Qualifier				
Acenaphthylene	ND		2.09		1.353			65	25 - 120	
Anthracene	ND		2.09		1.301			62	28 - 125	
Benzo[a]anthracene	ND		2.09		1.241			59	23 - 120	
Benzo[a]pyrene	ND		2.09		1.249			60	15 - 128	
Benzo[b]fluoranthene	ND		2.09		1.298			62	12 - 133	
Benzo[g,h,i]perylene	ND		2.09		1.243			59	22 - 120	
Benzo[k]fluoranthene	ND		2.09		1.253			60	28 - 120	
1-Methylnaphthalene	ND		2.09		1.330			64	10 - 120	
Pyrene	ND		2.09		1.340			64	20 - 123	
Phenanthrene	ND		2.09		1.304			62	21 - 122	
Chrysene	0.0644	J	2.09		1.245			56	20 - 120	
Dibenz(a,h)anthracene	ND		2.09		1.306			62	12 - 128	
Fluoranthene	ND		2.09		1.250			60	10 - 143	
Fluorene	ND		2.09		1.262			60	20 - 120	
Indeno[1,2,3-cd]pyrene	ND		2.09		1.274			61	22 - 121	
Naphthalene	ND		2.09		1.231			59	10 - 120	
2-Methylnaphthalene	ND		2.09		1.337			64	13 - 120	

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl (Surr)	52		29 - 120
Terphenyl-d14 (Surr)	68		13 - 120
Nitrobenzene-d5 (Surr)	57		27 - 120

Lab Sample ID: 490-25044-1 MSD

Matrix: Solid

Analysis Batch: 74973

Client Sample ID: 1212 Cardinal

Prep Type: Total/NA

Prep Batch: 74873

Analyte	Sample Sample		Spike	MSD MSD		Unit	D	%Rec	%Rec.		RPD	Limit
	Result	Qualifier		Added	Result	Qualifier			Limits	RPD		
Acenaphthylene	ND		2.10		1.532			73	25 - 120	12	50	
Anthracene	ND		2.10		1.525			73	28 - 125	16	49	
Benzo[a]anthracene	ND		2.10		1.446			69	23 - 120	15	50	
Benzo[a]pyrene	ND		2.10		1.456			69	15 - 128	15	50	
Benzo[b]fluoranthene	ND		2.10		1.666			79	12 - 133	25	50	
Benzo[g,h,i]perylene	ND		2.10		1.422			68	22 - 120	13	50	
Benzo[k]fluoranthene	ND		2.10		1.303			62	28 - 120	4	45	
1-Methylnaphthalene	ND		2.10		1.503			72	10 - 120	12	50	
Pyrene	ND		2.10		1.568			75	20 - 123	16	50	
Phenanthrene	ND		2.10		1.548			74	21 - 122	17	50	
Chrysene	0.0644	J	2.10		1.478			67	20 - 120	17	49	

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-25044-1

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

Lab Sample ID: 490-25044-1 MSD

Matrix: Solid

Analysis Batch: 74973

Client Sample ID: 1212 Cardinal

Prep Type: Total/NA

Prep Batch: 74873

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dibenz(a,h)anthracene	ND		2.10	1.490		mg/Kg	☐	71	12 - 128	13	50
Fluoranthene	ND		2.10	1.532		mg/Kg	☐	73	10 - 143	20	50
Fluorene	ND		2.10	1.492		mg/Kg	☐	71	20 - 120	17	50
Indeno[1,2,3-cd]pyrene	ND		2.10	1.446		mg/Kg	☐	69	22 - 121	13	50
Naphthalene	ND		2.10	1.355		mg/Kg	☐	65	10 - 120	10	50
2-Methylnaphthalene	ND		2.10	1.527		mg/Kg	☐	73	13 - 120	13	50
MSD MSD											
Surrogate	%Recovery	Qualifier	Limits								
2-Fluorobiphenyl (Surr)	53		29 - 120								
Terphenyl-d14 (Surr)	75		13 - 120								
Nitrobenzene-d5 (Surr)	60		27 - 120								

