

SUMMARY REPORT
219 ASPEN STREET (FORMERLY 380 ASPEN STREET)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC

Revision: 0
Prepared for:

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

and



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

JUNE 2021

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Prepared by:



CDM - AECOM Multimedia Joint Venture
10560 Arrowhead Drive, Suite 500
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Contract Number: N62470-14-D-9016
CTO WE52
JUNE 2021

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List of Acronyms

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

1.0 INTRODUCTION

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

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

This report summarizes the results the environmental investigation activities associated with the storage of home heating oil and the potential release of petroleum constituents at the referenced property. Based on the results of the investigation, a No Further Action (NFA) determination has been made by the South Carolina Department of Health and Environmental Control (SCDHEC) for 219 Aspen Street (Formerly 380 Aspen Street). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

1.1 Background Information

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

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

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

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

1.2 UST Removal and Assessment Process

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

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

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

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

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

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 219 Aspen Street (Formerly 380 Aspen Street). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 380 Aspen Street* (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 – May and June 2015* (Resolution Consultants, 2015). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C.

2.1 UST Removal and Soil Sampling

On January 14, 2013, a single 280 gallon heating oil UST was removed from underneath the rear concrete patio at 219 Aspen Street (Formerly 380 Aspen Street). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The UST was removed, cleaned, and shipped offsite for recycling. There was no visual evidence (i.e.,

staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depth to the base of the UST was 6'1" bgs and a single soil sample was collected from that depth. The sample was collected from the fill port side of the former UST to represent a worst case scenario.

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

2.2 Soil Analytical Results

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

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST location were used by MCAS Beaufort, in consultation with SCDHEC, to determine a path forward (i.e., additional sampling or NFA) for the property. The soil results collected from 219 Aspen Street (Formerly 380 Aspen Street) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated May 15, 2014, SCDHEC requested an IGWA for 219 Aspen Street (Formerly 380 Aspen Street) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

2.3 Groundwater Sampling

On May 28, 2015, a temporary monitoring well was installed at 219 Aspen Street (Formerly 380 Aspen Street), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST. The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – May and June 2015* (Resolution Consultants, 2015).

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

2.4 Groundwater Analytical Results

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

The groundwater results collected from 219 Aspen Street (Formerly 380 Aspen Street) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated that the groundwater was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

3.0 PROPERTY STATUS

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 219 Aspen Street (Formerly 380 Aspen Street). This NFA determination was obtained in a letter dated February 22, 2016. SCDHEC's NFA letter is provided in Appendix D.

4.0 REFERENCES

Marine Corps Air Station Beaufort, 2013. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 380 Aspen Street, Laurel Bay Military Housing Area*, April 2013.

Resolution Consultants, 2015. *Initial Groundwater Investigation Report – May and June 2015 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, October 2015.

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

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

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

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

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

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

Tables

Table 1
Laboratory Analytical Results - Soil
219 Aspen Street (Formerly 380 Aspen Street)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Results Sample Collected 01/14/13
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)		
Benzene	0.003	ND
Ethylbenzene	1.15	0.517
Naphthalene	0.036	14.3
Toluene	0.627	0.00248
Xylenes, Total	13.01	1.39
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)		
Benzo(a)anthracene	0.66	0.574
Benzo(b)fluoranthene	0.66	0.390
Benzo(k)fluoranthene	0.66	0.159
Chrysene	0.66	0.502
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 2.0 (SCDHEC, April 2013).

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Table 2
Laboratory Analytical Results - Groundwater
219 Aspen Street (Formerly 380 Aspen Street)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Site-Specific Groundwater VISLs ($\mu\text{g/L}$) ⁽²⁾	Results Sample Collected 05/29/15
Volatile Organic Compounds Analyzed by EPA Method 8260B ($\mu\text{g/L}$)			
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	1.3
Naphthalene	25	29.33	7.5
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	0.45
Semivolatile Organic Compounds Analyzed by EPA Method 8270D ($\mu\text{g/L}$)			
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

$\mu\text{g/L}$ - micrograms per liter

VISL - Vapor Intrusion Screening Level

Appendix A
Multi-Media Selection Process for LBMH

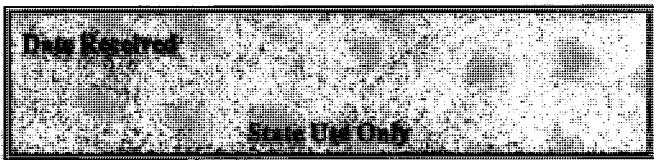


Appendix A - Multi-Media Selection Process for LBMH

Appendix B
UST Assessment Report

Attachment 1

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



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

I. OWNERSHIP OF UST (S)

MCAS Beaufort, Commanding Officer Attn: NREAO (Craig Ehde)
 Owner Name (Corporation, Individual, Public Agency, Other)

P.O. Box 55001
 Mailing Address

Beaufort,	South Carolina	29904-5001
City	State	Zip Code
843	228-7317	Craig Ehde
Area Code	Telephone Number	Contact Person

II. SITE IDENTIFICATION AND LOCATION

Permit I.D. #
Laurel Bay Military Housing Area, Marine Corps Air Station, Beaufort, SC
 Facility Name or Company Site Identifier

380 Aspen Street, Laurel Bay Military Housing Area
 Street Address or State Road (as applicable)

Beaufort,	Beaufort
City	County

Attachment 2

III. INSURANCE INFORMATION

Insurance Statement

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

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

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

My policy provider is: _____

The policy deductible is: _____

The policy limit is: _____

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

IV. REQUEST FOR SUPERB FUNDING

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

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

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

Name (Type or print.) _____

Signature _____

To be completed by Notary Public:

Sworn before me this _____ day of _____, 20 _____

(Name)

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

VI. UST INFORMATION

- A. Product...(ex. Gas, Kerosene).....
- 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.....
- M. Method of disposal for any USTs removed from the ground (attach disposal manifests)
UST 380Aspen was removed from the ground, cleaned and recycled. See Attachment "A".
-

380Aspen				
Heating oil				
280 gal				
Late 1950s				
Steel				
Mid 1980s				
6'1"				
NO				
NO				
Removed				
1/14/2013				
Yes				
Yes				

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

380Aspen				
Steel & Copper				
N/A				
N/A				
Suction				
No				
Yes				
No				
Late 1950s				

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

VIII. BRIEF SITE DESCRIPTION AND HISTORY

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

IX. SITE CONDITIONS

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

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
380 Aspen	Excav at fill end	Soil	Sandy	6' 1"	1/14/13 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
A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system? If yes, indicate type of receptor, distance, and direction on site map.	*X	
B. Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system? If yes, indicate type of well, distance, and direction on site map.		X
C. Are there any underground structures (e.g., basements) Located within 100 feet of the UST system? If yes, indicate type of structure, distance, and direction on site map.		X
D. Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination? *Sewer, water, electricity, cable, fiber optic & geothermal If yes, indicate the type of utility, distance, and direction on the site map.	*X	
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? If yes, indicate the area of contaminated soil on the site map.		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)



0 100 200 400 600 800 1,000
Feet

SBG-EEG, Inc.

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

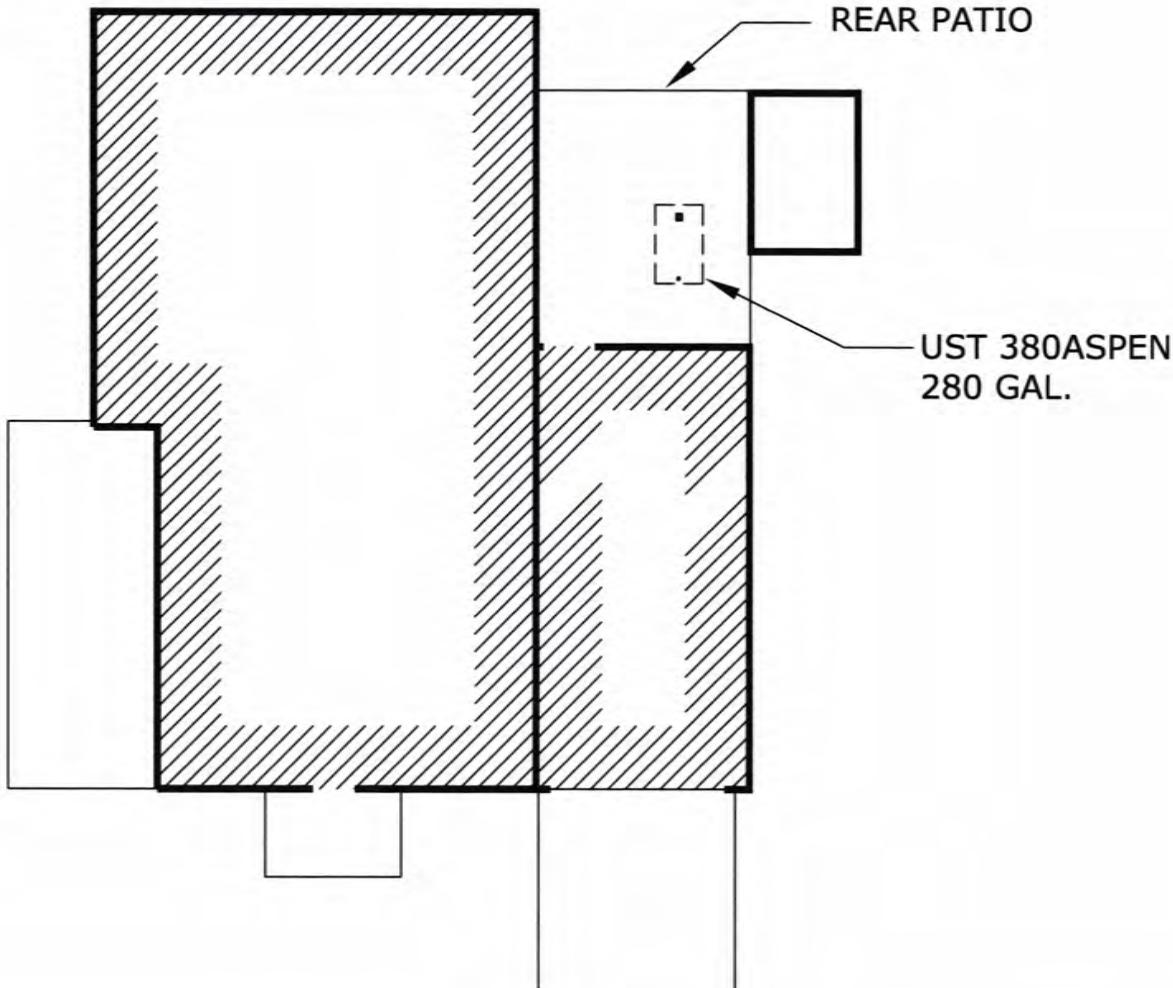
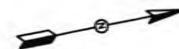
Ph. (843) 573-7140