Method: Moisture - Percent Moisture

Lab Sample ID: 490-25050-A-1 DU

Matrix: Solid

Analysis Batch: 74872

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	83		82		%		0.7	20

TestAmerica Nashville

QC Association Summary

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

TestAmerica Job ID: 490-25044-1

GC/MS VOA

Prep Batch: 74420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-24870-B-6-D MS	Matrix Spike	Total/NA	Solid	5035	
490-24870-B-6-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 74812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-25044-1	1212 Cardinal	Total/NA	Solid	5035	
490-25044-5	1245 Dove	Total/NA	Solid	5035	

Prep Batch: 74817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-25044-1	1212 Cardinal	Total/NA	Solid	5035	
490-25044-2	1266 Dove	Total/NA	Solid	5035	
490-25044-3	1424 Albatross	Total/NA	Solid	5035	
490-25044-4	1285 Dove	Total/NA	Solid	5035	
490-25044-5	1245 Dove	Total/NA	Solid	5035	
490-25044-6	1445 Dove	Total/NA	Solid	5035	

Analysis Batch: 74897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-24870-B-6-D MS	Matrix Spike	Total/NA	Solid	8260B	74420
490-24870-B-6-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	74420
490-25044-2	1266 Dove	Total/NA	Solid	8260B	74817
490-25044-3	1424 Albatross	Total/NA	Solid	8260B	74817
490-25044-4	1285 Dove	Total/NA	Solid	8260B	74817
490-25044-6	1445 Dove	Total/NA	Solid	8260B	74817
LCS 490-74897/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-74897/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-74897/6	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 75266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-25044-1	1212 Cardinal	Total/NA	Solid	8260B	74812
490-25044-1	1212 Cardinal	Total/NA	Solid	8260B	74817
490-25044-5	1245 Dove	Total/NA	Solid	8260B	74812
490-25044-5	1245 Dove	Total/NA	Solid	8260B	74817
LCS 490-75266/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-75266/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-75266/6	Method Blank	Total/NA	Solid	8260B	
MB 490-75266/7	Method Blank	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 74873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-25044-1	1212 Cardinal	Total/NA	Solid	3550C	
490-25044-1 MS	1212 Cardinal	Total/NA	Solid	3550C	
490-25044-1 MSD	1212 Cardinal	Total/NA	Solid	3550C	
490-25044-2	1266 Dove	Total/NA	Solid	3550C	
490-25044-3	1424 Albatross	Total/NA	Solid	3550C	
490-25044-4	1285 Dove	Total/NA	Solid	3550C	

TestAmerica Nashville

QC Association Summary

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

TestAmerica Job ID: 490-25044-1

GC/MS Semi VOA (Continued)

Prep Batch: 74873 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-25044-5	1245 Dove	Total/NA	Solid	3550C	
490-25044-6	1445 Dove	Total/NA	Solid	3550C	
LCS 490-74873/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 490-74873/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 74973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-25044-1	1212 Cardinal	Total/NA	Solid	8270D	74873
490-25044-1 MS	1212 Cardinal	Total/NA	Solid	8270D	74873
490-25044-1 MSD	1212 Cardinal	Total/NA	Solid	8270D	74873
490-25044-2	1266 Dove	Total/NA	Solid	8270D	74873
490-25044-3	1424 Albatross	Total/NA	Solid	8270D	74873
490-25044-4	1285 Dove	Total/NA	Solid	8270D	74873
490-25044-5	1245 Dove	Total/NA	Solid	8270D	74873
490-25044-6	1445 Dove	Total/NA	Solid	8270D	74873
LCS 490-74873/2-A	Lab Control Sample	Total/NA	Solid	8270D	74873
MB 490-74873/1-A	Method Blank	Total/NA	Solid	8270D	74873