Drawn By: L. DiAsia

Dwg Date: Mar 2013

**FIGURE 1: LOCATION MAP
380 ASPEN STREET
LAUREL BAY, BEAUFORT SC**

STORMWATER DRAINAGE CANAL ≈ 600'



GRAPHIC SCALE
0 5' 10' 20'

TANK DEPTH BELOW GRADE
380ASPEN = 37"

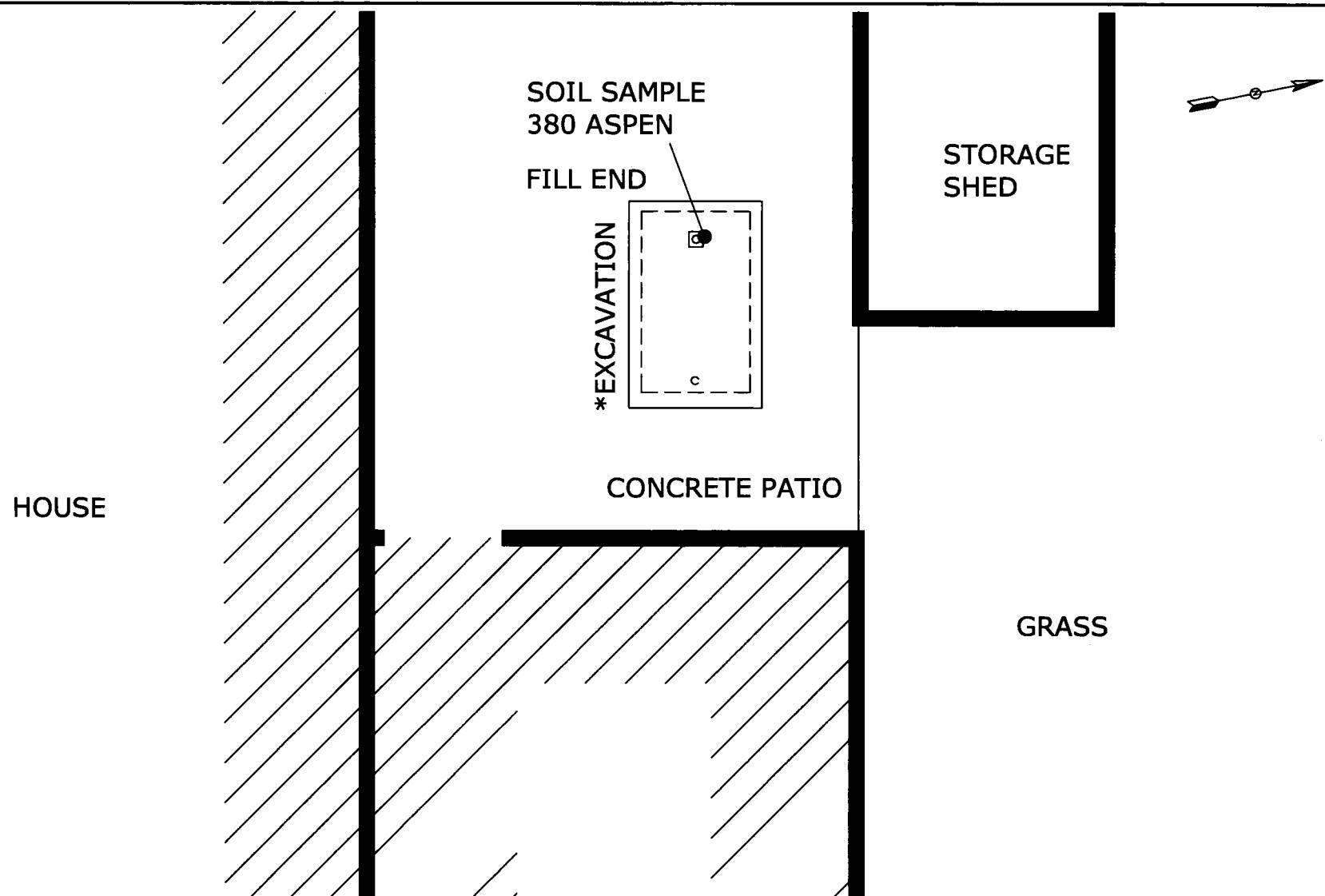
SBG-EEG

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

FIGURE 2 SITE MAP
380 ASPEN STREET, LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE MAR 2013



*A PORTION OF THE PATIO
WAS REMOVED TO FACILITATE
EXTRACTING THE TANK.

GRAPHIC SCALE
0 1 2 3 4 5'

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

FIGURE 3 UST SAMPLE LOCATIONS
380 ASPEN STREET LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE MAR 2013



Picture 1: Location of UST 380Aspen.



Picture 2: UST 380Aspen 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	380Aspen						
Benzene		ND						
Toluene		0.00248 mg/kg						
Ethylbenzene		0.517 mg/kg						
Xylenes		1.39 mg/kg						
Naphthalene		14.3 mg/kg						
Benzo (a) anthracene		0.574 mg/kg						
Benzo (b) fluoranthene		0.390 mg/kg						
Benzo (k) fluoranthene		0.159 mg/kg						
Chrysene		0.502 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 ($\mu\text{g/l}$)	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: 490-17778-1

TestAmerica SDG: Laurel Bay Housing Project

Client Project/Site: EEG Default

For:

Environmental Enterprise Group

10179 Highway 78

Ladson, South Carolina 29456

Attn: Mr. Tom McElwee

Authorized for release by:

1/31/2013 11:14:00 AM

Ken Hayes

Project Manager I

ken.hayes@testamericainc.com

LINKS

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results through

Total Access

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Visit us at:

www.testamericainc.com

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

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

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

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Sample Summary

Client: Environmental Enterprise Group
Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
SDG: Laurel Bay Housing Project

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-17778-1	380 Aspen	Solid	01/14/13 14:15	01/23/13 08:20
490-17778-2	646 Dahlia-a	Solid	01/15/13 13:50	01/23/13 08:20
490-17778-3	634 Dahlia	Solid	01/16/13 11:20	01/23/13 08:20
490-17778-4	629 Dahlia	Solid	01/17/13 11:50	01/23/13 08:20
490-17778-5	635 Dahlia-1	Solid	01/15/13 13:45	01/23/13 08:20
490-17778-6	635 Dahlia-2	Solid	01/16/13 11:45	01/23/13 08:20
490-17778-7	628 Dahlia	Solid	01/17/13 13:45	01/23/13 08:20

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Case Narrative

Client: Environmental Enterprise Group
Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
SDG: Laurel Bay Housing Project

Job ID: 490-17778-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-17778-1

Comments

No additional comments.

Receipt

The samples were received on 1/23/2013 8:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.5° C.

GC/MS VOA

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: 380 Aspen (490-17778-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: 646 Dahlia-a (490-17778-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: 635 Dahlia-2 (490-17778-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample(s): 635 Dahlia-2 (490-17778-6).

Method(s) 8260B: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample(s): 380 Aspen (490-17778-1).

Method(s) 8260B: The following sample(s) required a dilution which was performed outside of the analytical holding time: 380 Aspen (490-17778-1).

Method(s) 8260B: The following sample(s) was diluted due to the nature of the sample matrix: 635 Dahlia-2 (490-17778-6). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 54052.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 54278.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 54600.

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

Client: Environmental Enterprise Group
Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
SDG: Laurel Bay Housing Project

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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.
E	Result exceeded calibration range.

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, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
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)

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Client Sample Results

Client: Environmental Enterprise Group
Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
SDG: Laurel Bay Housing Project

Client Sample ID: 380 Aspen

Date Collected: 01/14/13 14:15

Date Received: 01/23/13 08:20

Lab Sample ID: 490-17778-1

Matrix: Solid

Percent Solids: 77.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00244	0.000817	mg/Kg	☒	01/24/13 07:28	01/26/13 19:28	1
Ethylbenzene	0.517	H	0.164	0.0556	mg/Kg	☒	01/24/13 07:26	01/29/13 09:56	1
Naphthalene	14.3	H	0.409	0.139	mg/Kg	☒	01/24/13 07:26	01/29/13 09:56	1
Toluene	0.00248		0.00244	0.000902	mg/Kg	☒	01/24/13 07:28	01/26/13 19:28	1
Xylenes, Total	1.39		0.00610	0.000817	mg/Kg	☒	01/24/13 07:28	01/26/13 19:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared		Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 130			01/24/13 07:28		01/26/13 19:28	1
1,2-Dichloroethane-d4 (Surr)	83		70 - 130			01/24/13 07:26		01/29/13 09:56	1
4-Bromofluorobenzene (Surr)	968	X	70 - 130			01/24/13 07:28		01/26/13 19:28	1
4-Bromofluorobenzene (Surr)	110		70 - 130			01/24/13 07:26		01/29/13 09:56	1
Dibromofluoromethane (Surr)	95		70 - 130			01/24/13 07:28		01/26/13 19:28	1
Dibromofluoromethane (Surr)	89		70 - 130			01/24/13 07:26		01/29/13 09:56	1
Toluene-d8 (Surr)	174	X	70 - 130			01/24/13 07:28		01/26/13 19:28	1
Toluene-d8 (Surr)	93		70 - 130			01/24/13 07:26		01/29/13 09:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0855	0.0128	mg/Kg	☒	01/24/13 08:53	01/24/13 18:58	1
Acenaphthylene	0.149		0.0855	0.0115	mg/Kg	☒	01/24/13 08:53	01/24/13 18:58	1
Anthracene	0.336		0.0855	0.0115	mg/Kg	☒	01/24/13 08:53	01/24/13 18:58	1
Benzo[a]anthracene	0.574		0.0855	0.0191	mg/Kg	☒	01/24/13 08:53	01/24/13 18:58	1
Benzo[a]pyrene	0.241		0.0855	0.0153	mg/Kg	☒	01/24/13 08:53	01/24/13 18:58	1
Benzo[b]fluoranthene	0.390		0.0855	0.0153	mg/Kg	☒	01/24/13 08:53	01/24/13 18:58	1
Benzo[g,h,i]perylene	0.0727	J	0.0855	0.0115	mg/Kg	☒	01/24/13 08:53	01/24/13 18:58	1
Benzo[k]fluoranthene	0.159		0.0855	0.0179	mg/Kg	☒	01/24/13 08:53	01/24/13 18:58	1
1-Methylnaphthalene	5.95		0.428	0.0894	mg/Kg	☒	01/24/13 08:53	01/25/13 18:27	5
Pyrene	1.26		0.0855	0.0153	mg/Kg	☒	01/24/13 08:53	01/24/13 18:58	1
Phenanthrene	2.49		0.0855	0.0115	mg/Kg	☒	01/24/13 08:53	01/24/13 18:58	1
Chrysene	0.502		0.0855	0.0115	mg/Kg	☒	01/24/13 08:53	01/24/13 18:58	1
Dibenz(a,h)anthracene	ND		0.0855	0.00894	mg/Kg	☒	01/24/13 08:53	01/24/13 18:58	1
Fluoranthene	1.54		0.0855	0.0115	mg/Kg	☒	01/24/13 08:53	01/24/13 18:58	1
Fluorene	0.922		0.0855	0.0153	mg/Kg	☒	01/24/13 08:53	01/24/13 18:58	1
Indeno[1,2,3-cd]pyrene	0.0721	J	0.0855	0.0128	mg/Kg	☒	01/24/13 08:53	01/24/13 18:58	1
Naphthalene	1.16		0.0855	0.0115	mg/Kg	☒	01/24/13 08:53	01/24/13 18:58	1
2-Methylnaphthalene	8.90		0.428	0.102	mg/Kg	☒	01/24/13 08:53	01/25/13 18:27	5
Surrogate	%Recovery	Qualifier	Limits			Prepared		Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	65		29 - 120			01/24/13 08:53		01/24/13 18:58	1
Terphenyl-d14 (Surr)	78		13 - 120			01/24/13 08:53		01/24/13 18:58	1
Nitrobenzene-d5 (Surr)	67		27 - 120			01/24/13 08:53		01/24/13 18:58	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	78		0.10	0.10	%			01/24/13 07:37	1