General Chemistry

Analysis Batch: 74872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-25044-1	1212 Cardinal	Total/NA	Solid	Moisture	
490-25044-2	1266 Dove	Total/NA	Solid	Moisture	
490-25044-3	1424 Albatross	Total/NA	Solid	Moisture	
490-25044-4	1285 Dove	Total/NA	Solid	Moisture	
490-25044-5	1245 Dove	Total/NA	Solid	Moisture	
490-25044-6	1445 Dove	Total/NA	Solid	Moisture	
490-25050-A-1 DU	Duplicate	Total/NA	Solid	Moisture	

Lab Chronicle

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

TestAmerica Job ID: 490-25044-1

Client Sample ID: 1212 Cardinal

Date Collected: 04/15/13 15:15

Date Received: 04/24/13 08:15

Lab Sample ID: 490-25044-1

Matrix: Solid

Percent Solids: 79.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			74812	04/24/13 17:29	ML	TAL NSH
Total/NA	Analysis	8260B		1	75266	04/26/13 15:02	AF	TAL NSH
Total/NA	Prep	5035			74817	04/24/13 18:04	ML	TAL NSH
Total/NA	Analysis	8260B		1	75266	04/26/13 14:01	AF	TAL NSH
Total/NA	Prep	3550C			74873	04/25/13 08:27	AK	TAL NSH
Total/NA	Analysis	8270D		1	74973	04/25/13 18:19	BS	TAL NSH
Total/NA	Analysis	Moisture		1	74872	04/25/13 08:25	RS	TAL NSH

9

Client Sample ID: 1266 Dove

Date Collected: 04/16/13 15:15

Date Received: 04/24/13 08:15

Lab Sample ID: 490-25044-2

Matrix: Solid

Percent Solids: 97.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			74817	04/24/13 18:04	ML	TAL NSH
Total/NA	Analysis	8260B		1	74897	04/25/13 13:56	KK	TAL NSH
Total/NA	Prep	3550C			74873	04/25/13 08:27	AK	TAL NSH
Total/NA	Analysis	8270D		1	74973	04/25/13 19:24	BS	TAL NSH
Total/NA	Analysis	Moisture		1	74872	04/25/13 08:25	RS	TAL NSH

Client Sample ID: 1424 Albatross

Date Collected: 04/17/13 15:45

Date Received: 04/24/13 08:15

Lab Sample ID: 490-25044-3

Matrix: Solid

Percent Solids: 83.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			74817	04/24/13 18:04	ML	TAL NSH
Total/NA	Analysis	8260B		1	74897	04/25/13 14:27	KK	TAL NSH
Total/NA	Prep	3550C			74873	04/25/13 08:27	AK	TAL NSH
Total/NA	Analysis	8270D		1	74973	04/25/13 19:46	BS	TAL NSH
Total/NA	Analysis	Moisture		1	74872	04/25/13 08:25	RS	TAL NSH

Client Sample ID: 1285 Dove

Date Collected: 04/16/13 14:45

Date Received: 04/24/13 08:15

Lab Sample ID: 490-25044-4

Matrix: Solid

Percent Solids: 94.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			74817	04/24/13 18:04	ML	TAL NSH
Total/NA	Analysis	8260B		1	74897	04/25/13 14:58	KK	TAL NSH
Total/NA	Prep	3550C			74873	04/25/13 08:27	AK	TAL NSH
Total/NA	Analysis	8270D		1	74973	04/25/13 20:07	BS	TAL NSH
Total/NA	Analysis	Moisture		1	74872	04/25/13 08:25	RS	TAL NSH