TestAmerica Nashville

Client Sample Results

Client: Environmental Enterprise Group
 Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
 SDG: Laurel Bay Housing Project

Client Sample ID: 646 Dahlia-a

Date Collected: 01/15/13 13:50
 Date Received: 01/23/13 08:20

Lab Sample ID: 490-17778-2

Matrix: Solid
 Percent Solids: 82.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00209	0.000700	mg/Kg	☒	01/24/13 07:28	01/26/13 19:58	1
Ethylbenzene	0.0644		0.00209	0.000700	mg/Kg	☒	01/24/13 07:28	01/26/13 19:58	1
Naphthalene	0.201		0.00523	0.00178	mg/Kg	☒	01/24/13 07:28	01/26/13 19:58	1
Toluene	ND		0.00209	0.000774	mg/Kg	☒	01/24/13 07:28	01/26/13 19:58	1
Xylenes, Total	0.0251		0.00523	0.000700	mg/Kg	☒	01/24/13 07:28	01/26/13 19:58	1
Surrogate	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95			70 - 130			01/24/13 07:28	01/26/13 19:58	1
4-Bromofluorobenzene (Surr)	219	X		70 - 130			01/24/13 07:28	01/26/13 19:58	1
Dibromofluoromethane (Surr)	97			70 - 130			01/24/13 07:28	01/26/13 19:58	1
Toluene-d8 (Surr)	105			70 - 130			01/24/13 07:28	01/26/13 19:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0788	0.0118	mg/Kg	☒	01/24/13 08:53	01/24/13 20:05	1
Acenaphthylene	ND		0.0788	0.0106	mg/Kg	☒	01/24/13 08:53	01/24/13 20:05	1
Anthracene	0.926		0.0788	0.0106	mg/Kg	☒	01/24/13 08:53	01/24/13 20:05	1
Benzo[a]anthracene	0.856		0.0788	0.0177	mg/Kg	☒	01/24/13 08:53	01/24/13 20:05	1
Benzo[a]pyrene	0.338		0.0788	0.0141	mg/Kg	☒	01/24/13 08:53	01/24/13 20:05	1
Benzo[b]fluoranthene	0.544		0.0788	0.0141	mg/Kg	☒	01/24/13 08:53	01/24/13 20:05	1
Benzo[g,h,i]perylene	0.0982		0.0788	0.0106	mg/Kg	☒	01/24/13 08:53	01/24/13 20:05	1
Benzo[k]fluoranthene	0.246		0.0788	0.0165	mg/Kg	☒	01/24/13 08:53	01/24/13 20:05	1
1-Methylnaphthalene	9.86		0.394	0.0824	mg/Kg	☒	01/24/13 08:53	01/25/13 18:50	5
Pyrene	1.84		0.0788	0.0141	mg/Kg	☒	01/24/13 08:53	01/24/13 20:05	1
Phenanthrene	7.27	E	0.0788	0.0106	mg/Kg	☒	01/24/13 08:53	01/24/13 20:05	1
Chrysene	0.698		0.0788	0.0106	mg/Kg	☒	01/24/13 08:53	01/24/13 20:05	1
Dibenz(a,h)anthracene	ND		0.0788	0.00824	mg/Kg	☒	01/24/13 08:53	01/24/13 20:05	1
Fluoranthene	3.20		0.0788	0.0106	mg/Kg	☒	01/24/13 08:53	01/24/13 20:05	1
Fluorene	3.15		0.0788	0.0141	mg/Kg	☒	01/24/13 08:53	01/24/13 20:05	1
Indeno[1,2,3-cd]pyrene	0.101		0.0788	0.0118	mg/Kg	☒	01/24/13 08:53	01/24/13 20:05	1
Naphthalene	1.26		0.0788	0.0106	mg/Kg	☒	01/24/13 08:53	01/24/13 20:05	1
2-Methylnaphthalene	9.48		0.394	0.0941	mg/Kg	☒	01/24/13 08:53	01/25/13 18:50	5
Surrogate	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	74			29 - 120			01/24/13 08:53	01/24/13 20:05	1
Terphenyl-d14 (Surr)	85			13 - 120			01/24/13 08:53	01/24/13 20:05	1
Nitrobenzene-d5 (Surr)	101			27 - 120			01/24/13 08:53	01/24/13 20:05	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83		0.10	0.10	%			01/24/13 07:37	1

TestAmerica Nashville

Client Sample Results

Client: Environmental Enterprise Group
Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
SDG: Laurel Bay Housing Project

Client Sample ID: 634 Dahlia

Date Collected: 01/16/13 11:20

Date Received: 01/23/13 08:20

Lab Sample ID: 490-17778-3

Matrix: Solid

Percent Solids: 95.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00238	0.000799	mg/Kg	☒	01/24/13 07:28	01/28/13 08:48	1
Ethylbenzene	ND		0.00238	0.000799	mg/Kg	☒	01/24/13 07:28	01/28/13 08:48	1
Naphthalene	ND		0.00596	0.00203	mg/Kg	☒	01/24/13 07:28	01/28/13 08:48	1
Toluene	ND		0.00238	0.000882	mg/Kg	☒	01/24/13 07:28	01/28/13 08:48	1
Xylenes, Total	ND		0.00596	0.000799	mg/Kg	☒	01/24/13 07:28	01/28/13 08:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared		Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 130			01/24/13 07:28		01/28/13 08:48	1
4-Bromofluorobenzene (Surr)	108		70 - 130			01/24/13 07:28		01/28/13 08:48	1
Dibromofluoromethane (Surr)	95		70 - 130			01/24/13 07:28		01/28/13 08:48	1
Toluene-d8 (Surr)	95		70 - 130			01/24/13 07:28		01/28/13 08:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0690	0.0103	mg/Kg	☒	01/24/13 08:53	01/24/13 20:28	1
Acenaphthylene	ND		0.0690	0.00926	mg/Kg	☒	01/24/13 08:53	01/24/13 20:28	1
Anthracene	ND		0.0690	0.00926	mg/Kg	☒	01/24/13 08:53	01/24/13 20:28	1
Benzo[a]anthracene	ND		0.0690	0.0154	mg/Kg	☒	01/24/13 08:53	01/24/13 20:28	1
Benzo[a]pyrene	0.138		0.0690	0.0123	mg/Kg	☒	01/24/13 08:53	01/24/13 20:28	1
Benzo[b]fluoranthene	ND		0.0690	0.0123	mg/Kg	☒	01/24/13 08:53	01/24/13 20:28	1
Benzo[g,h,i]perylene	0.0381 J		0.0690	0.00926	mg/Kg	☒	01/24/13 08:53	01/24/13 20:28	1
Benzo[k]fluoranthene	ND		0.0690	0.0144	mg/Kg	☒	01/24/13 08:53	01/24/13 20:28	1
1-Methylnaphthalene	ND		0.0690	0.0144	mg/Kg	☒	01/24/13 08:53	01/24/13 20:28	1
Pyrene	ND		0.0690	0.0123	mg/Kg	☒	01/24/13 08:53	01/24/13 20:28	1
Phenanthrene	ND		0.0690	0.00926	mg/Kg	☒	01/24/13 08:53	01/24/13 20:28	1
Chrysene	ND		0.0690	0.00926	mg/Kg	☒	01/24/13 08:53	01/24/13 20:28	1
Dibenz(a,h)anthracene	ND		0.0690	0.00720	mg/Kg	☒	01/24/13 08:53	01/24/13 20:28	1
Fluoranthene	ND		0.0690	0.00926	mg/Kg	☒	01/24/13 08:53	01/24/13 20:28	1
Fluorene	ND		0.0690	0.0123	mg/Kg	☒	01/24/13 08:53	01/24/13 20:28	1
Indeno[1,2,3-cd]pyrene	ND		0.0690	0.0103	mg/Kg	☒	01/24/13 08:53	01/24/13 20:28	1
Naphthalene	ND		0.0690	0.00926	mg/Kg	☒	01/24/13 08:53	01/24/13 20:28	1
2-Methylnaphthalene	ND		0.0690	0.0165	mg/Kg	☒	01/24/13 08:53	01/24/13 20:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared		Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	64		29 - 120			01/24/13 08:53		01/24/13 20:28	1
Terphenyl-d14 (Surr)	78		13 - 120			01/24/13 08:53		01/24/13 20:28	1
Nitrobenzene-d5 (Surr)	57		27 - 120			01/24/13 08:53		01/24/13 20:28	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	95		0.10	0.10	%		01/24/13 07:37		1

TestAmerica Nashville

Client Sample Results

Client: Environmental Enterprise Group
Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
SDG: Laurel Bay Housing Project