TestAmerica Nashville

Lab Chronicle

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

TestAmerica Job ID: 490-25044-1

Client Sample ID: 1245 Dove

Date Collected: 04/17/13 14:15

Date Received: 04/24/13 08:15

Lab Sample ID: 490-25044-5

Matrix: Solid

Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			74812	04/24/13 17:29	ML	TAL NSH
Total/NA	Analysis	8260B		1	75266	04/26/13 15:33	AF	TAL NSH
Total/NA	Prep	5035			74817	04/24/13 18:04	ML	TAL NSH
Total/NA	Analysis	8260B		1	75266	04/26/13 14:31	AF	TAL NSH
Total/NA	Prep	3550C			74873	04/25/13 08:27	AK	TAL NSH
Total/NA	Analysis	8270D		1	74973	04/25/13 20:28	BS	TAL NSH
Total/NA	Analysis	Moisture		1	74872	04/25/13 08:25	RS	TAL NSH

9

Client Sample ID: 1445 Dove

Date Collected: 04/18/13 13:45

Date Received: 04/24/13 08:15

Lab Sample ID: 490-25044-6

Matrix: Solid

Percent Solids: 73.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			74817	04/24/13 18:04	ML	TAL NSH
Total/NA	Analysis	8260B		1	74897	04/25/13 15:59	KK	TAL NSH
Total/NA	Prep	3550C			74873	04/25/13 08:27	AK	TAL NSH
Total/NA	Analysis	8270D		1	74973	04/25/13 20:50	BS	TAL NSH
Total/NA	Analysis	Moisture		1	74872	04/25/13 08:25	RS	TAL NSH

Laboratory References:

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

Method Summary

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

TestAmerica Job ID: 490-25044-1

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: EEG Laurel Bay Site

TestAmerica Job ID: 490-25044-1

Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
	ACIL		393	10-30-13
A2LA	ISO/IEC 17025		0453.07	12-31-13
Alabama	State Program	4	41150	05-31-13
Alaska (UST)	State Program	10	UST-087	07-24-13
Arizona	State Program	9	AZ0473	05-05-13 *
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
Florida	NELAP	4	E87358	06-30-13
Illinois	NELAP	5	200010	12-09-13
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-13
Kentucky (UST)	State Program	4	19	09-15-13
Louisiana	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
Nevada	State Program	9	TN00032	07-31-13
New Hampshire	NELAP	1	2963	10-10-13
New Jersey	NELAP	2	TN965	06-30-13
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-13
North Dakota	State Program	8	R-146	06-30-13
Ohio VAP	State Program	5	CL0033	01-19-14
Oregon	NELAP	10	TN200001	04-30-13 *
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
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-13
USDA	Federal		S-48469	11-02-13
Utah	NELAP	8	TAN	06-30-13
Virginia	NELAP	3	460152	06-14-13
Washington	State Program	10	C789	07-19-13
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-13
Wyoming (UST)	A2LA	8	453.07	12-31-13

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

TestAmerica Nashville

COOLER RECEIPT FORM

Charleston



490-25044 Chain of Custody

Cooler Received/Opened On: 4/24/2013 @0815

1. Tracking # 9593 (last 4 digits, FedEx)

Courier: Fed-Ex IR Gun ID: 14740456

2. Temperature of rep. sample or temp blank when opened: 2.2 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler?

If yes, how many and where:

2 Front / Back

5. Were the seals intact, signed, and dated correctly?

6. Were custody papers inside cooler?

I certify that I opened the cooler and answered questions 1-6 (initial) J

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # NA

I certify that I unloaded the cooler and answered questions 7-14 (initial) B

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) V

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) V

I certify that I attached a label with the unique LIMS number to each container (initial) B

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#

4/30/2013

estAmerica

E LEADER IN ENVIRONMENTAL TESTING

Nashville Division
2960 Foster Creighton
Nashville, TN 37204

Phone: 615-726-0177
Toll Free: 800-765-0980
Fax: 615-726-3404

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?