Client Sample ID: 629 Dahlia

Date Collected: 01/17/13 11:50

Date Received: 01/23/13 08:20

Lab Sample ID: 490-17778-4

Matrix: Solid

Percent Solids: 93.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00235	0.000786	mg/Kg	☒	01/24/13 07:28	01/28/13 09:19	1
Ethylbenzene	ND		0.00235	0.000786	mg/Kg	☒	01/24/13 07:28	01/28/13 09:19	1
Naphthalene	ND		0.00587	0.00200	mg/Kg	☒	01/24/13 07:28	01/28/13 09:19	1
Toluene	0.00103	J	0.00235	0.000869	mg/Kg	☒	01/24/13 07:28	01/28/13 09:19	1
Xylenes, Total	ND		0.00587	0.000786	mg/Kg	☒	01/24/13 07:28	01/28/13 09:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared		Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 130			01/24/13 07:28		01/28/13 09:19	1
4-Bromofluorobenzene (Surr)	105		70 - 130			01/24/13 07:28		01/28/13 09:19	1
Dibromofluoromethane (Surr)	96		70 - 130			01/24/13 07:28		01/28/13 09:19	1
Toluene-d8 (Surr)	92		70 - 130			01/24/13 07:28		01/28/13 09:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0708	0.0106	mg/Kg	☒	01/24/13 08:53	01/24/13 20:51	1
Acenaphthylene	ND		0.0708	0.00951	mg/Kg	☒	01/24/13 08:53	01/24/13 20:51	1
Anthracene	ND		0.0708	0.00951	mg/Kg	☒	01/24/13 08:53	01/24/13 20:51	1
Benzo[a]anthracene	ND		0.0708	0.0159	mg/Kg	☒	01/24/13 08:53	01/24/13 20:51	1
Benzo[a]pyrene	ND		0.0708	0.0127	mg/Kg	☒	01/24/13 08:53	01/24/13 20:51	1
Benzo[b]fluoranthene	ND		0.0708	0.0127	mg/Kg	☒	01/24/13 08:53	01/24/13 20:51	1
Benzo[g,h,i]perylene	ND		0.0708	0.00951	mg/Kg	☒	01/24/13 08:53	01/24/13 20:51	1
Benzo[k]fluoranthene	ND		0.0708	0.0148	mg/Kg	☒	01/24/13 08:53	01/24/13 20:51	1
1-Methylnaphthalene	ND		0.0708	0.0148	mg/Kg	☒	01/24/13 08:53	01/24/13 20:51	1
Pyrene	ND		0.0708	0.0127	mg/Kg	☒	01/24/13 08:53	01/24/13 20:51	1
Phenanthrene	ND		0.0708	0.00951	mg/Kg	☒	01/24/13 08:53	01/24/13 20:51	1
Chrysene	ND		0.0708	0.00951	mg/Kg	☒	01/24/13 08:53	01/24/13 20:51	1
Dibenz(a,h)anthracene	ND		0.0708	0.00740	mg/Kg	☒	01/24/13 08:53	01/24/13 20:51	1
Fluoranthene	ND		0.0708	0.00951	mg/Kg	☒	01/24/13 08:53	01/24/13 20:51	1
Fluorene	ND		0.0708	0.0127	mg/Kg	☒	01/24/13 08:53	01/24/13 20:51	1
Indeno[1,2,3-cd]pyrene	ND		0.0708	0.0106	mg/Kg	☒	01/24/13 08:53	01/24/13 20:51	1
Naphthalene	ND		0.0708	0.00951	mg/Kg	☒	01/24/13 08:53	01/24/13 20:51	1
2-Methylnaphthalene	ND		0.0708	0.0169	mg/Kg	☒	01/24/13 08:53	01/24/13 20:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared		Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	70		29 - 120			01/24/13 08:53		01/24/13 20:51	1
Terphenyl-d14 (Surr)	85		13 - 120			01/24/13 08:53		01/24/13 20:51	1
Nitrobenzene-d5 (Surr)	63		27 - 120			01/24/13 08:53		01/24/13 20:51	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10	0.10	%			01/24/13 07:37	1

TestAmerica Nashville

Client Sample Results

Client: Environmental Enterprise Group
 Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
 SDG: Laurel Bay Housing Project

Client Sample ID: 635 Dahlia-1

Date Collected: 01/15/13 13:45

Date Received: 01/23/13 08:20

Lab Sample ID: 490-17778-5

Matrix: Solid

Percent Solids: 89.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00226	0.000757	mg/Kg	☒	01/24/13 07:28	01/28/13 09:49	1
Ethylbenzene	ND		0.00226	0.000757	mg/Kg	☒	01/24/13 07:28	01/28/13 09:49	1
Naphthalene	ND		0.00565	0.00192	mg/Kg	☒	01/24/13 07:28	01/28/13 09:49	1
Toluene	ND		0.00226	0.000837	mg/Kg	☒	01/24/13 07:28	01/28/13 09:49	1
Xylenes, Total	ND		0.00565	0.000757	mg/Kg	☒	01/24/13 07:28	01/28/13 09:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared		Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 130			01/24/13 07:28		01/28/13 09:49	1
4-Bromofluorobenzene (Surr)	104		70 - 130			01/24/13 07:28		01/28/13 09:49	1
Dibromofluoromethane (Surr)	97		70 - 130			01/24/13 07:28		01/28/13 09:49	1
Toluene-d8 (Surr)	92		70 - 130			01/24/13 07:28		01/28/13 09:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0749	0.0112	mg/Kg	☒	01/24/13 08:53	01/24/13 21:13	1
Acenaphthylene	ND		0.0749	0.0101	mg/Kg	☒	01/24/13 08:53	01/24/13 21:13	1
Anthracene	ND		0.0749	0.0101	mg/Kg	☒	01/24/13 08:53	01/24/13 21:13	1
Benzo[a]anthracene	ND		0.0749	0.0168	mg/Kg	☒	01/24/13 08:53	01/24/13 21:13	1
Benzo[a]pyrene	ND		0.0749	0.0134	mg/Kg	☒	01/24/13 08:53	01/24/13 21:13	1
Benzo[b]fluoranthene	ND		0.0749	0.0134	mg/Kg	☒	01/24/13 08:53	01/24/13 21:13	1
Benzo[g,h,i]perylene	ND		0.0749	0.0101	mg/Kg	☒	01/24/13 08:53	01/24/13 21:13	1
Benzo[k]fluoranthene	ND		0.0749	0.0156	mg/Kg	☒	01/24/13 08:53	01/24/13 21:13	1
1-Methylnaphthalene	ND		0.0749	0.0156	mg/Kg	☒	01/24/13 08:53	01/24/13 21:13	1
Pyrene	ND		0.0749	0.0134	mg/Kg	☒	01/24/13 08:53	01/24/13 21:13	1
Phenanthrene	ND		0.0749	0.0101	mg/Kg	☒	01/24/13 08:53	01/24/13 21:13	1
Chrysene	ND		0.0749	0.0101	mg/Kg	☒	01/24/13 08:53	01/24/13 21:13	1
Dibenz(a,h)anthracene	ND		0.0749	0.00782	mg/Kg	☒	01/24/13 08:53	01/24/13 21:13	1
Fluoranthene	ND		0.0749	0.0101	mg/Kg	☒	01/24/13 08:53	01/24/13 21:13	1
Fluorene	ND		0.0749	0.0134	mg/Kg	☒	01/24/13 08:53	01/24/13 21:13	1
Indeno[1,2,3-cd]pyrene	ND		0.0749	0.0112	mg/Kg	☒	01/24/13 08:53	01/24/13 21:13	1
Naphthalene	ND		0.0749	0.0101	mg/Kg	☒	01/24/13 08:53	01/24/13 21:13	1
2-Methylnaphthalene	ND		0.0749	0.0179	mg/Kg	☒	01/24/13 08:53	01/24/13 21:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared		Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	55		29 - 120			01/24/13 08:53		01/24/13 21:13	1
Terphenyl-d14 (Surr)	65		13 - 120			01/24/13 08:53		01/24/13 21:13	1
Nitrobenzene-d5 (Surr)	50		27 - 120			01/24/13 08:53		01/24/13 21:13	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10	0.10	%			01/24/13 07:37	1

TestAmerica Nashville

Client Sample Results

Client: Environmental Enterprise Group
Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
SDG: Laurel Bay Housing Project

Client Sample ID: 635 Dahlia-2

Date Collected: 01/16/13 11:45

Date Received: 01/23/13 08:20

Lab Sample ID: 490-17778-6

Matrix: Solid

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00216	0.000725	mg/Kg	☒	01/24/13 07:28	01/28/13 10:19	1
Ethylbenzene	0.114 J		0.126	0.0428	mg/Kg	☒	01/24/13 07:26	01/29/13 10:26	1
Naphthalene	7.78		0.315	0.107	mg/Kg	☒	01/24/13 07:26	01/29/13 10:26	1
Toluene	ND		0.126	0.0466	mg/Kg	☒	01/24/13 07:26	01/29/13 10:26	1
Xylenes, Total	0.628		0.315	0.0428	mg/Kg	☒	01/24/13 07:26	01/29/13 10:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared		Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		70 - 130			01/24/13 07:28		01/28/13 10:19	1
1,2-Dichloroethane-d4 (Surr)	82		70 - 130			01/24/13 07:26		01/29/13 10:26	1
4-Bromofluorobenzene (Surr)	415 X		70 - 130			01/24/13 07:28		01/28/13 10:19	1
4-Bromofluorobenzene (Surr)	101		70 - 130			01/24/13 07:26		01/29/13 10:26	1
Dibromofluoromethane (Surr)	109		70 - 130			01/24/13 07:28		01/28/13 10:19	1
Dibromofluoromethane (Surr)	90		70 - 130			01/24/13 07:26		01/29/13 10:26	1
Toluene-d8 (Surr)	134 X		70 - 130			01/24/13 07:28		01/28/13 10:19	1
Toluene-d8 (Surr)	87		70 - 130			01/24/13 07:26		01/29/13 10:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1.03		0.392	0.0585	mg/Kg	☒	01/24/13 08:53	01/25/13 19:12	5
Acenaphthylene	0.539		0.392	0.0526	mg/Kg	☒	01/24/13 08:53	01/25/13 19:12	5
Anthracene	0.324 J		0.392	0.0526	mg/Kg	☒	01/24/13 08:53	01/25/13 19:12	5
Benzo[a]anthracene	ND		0.392	0.0877	mg/Kg	☒	01/24/13 08:53	01/25/13 19:12	5
Benzo[a]pyrene	ND		0.392	0.0702	mg/Kg	☒	01/24/13 08:53	01/25/13 19:12	5
Benzo[b]fluoranthene	ND		0.392	0.0702	mg/Kg	☒	01/24/13 08:53	01/25/13 19:12	5
Benzo[g,h,i]perylene	ND		0.392	0.0526	mg/Kg	☒	01/24/13 08:53	01/25/13 19:12	5
Benzo[k]fluoranthene	ND		0.392	0.0819	mg/Kg	☒	01/24/13 08:53	01/25/13 19:12	5
1-Methylnaphthalene	14.5		0.392	0.0819	mg/Kg	☒	01/24/13 08:53	01/25/13 19:12	5
Pyrene	0.420		0.392	0.0702	mg/Kg	☒	01/24/13 08:53	01/25/13 19:12	5
Phenanthrene	4.92		0.392	0.0526	mg/Kg	☒	01/24/13 08:53	01/25/13 19:12	5
Chrysene	ND		0.392	0.0526	mg/Kg	☒	01/24/13 08:53	01/25/13 19:12	5
Dibenz(a,h)anthracene	ND		0.392	0.0409	mg/Kg	☒	01/24/13 08:53	01/25/13 19:12	5
Fluoranthene	ND		0.392	0.0526	mg/Kg	☒	01/24/13 08:53	01/25/13 19:12	5
Fluorene	2.45		0.392	0.0702	mg/Kg	☒	01/24/13 08:53	01/25/13 19:12	5
Indeno[1,2,3-cd]pyrene	ND		0.392	0.0585	mg/Kg	☒	01/24/13 08:53	01/25/13 19:12	5
Naphthalene	0.384 J		0.392	0.0526	mg/Kg	☒	01/24/13 08:53	01/25/13 19:12	5
2-Methylnaphthalene	18.9		0.392	0.0936	mg/Kg	☒	01/24/13 08:53	01/25/13 19:12	5
Surrogate	%Recovery	Qualifier	Limits			Prepared		Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	69		29 - 120			01/24/13 08:53		01/25/13 19:12	5
Terphenyl-d14 (Surr)	80		13 - 120			01/24/13 08:53		01/25/13 19:12	5
Nitrobenzene-d5 (Surr)	63		27 - 120			01/24/13 08:53		01/25/13 19:12	5