Client Name/Account #: EEG - SBG # 2449

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29456

Project Manager: Tom McElwee email: mcelwee@eeginc.net

Telephone Number: 843.412.2097

Fax No.: 843-879-0401

Sampler Name: (Print) Pratt Shaw

Sampler Signature: 

Compliance Monitoring?	Yes	No
------------------------	-----	----

Enforcement Action?	Yes	No
---------------------	-----	----

Site State: SC

PO#: 1035

TA Quote#:

Project ID: Laurel Bay Housing Project


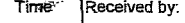


Project #:[illegible]

Special Instructions:

Laboratory Comments:

Temperature Upon Receipt:
VOCs Free of Headspace?

Y I

quished by: 	Date 4/23/13	Time 0900	Received by: 	Date	Time
quished by: 	Date	Time	Received by TestAmerica: 	Date 4/24/13	Time 0815

ived by TestAmerica:

Loc: 490
25044

Pg 2 of 2

4/30/2013

estAmerica
E LEADER IN ENVIRONMENTAL TESTING

Nashville Division
2960 Foster Creighton
Nashville, TN 37204

Phone: 615-726-0177
Toll Free: 800-765-0980
Fax: 615-726-3404

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?

Compliance Monitoring? Yes ☐ No ☐

Enforcement Action? Yes ☐ No ☐

Client Name/Account #: EEG - SBG # 2449

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29456

Project Manager: Torn McElwee email: mcelwee@eeginc.net

Telephone Number: 843.412.2097

Fax No.: 843-879-0401

Sampler Name: (Print) *Chris Tunstall*

Sampler Signature: *[Signature]*

Site State: SC

PO#: 1033

TA Quote #:

Project ID: Laurel Bay Housing Project

Project #:

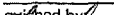

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative								Matrix						Analyze For:										RUSH TAT (Pre-Schedule)	Standard TAT	Fax Results	Send QC with report																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
							Ice	HNO ₃ (Red Label)	H ₂ SO ₄ (Yellow Label)	NaOH (Orange Label)	H ₂ SO ₄ Plastic (Yellow Label)	H ₂ SO ₄ Glass (Yellow Label)	None (Black Label)	Other (Specify)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	BTEX + Napth - 8260	PAH - 8270D																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

Special Instructions:

Laboratory Comments:

Temperature Upon Receipt:
VOCs Free of Headspace?

Y N

Shipped by:	Date	Time	Received by:	Date	Time
	4/23/13	0900	Fedex		
Shipped by:	Date	Time	Received by TestAmerica:	Date	Time
			 ITAN	4/24/13	0815