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84		0.10	0.10	%		01/24/13 07:37		1

TestAmerica Nashville

Client Sample Results

Client: Environmental Enterprise Group
 Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
 SDG: Laurel Bay Housing Project

Client Sample ID: 628 Dahlia

Date Collected: 01/17/13 13:45
 Date Received: 01/23/13 08:20

Lab Sample ID: 490-17778-7
 Matrix: Solid
 Percent Solids: 95.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00216	0.000723	mg/Kg	☒	01/24/13 07:28	01/28/13 10:49	1
Ethylbenzene	ND		0.00216	0.000723	mg/Kg	☒	01/24/13 07:28	01/28/13 10:49	1
Naphthalene	0.0216		0.00540	0.00183	mg/Kg	☒	01/24/13 07:28	01/28/13 10:49	1
Toluene	0.00161 J		0.00216	0.000799	mg/Kg	☒	01/24/13 07:28	01/28/13 10:49	1
Xylenes, Total	ND		0.00540	0.000723	mg/Kg	☒	01/24/13 07:28	01/28/13 10:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 130				01/24/13 07:28	01/28/13 10:49	1
4-Bromofluorobenzene (Surr)	105		70 - 130				01/24/13 07:28	01/28/13 10:49	1
Dibromofluoromethane (Surr)	96		70 - 130				01/24/13 07:28	01/28/13 10:49	1
Toluene-d8 (Surr)	80		70 - 130				01/24/13 07:28	01/28/13 10:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0682	0.0102	mg/Kg	☒	01/24/13 08:53	01/24/13 21:57	1
Acenaphthylene	ND		0.0682	0.00917	mg/Kg	☒	01/24/13 08:53	01/24/13 21:57	1
Anthracene	ND		0.0682	0.00917	mg/Kg	☒	01/24/13 08:53	01/24/13 21:57	1
Benzo[a]anthracene	ND		0.0682	0.0153	mg/Kg	☒	01/24/13 08:53	01/24/13 21:57	1
Benzo[a]pyrene	ND		0.0682	0.0122	mg/Kg	☒	01/24/13 08:53	01/24/13 21:57	1
Benzo[b]fluoranthene	ND		0.0682	0.0122	mg/Kg	☒	01/24/13 08:53	01/24/13 21:57	1
Benzo[g,h,i]perylene	ND		0.0682	0.00917	mg/Kg	☒	01/24/13 08:53	01/24/13 21:57	1
Benzo[k]fluoranthene	ND		0.0682	0.0143	mg/Kg	☒	01/24/13 08:53	01/24/13 21:57	1
1-Methylnaphthalene	ND		0.0682	0.0143	mg/Kg	☒	01/24/13 08:53	01/24/13 21:57	1
Pyrene	ND		0.0682	0.0122	mg/Kg	☒	01/24/13 08:53	01/24/13 21:57	1
Phenanthrene	ND		0.0682	0.00917	mg/Kg	☒	01/24/13 08:53	01/24/13 21:57	1
Chrysene	ND		0.0682	0.00917	mg/Kg	☒	01/24/13 08:53	01/24/13 21:57	1
Dibenz(a,h)anthracene	ND		0.0682	0.00713	mg/Kg	☒	01/24/13 08:53	01/24/13 21:57	1
Fluoranthene	ND		0.0682	0.00917	mg/Kg	☒	01/24/13 08:53	01/24/13 21:57	1
Fluorene	ND		0.0682	0.0122	mg/Kg	☒	01/24/13 08:53	01/24/13 21:57	1
Indeno[1,2,3-cd]pyrene	ND		0.0682	0.0102	mg/Kg	☒	01/24/13 08:53	01/24/13 21:57	1
Naphthalene	ND		0.0682	0.00917	mg/Kg	☒	01/24/13 08:53	01/24/13 21:57	1
2-Methylnaphthalene	ND		0.0682	0.0163	mg/Kg	☒	01/24/13 08:53	01/24/13 21:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	57		29 - 120				01/24/13 08:53	01/24/13 21:57	1
Terphenyl-d14 (Surr)	69		13 - 120				01/24/13 08:53	01/24/13 21:57	1
Nitrobenzene-d5 (Surr)	50		27 - 120				01/24/13 08:53	01/24/13 21:57	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	96		0.10	0.10	%		01/24/13 07:37		1

TestAmerica Nashville

QC Sample Results

Client: Environmental Enterprise Group
Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
SDG: Laurel Bay Housing Project

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

Lab Sample ID: 490-17581-A-54-D MS

Matrix: Solid

Analysis Batch: 53895

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	Client Sample ID: Matrix Spike
	Result	Qualifier	Added	Result	Qualifier					
Benzene	ND		0.0440	0.03491		mg/Kg	☒	79	31 - 143	
Ethylbenzene	ND		0.0440	0.02329		mg/Kg	☒	53	23 - 161	
Naphthalene	ND		0.0440	0.04726		mg/Kg	☒	107	10 - 176	
Toluene	ND		0.0440	0.02527		mg/Kg	☒	57	30 - 155	
Xylenes, Total	ND		0.132	0.07165		mg/Kg	☒	54	25 - 162	
Surrogate		MS	MS							
		%Recovery	Qualifier		Limits					
1,2-Dichloroethane-d4 (Surr)	100			70 - 130						
4-Bromofluorobenzene (Surr)	105			70 - 130						
Dibromofluoromethane (Surr)	101			70 - 130						
Toluene-d8 (Surr)	83			70 - 130						

Lab Sample ID: 490-17581-A-54-E MSD

Matrix: Solid

Analysis Batch: 53895

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	Client Sample ID: Matrix Spike Duplicate
	Result	Qualifier	Added	Result	Qualifier					
Benzene	ND		0.0456	0.03525		mg/Kg	☒	77	31 - 143	Prep Type: Total/NA
Ethylbenzene	ND		0.0456	0.02346		mg/Kg	☒	51	23 - 161	Prep Batch: 52654
Naphthalene	ND		0.0456	0.03587		mg/Kg	☒	79	10 - 176	
Toluene	ND		0.0456	0.02737		mg/Kg	☒	60	30 - 155	
Xylenes, Total	ND		0.137	0.07212		mg/Kg	☒	53	25 - 162	
Surrogate		MSD	MSD							
		%Recovery	Qualifier		Limits					
1,2-Dichloroethane-d4 (Surr)	97			70 - 130						
4-Bromofluorobenzene (Surr)	103			70 - 130						
Dibromofluoromethane (Surr)	100			70 - 130						
Toluene-d8 (Surr)	85			70 - 130						

Lab Sample ID: MB 490-53895/6

Matrix: Solid

Analysis Batch: 53895

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.00200	0.000670	mg/Kg			01/26/13 11:54	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			01/26/13 11:54	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			01/26/13 11:54	1
Toluene	ND		0.00200	0.000740	mg/Kg			01/26/13 11:54	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			01/26/13 11:54	1
Surrogate		MB	MB						
		%Recovery	Qualifier		Limits				
1,2-Dichloroethane-d4 (Surr)	87			70 - 130				01/26/13 11:54	1
4-Bromofluorobenzene (Surr)	107			70 - 130				01/26/13 11:54	1
Dibromofluoromethane (Surr)	92			70 - 130				01/26/13 11:54	1
Toluene-d8 (Surr)	100			70 - 130				01/26/13 11:54	1

TestAmerica Nashville

QC Sample Results

Client: Environmental Enterprise Group
Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
SDG: Laurel Bay Housing Project

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

Lab Sample ID: MB 490-53895/7

Matrix: Solid

Analysis Batch: 53895

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			01/26/13 12:24	1
Ethylbenzene	ND		0.100	0.0335	mg/Kg			01/26/13 12:24	1
Naphthalene	ND		0.250	0.0850	mg/Kg			01/26/13 12:24	1
Toluene	ND		0.100	0.0370	mg/Kg			01/26/13 12:24	1
Xylenes, Total	ND		0.250	0.0335	mg/Kg			01/26/13 12:24	1
Surrogate	MB MB		Limits			D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
1,2-Dichloroethane-d4 (Surr)	87		70 - 130					01/26/13 12:24	1
4-Bromofluorobenzene (Surr)	104		70 - 130					01/26/13 12:24	1
Dibromofluoromethane (Surr)	89		70 - 130					01/26/13 12:24	1
Toluene-d8 (Surr)	97		70 - 130					01/26/13 12:24	1

Lab Sample ID: LCS 490-53895/3

Matrix: Solid

Analysis Batch: 53895

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

Analyte	Spike		LCS LCS			D	%Rec.		Limits
	Added	Result	Qualifier	Unit			%Rec		
Benzene	0.0500	0.05291		mg/Kg			106		75 - 127
Ethylbenzene	0.0500	0.05429		mg/Kg			109		80 - 134
Naphthalene	0.0500	0.05887		mg/Kg			118		69 - 150
Toluene	0.0500	0.05156		mg/Kg			103		80 - 132
Xylenes, Total	0.150	0.1696		mg/Kg			113		80 - 137
Surrogate	LCS LCS		Limits			D	%Rec.		
	%Recovery	Qualifier					%Rec		
1,2-Dichloroethane-d4 (Surr)	101		70 - 130						
4-Bromofluorobenzene (Surr)	107		70 - 130						
Dibromofluoromethane (Surr)	101		70 - 130						
Toluene-d8 (Surr)	95		70 - 130						

Lab Sample ID: LCSD 490-53895/4

Matrix: Solid

Analysis Batch: 53895

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

Analyte	Spike		LCSD LCSD			D	%Rec.		RPD	Limit
	Added	Result	Qualifier	Unit			%Rec			
Benzene	0.0500	0.05635		mg/Kg			113		6	50
Ethylbenzene	0.0500	0.05724		mg/Kg			114		5	50
Naphthalene	0.0500	0.06473		mg/Kg			129		9	50
Toluene	0.0500	0.05352		mg/Kg			107		4	50
Xylenes, Total	0.150	0.1751		mg/Kg			117		3	50
Surrogate	LCSD LCSD		Limits			D	%Rec.			
	%Recovery	Qualifier					%Rec			
1,2-Dichloroethane-d4 (Surr)	100		70 - 130							
4-Bromofluorobenzene (Surr)	96		70 - 130							
Dibromofluoromethane (Surr)	100		70 - 130							
Toluene-d8 (Surr)	93		70 - 130							

TestAmerica Nashville

QC Sample Results

Client: Environmental Enterprise Group
Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
SDG: Laurel Bay Housing Project

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

Lab Sample ID: MB 490-54052/6

Matrix: Solid

Analysis Batch: 54052

Analyte	MB MB		RL	MDL	Unit	D	Client Sample ID: Method Blank		Dil Fac
	Result	Qualifier					Prepared	Analyzed	
Benzene	ND		0.00200	0.000670	mg/Kg			01/28/13 07:48	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			01/28/13 07:48	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			01/28/13 07:48	1
Toluene	ND		0.00200	0.000740	mg/Kg			01/28/13 07:48	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			01/28/13 07:48	1
Surrogate	MB MB		Limits			D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
1,2-Dichloroethane-d4 (Surr)	86		70 - 130					01/28/13 07:48	1
4-Bromofluorobenzene (Surr)	110		70 - 130					01/28/13 07:48	1
Dibromofluoromethane (Surr)	93		70 - 130					01/28/13 07:48	1
Toluene-d8 (Surr)	93		70 - 130					01/28/13 07:48	1

Lab Sample ID: LCS 490-54052/3

Matrix: Solid

Analysis Batch: 54052

Analyte	Spike		LCS	LCS	Unit	D	%Rec.		Limits
	Added	Result	Qualifier	Unit	D	%Rec			
Benzene	0.0500	0.04782		mg/Kg		96			75 - 127
Ethylbenzene	0.0500	0.05128		mg/Kg		103			80 - 134
Naphthalene	0.0500	0.05830		mg/Kg		117			69 - 150
Toluene	0.0500	0.05272		mg/Kg		105			80 - 132
Xylenes, Total	0.150	0.1639		mg/Kg		109			80 - 137
Surrogate	LCS LCS		Limits			D	%Rec.		Limits
	%Recovery	Qualifier					%Rec		
1,2-Dichloroethane-d4 (Surr)	93		70 - 130						
4-Bromofluorobenzene (Surr)	97		70 - 130						
Dibromofluoromethane (Surr)	100		70 - 130						
Toluene-d8 (Surr)	104		70 - 130						

Lab Sample ID: LCSD 490-54052/4

Matrix: Solid

Analysis Batch: 54052

Analyte	Spike		LCSD	LCSD	Unit	D	%Rec.		RPD	Limit
	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD		
Benzene	0.0500	0.04937		mg/Kg		99	75 - 127	3	50	
Ethylbenzene	0.0500	0.04943		mg/Kg		99	80 - 134	4	50	
Naphthalene	0.0500	0.06157		mg/Kg		123	69 - 150	5	50	
Toluene	0.0500	0.04864		mg/Kg		97	80 - 132	8	50	
Xylenes, Total	0.150	0.1500		mg/Kg		100	80 - 137	9	50	
Surrogate	LCSD LCSD		Limits			D	%Rec.		RPD	Limit
	%Recovery	Qualifier					%Rec			
1,2-Dichloroethane-d4 (Surr)	92		70 - 130							
4-Bromofluorobenzene (Surr)	101		70 - 130							
Dibromofluoromethane (Surr)	102		70 - 130							
Toluene-d8 (Surr)	95		70 - 130							

TestAmerica Nashville

QC Sample Results

Client: Environmental Enterprise Group
Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
SDG: Laurel Bay Housing Project

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

Lab Sample ID: MB 490-54278/7

Matrix: Solid

Analysis Batch: 54278

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	0.0340	mg/Kg			01/29/13 08:55	1
Ethylbenzene	ND		0.100	0.0340	mg/Kg			01/29/13 08:55	1
Naphthalene	ND		0.250	0.0850	mg/Kg			01/29/13 08:55	1
Toluene	ND		0.100	0.0370	mg/Kg			01/29/13 08:55	1
Xylenes, Total	ND		0.250	0.0340	mg/Kg			01/29/13 08:55	1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac	%Rec.	Limits	Prepared
	%Recovery	Qualifier							
1,2-Dichloroethane-d4 (Surr)	93		70 - 130					01/29/13 08:55	1
4-Bromofluorobenzene (Surr)	104		70 - 130					01/29/13 08:55	1
Dibromofluoromethane (Surr)	93		70 - 130					01/29/13 08:55	1
Toluene-d8 (Surr)	100		70 - 130					01/29/13 08:55	1

Lab Sample ID: LCS 490-54278/3

Matrix: Solid

Analysis Batch: 54278

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

Analyte	Spikes	LCS	LCS	D	%Rec.	Limits
	Added	Result	Qualifier			
Benzene	0.0500	0.05504		mg/Kg	110	75 - 127
Ethylbenzene	0.0500	0.05379		mg/Kg	108	80 - 134
Naphthalene	0.0500	0.06518		mg/Kg	130	69 - 150
Toluene	0.0500	0.05012		mg/Kg	100	80 - 132
Xylenes, Total	0.150	0.1617		mg/Kg	108	80 - 137
Surrogate	LCS	LCS	Limits	%Rec.	Limits	Prepared
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	99		70 - 130			
4-Bromofluorobenzene (Surr)	97		70 - 130			
Dibromofluoromethane (Surr)	98		70 - 130			
Toluene-d8 (Surr)	90		70 - 130			

Lab Sample ID: LCSD 490-54278/4

Matrix: Solid

Analysis Batch: 54278

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

Analyte	Spikes	LCSD	LCSD	D	%Rec.	Limits	RPD	Limit
	Added	Result	Qualifier					
Benzene	0.0500	0.05450		mg/Kg	109	75 - 127	1	50
Ethylbenzene	0.0500	0.05471		mg/Kg	109	80 - 134	2	50
Naphthalene	0.0500	0.06376		mg/Kg	128	69 - 150	2	50
Toluene	0.0500	0.05379		mg/Kg	108	80 - 132	7	50
Xylenes, Total	0.150	0.1674		mg/Kg	112	80 - 137	4	50
Surrogate	LCSD	LCSD	Limits	%Rec.	Limits	RPD	Limit	Prepared
	%Recovery	Qualifier						
1,2-Dichloroethane-d4 (Surr)	95		70 - 130					
4-Bromofluorobenzene (Surr)	100		70 - 130					
Dibromofluoromethane (Surr)	98		70 - 130					
Toluene-d8 (Surr)	97		70 - 130					

TestAmerica Nashville

QC Sample Results

Client: Environmental Enterprise Group
Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
SDG: Laurel Bay Housing Project

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

Lab Sample ID: MB 490-53313/1-A

Matrix: Solid

Analysis Batch: 53348

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 53313

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene			ND		0.0670	0.0100	mg/Kg		01/24/13 08:53	01/24/13 17:06	1
Acenaphthylene			ND		0.0670	0.00900	mg/Kg		01/24/13 08:53	01/24/13 17:06	1
Anthracene			ND		0.0670	0.00900	mg/Kg		01/24/13 08:53	01/24/13 17:06	1
Benzo[a]anthracene			ND		0.0670	0.0150	mg/Kg		01/24/13 08:53	01/24/13 17:06	1
Benzo[a]pyrene			ND		0.0670	0.0120	mg/Kg		01/24/13 08:53	01/24/13 17:06	1
Benzo[b]fluoranthene			ND		0.0670	0.0120	mg/Kg		01/24/13 08:53	01/24/13 17:06	1
Benzo[g,h,i]perylene			ND		0.0670	0.00900	mg/Kg		01/24/13 08:53	01/24/13 17:06	1
Benzo[k]fluoranthene			ND		0.0670	0.0140	mg/Kg		01/24/13 08:53	01/24/13 17:06	1
1-Methylnaphthalene			ND		0.0670	0.0140	mg/Kg		01/24/13 08:53	01/24/13 17:06	1
Pyrene			ND		0.0670	0.0120	mg/Kg		01/24/13 08:53	01/24/13 17:06	1
Phenanthrene			ND		0.0670	0.00900	mg/Kg		01/24/13 08:53	01/24/13 17:06	1
Chrysene			ND		0.0670	0.00900	mg/Kg		01/24/13 08:53	01/24/13 17:06	1
Dibenz(a,h)anthracene			ND		0.0670	0.00700	mg/Kg		01/24/13 08:53	01/24/13 17:06	1
Fluoranthene			ND		0.0670	0.00900	mg/Kg		01/24/13 08:53	01/24/13 17:06	1
Fluorene			ND		0.0670	0.0120	mg/Kg		01/24/13 08:53	01/24/13 17:06	1
Indeno[1,2,3-cd]pyrene			ND		0.0670	0.0100	mg/Kg		01/24/13 08:53	01/24/13 17:06	1
Naphthalene			ND		0.0670	0.00900	mg/Kg		01/24/13 08:53	01/24/13 17:06	1
2-Methylnaphthalene			ND		0.0670	0.0160	mg/Kg		01/24/13 08:53	01/24/13 17:06	1
Surrogate	MB	MB	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)			70		29 - 120				01/24/13 08:53	01/24/13 17:06	1
Terphenyl-d14 (Surr)			87		13 - 120				01/24/13 08:53	01/24/13 17:06	1
Nitrobenzene-d5 (Surr)			62		27 - 120				01/24/13 08:53	01/24/13 17:06	1

Lab Sample ID: LCS 490-53313/2-A

Matrix: Solid

Analysis Batch: 53348

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 53313

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Acenaphthylene	1.67	1.351		mg/Kg		81	38 - 120
Anthracene	1.67	1.266		mg/Kg		76	46 - 124
Benzo[a]anthracene	1.67	1.335		mg/Kg		80	45 - 120
Benzo[a]pyrene	1.67	1.305		mg/Kg		78	45 - 120
Benzo[b]fluoranthene	1.67	1.350		mg/Kg		81	42 - 120
Benzo[g,h,i]perylene	1.67	1.348		mg/Kg		81	38 - 120
Benzo[k]fluoranthene	1.67	1.287		mg/Kg		77	42 - 120
1-Methylnaphthalene	1.67	1.430		mg/Kg		86	32 - 120
Pyrene	1.67	1.319		mg/Kg		79	43 - 120
Phenanthrene	1.67	1.315		mg/Kg		79	45 - 120
Chrysene	1.67	1.328		mg/Kg		80	43 - 120
Dibenz(a,h)anthracene	1.67	1.348		mg/Kg		81	32 - 128
Fluoranthene	1.67	1.287		mg/Kg		77	46 - 120
Fluorene	1.67	1.334		mg/Kg		80	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	1.336		mg/Kg		80	41 - 121
Naphthalene	1.67	1.385		mg/Kg		83	32 - 120
2-Methylnaphthalene	1.67	1.433		mg/Kg		86	28 - 120

TestAmerica Nashville

QC Sample Results

Client: Environmental Enterprise Group
Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
SDG: Laurel Bay Housing Project

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

Lab Sample ID: LCS 490-53313/2-A

Matrix: Solid

Analysis Batch: 53348

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 53313

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)			65		29 - 120
Terphenyl-d14 (Surr)			80		13 - 120
Nitrobenzene-d5 (Surr)			60		27 - 120