22

Login Sample Receipt Checklist

Client: Environmental Enterprise Group

Job Number: 490-25044-1

Login Number: 25044

List Source: TestAmerica Nashville

List Number: 1

Creator: Buckingham, Paul

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

ATTACHMENT A



NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST		1. Generator's US EPA ID No.		Manifest Doc No.		2. Page 1 of 1		716333			
3. Generator's Mailing Address: MCAS BEAUFORT LAUREL BAY HOUSING BEAUFORT, SC 29904				Generator's Site Address (if different than mailing):				A. Manifest Number WMNA 01519139			
4. Generator's Phone 843-879-0411								B. State Generator's ID			
5. Transporter 1 Company Name Carolina Containers P.O. Box 1925 Beaufort, SC 29901				6. US EPA ID Number				C. State Transporter's ID			
7. Transporter 2 Company Name				8. US EPA ID Number				D. Transporter's Phone (843) 522-1500			
9. Designated Facility Name and Site Address HICKORY HILL LANDFILL 2621 LOW COUNTRY DRIVE RIDGELAND, SC 29936				10. US EPA ID Number				E. State Transporter's ID			
								F. Transporter's Phone			
								G. State Facility ID			
								H. State Facility Phone 843-987-4643			
GENERATOR	11. Description of Waste Materials				12. Containers		13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments		
	a. HEATING OIL TANK FILLED WITH SAND WM Profile # 102655SC				No.	Type					
					1	200	8.60	TON	716333		
	b.										
	WM Profile #										
TRANSPORTER	c.										
	WM Profile #										
	d.										
	WM Profile #										
FACILITY	J. Additional Descriptions for Materials Listed Above				K. Disposal Location						
					Cell	Level					
					Grid						
15. Special Handling Instructions and Additional Information UST's from: 2) 1285 DOVE ✓ 4) 1245 DOVE ✓ 6) 1438 DOVE ✓ 1) 266 DOVE 3) 1424 Albatross 5) 1445 DOVE ✓ 7) 1208 Cardinal											
Purchase Order #				EMERGENCY CONTACT / PHONE NO.:							
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.											
Printed Name Timothy Whaley				Signature "On behalf of" Timothy Whaley				Month 8	Day 14	Year 13	
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials								Month 8	Day 14	Year 13
	Printed Name A. Prattshaw				Signature A. Prattshaw				Month 8	Day 14	Year 13
	18. Transporter 2 Acknowledgement of Receipt of Materials								Month	Day	Year
FACILITY	19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.								Month	Day	Year
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.								Month	Day	Year
	Printed Name Toni Coferd				Signature Toni Coferd				Month 9	Day 3	Year 13

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY

Appendix C
Laboratory Analytical Report - Groundwater

Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants	Laboratory ID: SC11009-008
Description: BEALB1245TW01WG20170309	Matrix: Aqueous
Date Sampled: 03/09/2017 1245	
Date Received: 03/11/2017	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/15/2017 1424	PMV		37143		

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Naphthalene	91-20-3	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Toluene	108-88-3	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	0.80	U	1.0	0.80	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		106	85-114
Dibromofluoromethane		93	80-119
1,2-Dichloroethane-d4		103	81-118
Toluene-d8		93	89-112

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

Semivolatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Laboratory ID: SC11009-008

Description: BEALB1245TW01WG20170309

Matrix: Aqueous

Date Sampled: 03/09/2017 1245

Date Received: 03/11/2017

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	03/17/2017 2319	RBH	03/15/2017 1020	37108

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	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	Run 1 % Recovery	Acceptance Limits						
Nitrobenzene-d5		66	44-120						
2-Fluorobiphenyl		61	44-119						
Terphenyl-d14		83	50-134						

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Q = Surrogate failure

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

Shealy Environmental Services, Inc.

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

Page: 19 of 34

Appendix D

Regulatory Correspondence



August 24, 2016

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

RE: IGWA
Laurel Bay Underground Tank Assessment Reports

Dear Mr. Drawdy:

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

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

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

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

Sincerely,

Laurel Petrus, Environmental Engineer Associate
RCRA Federal Facilities Section

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

Attachment to: Petrus to Drawdy, August 24, 2016

Subject: IGWA, Laurel Bay Underground Tank Assessment Reports

Draft Final Initial Groundwater Investigation Report for (41 addresses)

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



July 27, 2017

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

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

Dear Mr. Drawdy:

The South Carolina Department of Health and Environmental Control (DHEC) received groundwater data from temporary monitoring well installations in the Draft Final Groundwater Investigation Report, Laurel Bay Military Housing Area for the fifty two (52) addresses shown in the attachment. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

Per DHEC's request, groundwater samples were collected from the attached referenced addresses. DHEC reviewed the groundwater data and previous investigations and it agrees with the conclusions and recommendations included in the document. To further assess the impact to groundwater, permanent groundwater monitoring wells should be installed at the three (3) stated addresses. For the remaining forty nine (49) addresses, there is no indication of contamination on the property and therefore no further investigation is required at this time.

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

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

Sincerely,

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

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

Attachment to: Petrus to Drawdy Dated July 27, 2017

Draft Final Initial Groundwater Investigation Report for (52 addresses)

Permanent Well Installation recommendation (3 Addresses):

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

No Further Action recommendation (49 addresses):

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