Lab Sample ID: 490-17778-1 MS

Matrix: Solid

Analysis Batch: 53348

Client Sample ID: 380 Aspen

Prep Type: Total/NA

Prep Batch: 53313

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Acenaphthylene	0.149		2.12	1.643		mg/Kg	☒	71	25 - 120
Anthracene	0.336		2.12	1.722		mg/Kg	☒	66	28 - 125
Benzo[a]anthracene	0.574		2.12	2.104		mg/Kg	☒	72	23 - 120
Benzo[a]pyrene	0.241		2.12	1.717		mg/Kg	☒	70	15 - 128
Benzo[b]fluoranthene	0.390		2.12	1.938		mg/Kg	☒	73	12 - 133
Benzo[g,h,i]perylene	0.0727 J		2.12	1.576		mg/Kg	☒	71	22 - 120
Benzo[k]fluoranthene	0.159		2.12	1.641		mg/Kg	☒	70	28 - 120
1-Methylnaphthalene	5.56		2.12	6.633 E		mg/Kg	☒	51	10 - 120
Pyrene	1.26		2.12	2.620		mg/Kg	☒	64	20 - 123
Phenanthrene	2.49		2.12	3.789		mg/Kg	☒	62	21 - 122
Chrysene	0.502		2.12	1.975		mg/Kg	☒	70	20 - 120
Dibenz(a,h)anthracene	ND		2.12	1.546		mg/Kg	☒	73	12 - 128
Fluoranthene	1.54		2.12	2.906		mg/Kg	☒	65	10 - 143
Fluorene	0.922		2.12	2.334		mg/Kg	☒	67	20 - 120
Indeno[1,2,3-cd]pyrene	0.0721 J		2.12	1.577		mg/Kg	☒	71	22 - 121
Naphthalene	1.16		2.12	2.638		mg/Kg	☒	70	10 - 120
2-Methylnaphthalene	7.85		2.12	8.811 E		mg/Kg	☒	46	13 - 120
Surrogate	MS	MS							
	%Recovery	Qualifier							
2-Fluorobiphenyl (Surr)	51								
Terphenyl-d14 (Surr)	62								
Nitrobenzene-d5 (Surr)	54								

Lab Sample ID: 490-17778-1 MSD

Matrix: Solid

Analysis Batch: 53348

Client Sample ID: 380 Aspen

Prep Type: Total/NA

Prep Batch: 53313

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Acenaphthylene	0.149		2.14	1.917		mg/Kg	☒	82	25 - 120	15	50
Anthracene	0.336		2.14	2.130		mg/Kg	☒	84	28 - 125	21	49
Benzo[a]anthracene	0.574		2.14	2.472		mg/Kg	☒	89	23 - 120	16	50
Benzo[a]pyrene	0.241		2.14	2.071		mg/Kg	☒	85	15 - 128	19	50
Benzo[b]fluoranthene	0.390		2.14	2.258		mg/Kg	☒	87	12 - 133	15	50
Benzo[g,h,i]perylene	0.0727 J		2.14	1.932		mg/Kg	☒	87	22 - 120	20	50
Benzo[k]fluoranthene	0.159		2.14	1.980		mg/Kg	☒	85	28 - 120	19	45
1-Methylnaphthalene	5.56		2.14	6.676 E		mg/Kg	☒	52	10 - 120	1	50
Pyrene	1.26		2.14	2.985		mg/Kg	☒	81	20 - 123	13	50
Phenanthrene	2.49		2.14	4.060		mg/Kg	☒	73	21 - 122	7	50
Chrysene	0.502		2.14	2.359		mg/Kg	☒	87	20 - 120	18	49

TestAmerica Nashville

QC Sample Results

Client: Environmental Enterprise Group
 Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
 SDG: Laurel Bay Housing Project

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

Lab Sample ID: 490-17778-1 MSD

Client Sample ID: 380 Aspen

Prep Type: Total/NA

Prep Batch: 53313

Matrix: Solid
 Analysis Batch: 53348

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit	
	Result	Qualifier	Added	Result	Qualifier							
Dibenz(a,h)anthracene	ND		2.14	1.929		mg/Kg	☒	90	12 - 128	22	50	
Fluoranthene	1.54		2.14	3.287		mg/Kg	☒	81	10 - 143	12	50	
Fluorene	0.922		2.14	2.565		mg/Kg	☒	77	20 - 120	9	50	
Indeno[1,2,3-cd]pyrene	0.0721	J	2.14	1.965		mg/Kg	☒	88	22 - 121	22	50	
Naphthalene	1.16		2.14	3.009		mg/Kg	☒	87	10 - 120	13	50	
2-Methylnaphthalene	7.85		2.14	8.692	E	mg/Kg	☒	39	13 - 120	1	50	
MSD MSD												
Surrogate	%Recovery	Qualifier		Limits								
2-Fluorobiphenyl (Surr)	64			29 - 120								
Terphenyl-d14 (Surr)	82			13 - 120								
Nitrobenzene-d5 (Surr)	65			27 - 120								

Method: Moisture - Percent Moisture

Lab Sample ID: 490-17776-A-1 DU

Client Sample ID: Duplicate

Prep Type: Total/NA

Matrix: Solid
 Analysis Batch: 53269

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Percent Solids	80		81		%		1	20

TestAmerica Nashville

QC Association Summary

Client: Environmental Enterprise Group
Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
SDG: Laurel Bay Housing Project

GC/MS VOA

Prep Batch: 52654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-17581-A-54-D MS	Matrix Spike	Total/NA	Solid	5035	
490-17581-A-54-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 53261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-17778-1	380 Aspen	Total/NA	Solid	5035	
490-17778-6	635 Dahlia-2	Total/NA	Solid	5035	

Prep Batch: 53264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-17778-1	380 Aspen	Total/NA	Solid	5035	
490-17778-2	646 Dahlia-a	Total/NA	Solid	5035	
490-17778-3	634 Dahlia	Total/NA	Solid	5035	
490-17778-4	629 Dahlia	Total/NA	Solid	5035	
490-17778-5	635 Dahlia-1	Total/NA	Solid	5035	
490-17778-6	635 Dahlia-2	Total/NA	Solid	5035	
490-17778-7	628 Dahlia	Total/NA	Solid	5035	

Analysis Batch: 53895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-17581-A-54-D MS	Matrix Spike	Total/NA	Solid	8260B	52654
490-17581-A-54-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	52654
490-17778-1	380 Aspen	Total/NA	Solid	8260B	53264
490-17778-2	646 Dahlia-a	Total/NA	Solid	8260B	53264
LCS 490-53895/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-53895/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-53895/6	Method Blank	Total/NA	Solid	8260B	
MB 490-53895/7	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 54052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-17778-3	634 Dahlia	Total/NA	Solid	8260B	53264
490-17778-4	629 Dahlia	Total/NA	Solid	8260B	53264
490-17778-5	635 Dahlia-1	Total/NA	Solid	8260B	53264
490-17778-6	635 Dahlia-2	Total/NA	Solid	8260B	53264
490-17778-7	628 Dahlia	Total/NA	Solid	8260B	53264
LCS 490-54052/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-54052/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-54052/6	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 54278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-17778-1	380 Aspen	Total/NA	Solid	8260B	53261
490-17778-6	635 Dahlia-2	Total/NA	Solid	8260B	53261
LCS 490-54278/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-54278/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-54278/7	Method Blank	Total/NA	Solid	8260B	



QC Association Summary

Client: Environmental Enterprise Group
Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
SDG: Laurel Bay Housing Project

GC/MS Semi VOA

Prep Batch: 53313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-17778-1	380 Aspen	Total/NA	Solid	3550C	
490-17778-1 MS	380 Aspen	Total/NA	Solid	3550C	
490-17778-1 MSD	380 Aspen	Total/NA	Solid	3550C	
490-17778-2	646 Dahlia-a	Total/NA	Solid	3550C	
490-17778-3	634 Dahlia	Total/NA	Solid	3550C	
490-17778-4	629 Dahlia	Total/NA	Solid	3550C	
490-17778-5	635 Dahlia-1	Total/NA	Solid	3550C	
490-17778-6	635 Dahlia-2	Total/NA	Solid	3550C	
490-17778-7	628 Dahlia	Total/NA	Solid	3550C	
LCS 490-53313/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 490-53313/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 53348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-17778-1	380 Aspen	Total/NA	Solid	8270D	53313
490-17778-1 MS	380 Aspen	Total/NA	Solid	8270D	53313
490-17778-1 MSD	380 Aspen	Total/NA	Solid	8270D	53313
490-17778-2	646 Dahlia-a	Total/NA	Solid	8270D	53313
490-17778-3	634 Dahlia	Total/NA	Solid	8270D	53313
490-17778-4	629 Dahlia	Total/NA	Solid	8270D	53313
490-17778-5	635 Dahlia-1	Total/NA	Solid	8270D	53313
490-17778-7	628 Dahlia	Total/NA	Solid	8270D	53313
LCS 490-53313/2-A	Lab Control Sample	Total/NA	Solid	8270D	53313
MB 490-53313/1-A	Method Blank	Total/NA	Solid	8270D	53313

Analysis Batch: 53658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-17778-1	380 Aspen	Total/NA	Solid	8270D	53313
490-17778-2	646 Dahlia-a	Total/NA	Solid	8270D	53313
490-17778-6	635 Dahlia-2	Total/NA	Solid	8270D	53313

General Chemistry

Analysis Batch: 53269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-17776-A-1 DU	Duplicate	Total/NA	Solid	Moisture	
490-17778-1	380 Aspen	Total/NA	Solid	Moisture	
490-17778-2	646 Dahlia-a	Total/NA	Solid	Moisture	
490-17778-3	634 Dahlia	Total/NA	Solid	Moisture	
490-17778-4	629 Dahlia	Total/NA	Solid	Moisture	
490-17778-5	635 Dahlia-1	Total/NA	Solid	Moisture	
490-17778-6	635 Dahlia-2	Total/NA	Solid	Moisture	
490-17778-7	628 Dahlia	Total/NA	Solid	Moisture	

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Lab Chronicle

Client: Environmental Enterprise Group
Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
SDG: Laurel Bay Housing Project

Client Sample ID: 380 Aspen

Date Collected: 01/14/13 14:15
Date Received: 01/23/13 08:20

Lab Sample ID: 490-17778-1

Matrix: Solid
Percent Solids: 77.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			53264	01/24/13 07:28	ML	TAL NSH
Total/NA	Analysis	8260B		1	53895	01/26/13 19:28	AF	TAL NSH
Total/NA	Prep	5035			53261	01/24/13 07:26	ML	TAL NSH
Total/NA	Analysis	8260B		1	54278	01/29/13 09:56	AF	TAL NSH
Total/NA	Prep	3550C			53313	01/24/13 08:53	AK	TAL NSH
Total/NA	Analysis	8270D		1	53348	01/24/13 18:58	KP	TAL NSH
Total/NA	Analysis	8270D		5	53658	01/25/13 18:27	KP	TAL NSH
Total/NA	Analysis	Moisture		1	53269	01/24/13 07:37	RS	TAL NSH

Client Sample ID: 646 Dahlia-a

Date Collected: 01/15/13 13:50
Date Received: 01/23/13 08:20

Lab Sample ID: 490-17778-2

Matrix: Solid
Percent Solids: 82.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			53264	01/24/13 07:28	ML	TAL NSH
Total/NA	Analysis	8260B		1	53895	01/26/13 19:58	AF	TAL NSH
Total/NA	Prep	3550C			53313	01/24/13 08:53	AK	TAL NSH
Total/NA	Analysis	8270D		1	53348	01/24/13 20:05	KP	TAL NSH
Total/NA	Analysis	8270D		5	53658	01/25/13 18:50	KP	TAL NSH
Total/NA	Analysis	Moisture		1	53269	01/24/13 07:37	RS	TAL NSH

Client Sample ID: 634 Dahlia

Date Collected: 01/16/13 11:20
Date Received: 01/23/13 08:20

Lab Sample ID: 490-17778-3

Matrix: Solid
Percent Solids: 95.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			53264	01/24/13 07:28	ML	TAL NSH
Total/NA	Analysis	8260B		1	54052	01/28/13 08:48	AF	TAL NSH
Total/NA	Prep	3550C			53313	01/24/13 08:53	AK	TAL NSH
Total/NA	Analysis	8270D		1	53348	01/24/13 20:28	KP	TAL NSH
Total/NA	Analysis	Moisture		1	53269	01/24/13 07:37	RS	TAL NSH

Client Sample ID: 629 Dahlia

Date Collected: 01/17/13 11:50
Date Received: 01/23/13 08:20

Lab Sample ID: 490-17778-4

Matrix: Solid
Percent Solids: 93.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			53264	01/24/13 07:28	ML	TAL NSH
Total/NA	Analysis	8260B		1	54052	01/28/13 09:19	AF	TAL NSH
Total/NA	Prep	3550C			53313	01/24/13 08:53	AK	TAL NSH
Total/NA	Analysis	8270D		1	53348	01/24/13 20:51	KP	TAL NSH
Total/NA	Analysis	Moisture		1	53269	01/24/13 07:37	RS	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Environmental Enterprise Group
Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
SDG: Laurel Bay Housing Project

Client Sample ID: 635 Dahlia-1

Date Collected: 01/15/13 13:45
Date Received: 01/23/13 08:20

Lab Sample ID: 490-17778-5

Matrix: Solid
Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			53264	01/24/13 07:28	ML	TAL NSH
Total/NA	Analysis	8260B		1	54052	01/28/13 09:49	AF	TAL NSH
Total/NA	Prep	3550C			53313	01/24/13 08:53	AK	TAL NSH
Total/NA	Analysis	8270D		1	53348	01/24/13 21:13	KP	TAL NSH
Total/NA	Analysis	Moisture		1	53269	01/24/13 07:37	RS	TAL NSH

Client Sample ID: 635 Dahlia-2

Date Collected: 01/16/13 11:45
Date Received: 01/23/13 08:20

Lab Sample ID: 490-17778-6

Matrix: Solid
Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			53264	01/24/13 07:28	ML	TAL NSH
Total/NA	Analysis	8260B		1	54052	01/28/13 10:19	AF	TAL NSH
Total/NA	Prep	5035			53261	01/24/13 07:26	ML	TAL NSH
Total/NA	Analysis	8260B		1	54278	01/29/13 10:26	AF	TAL NSH
Total/NA	Prep	3550C			53313	01/24/13 08:53	AK	TAL NSH
Total/NA	Analysis	8270D		5	53658	01/25/13 19:12	KP	TAL NSH
Total/NA	Analysis	Moisture		1	53269	01/24/13 07:37	RS	TAL NSH

Client Sample ID: 628 Dahlia

Date Collected: 01/17/13 13:45
Date Received: 01/23/13 08:20

Lab Sample ID: 490-17778-7

Matrix: Solid
Percent Solids: 95.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			53264	01/24/13 07:28	ML	TAL NSH
Total/NA	Analysis	8260B		1	54052	01/28/13 10:49	AF	TAL NSH
Total/NA	Prep	3550C			53313	01/24/13 08:53	AK	TAL NSH
Total/NA	Analysis	8270D		1	53348	01/24/13 21:57	KP	TAL NSH
Total/NA	Analysis	Moisture		1	53269	01/24/13 07:37	RS	TAL NSH

Laboratory References:

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

TestAmerica Nashville

Method Summary

Client: Environmental Enterprise Group
Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
SDG: Laurel Bay Housing Project

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

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Certification Summary

Client: Environmental Enterprise Group
 Project/Site: EEG Default

TestAmerica Job ID: 490-17778-1
 SDG: Laurel Bay Housing Project

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
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Colorado	State Program	8	N/A	02-28-13
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	03-31-13
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	10-09-13
New Jersey	NELAP	2	TN965	06-30-13
New York	NELAP	2	11342	04-01-13
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
Oklahoma	State Program	6	9412	08-31-13
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)	02-28-13
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	02-28-13
Wisconsin	State Program	5	998020430	08-31-13
Wyoming (UST)	A2LA	8	453.07	12-31-13





490-17778 Chain of Custody

COOLER RECEIPT FORM

Cooler Received/Opened On 1/23/2013 @ 08201. Tracking # 5658 (last 4 digits, FedEx)Courier: Fedex IR Gun ID 946602202. Temperature of rep. sample or temp blank when opened: 2.5 Degrees Celsius3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA4. Were custody seals on outside of cooler? YES...NO...NAIf yes, how many and where: (2)Front/Back5. Were the seals intact, signed, and dated correctly? YES...NO...NA6. Were custody papers inside cooler? YES...NO...NA WI certify that I opened the cooler and answered questions 1-6 (initial)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 None9. 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 SO:/14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # I certify that I unloaded the cooler and answered questions 7-14 (initial)

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)

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) I certify that I attached a label with the unique LIMS number to each container (Initial) 21. Were there Non-Conformance issues at login? YES...NO! Was a NCM generated? YES...NO...#

Loc: 490
17778

PG 1072

TestAmerica

Nashville Division
2960 Foster Creighton
Nashville, TN 37204

THE LEADER IN ENVIRONMENTAL TESTING

Client Name/Account #: EEG-SBG # 2449

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29456

Project Manager: Tom McElwee email: mctweed@eeginc.net
Telephone Number: 843.412.2097

Sampler Name: (Print) Chris Twissell

Sampler Signature: chris

Phone: 615-726-0177
Toll Free: 800-765-0980
Fax: 615-726-3488

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

Site State: SC

PO#:

TA Quote #:

Project ID: Laurel Bay Housing Project

Project #: 8413-879-0401

Page	Sample ID / Description	Date Sampled	Time Sampled	No. of Contaminates Shipped	Analyze For		RUSH/TAT Pre-Schedule
					Matrix	Other (Specify):	
27	380 Aspcn	1/14/13	14:15	4	Grab		1
28	46 Dahli-a	1/15/13	13:50	4			3
29	34 Dahli-a	1/16/13	11:20	4			4
	29 Dahli-a	1/17/13	11:50	4			

Special Instructions:

Relinquished by:	Date	Time	Received by:	Method of Shipment:	FEDEX
				Received by TestAmerica: <i>J. Brown</i>	Date Time

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Loc: 490
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PG 2 of 2

TestAmerica

Nashville Division
2960 Foster Creighton
Nashville, TN 37204

THE LEADER IN ENVIRONMENTAL TESTING

Client Name/Account #: EEG - SBG # 2449

Phone: 615-726-0177
Toll Free: 800-765-0880
Fax: 615-726-3404

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29456

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

Telephone Number: 843-412-2097

Fax No.: 843-3-877-0101

Sampler Name: (Print)

Dakota Shae

Sampler Signature:

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

Site State: SC

PO#:

1003

TA Quote #:

Project ID: Laurel Bay Housing Project

Project #:

Preservative	Matrix	Analyze For:									
		PAH - 8270D	BTEX + Napht - 8260E	Other (Specify):	Soil	Sediment	Drinking Water	Wastewater	Groundwater	None (Black Label)	H2SO4, Plastic (Yellow Label)
None (Black Label)	Other (Specify):	X	X		X	X					
H2SO4, Glass (Yellow Label)	Soil		X		X	X					
H2SO4, Plastic (Yellow Label)	Sediment		X		X	X					
NaOH (Orange Label)	Drinking Water		X		X	X					
NaOH (Orange Label)	Wastewater		X		X	X					
HNO3 (Red Label)	Groundwater		X		X	X					
HNO3 (Red Label)	None (Black Label)		X		X	X					
10% HCl (White Label)	Soil		X		X	X					
10% HCl (White Label)	Sediment		X		X	X					
Field Filtered	Drinking Water		X		X	X					
Composite	Wastewater		X		X	X					
No. of Containers Shipped	Groundwater		X		X	X					
Date Sampled	None (Black Label)		X		X	X					
Time Sampled	HNO3 (Red Label)		X		X	X					
	NaOH (Orange Label)		X		X	X					

Special Instructions:

Relinquished By:	Date	Time	Received by:	Method of Shipment:	FEDEX	Date	Time
<i>John</i>	1/22/13	0900	<i>John</i>				
Relinquished By:	Date	Time	Received by TestAmérica:		Date	Time	

1/31/2013

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Login Sample Receipt Checklist

Client: Environmental Enterprise Group

Job Number: 490-17778-1

SDG Number: Laurel Bay Housing Project

Login Number: 17778

List Source: TestAmerica Nashville

List Number: 1

Creator: Huckaba, Jimmy

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

ATTACHMENT A

UST Certificate of Disposal

CONTRACTOR

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

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

TANK ID & LOCATION

UST 380Aspen; 380 Aspen Street, Laurel Bay Housing Area, MCAS Beaufort, S.C.

DISPOSAL LOCATION

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

TYPE OF TANK

SIZE (GAL)

Steel 280

CLEANING/DISPOSAL METHOD

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

DISPOSAL CERTIFICATION

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

T.L. W. Duee / 3/25/13
(Name) (Date)

Appendix C
Laboratory Analytical Report - Groundwater

Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Laboratory ID: QE28007-015

Description: BEALB380TW01WG20150529

Matrix: Aqueous

Date Sampled: 05/29/2015 0930

Date Received: 05/30/2015

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	06/02/2015 1426	EH1		76315			
Parameter		CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene		71-43-2	8260B	0.45	U	5.0	0.45	0.21	ug/L	1
Ethylbenzene		100-41-4	8260B	1.3	J	5.0	0.51	0.17	ug/L	1
Naphthalene		91-20-3	8260B	7.5		5.0	0.96	0.32	ug/L	1
Toluene		108-88-3	8260B	0.48	U	5.0	0.48	0.16	ug/L	1
Xylenes (total)		1330-20-7	8260B	0.45	J	5.0	0.57	0.19	ug/L	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits							
Bromofluorobenzene	96		75-120							
1,2-Dichloroethane-d4	92		70-120							
Toluene-d8	101		85-120							
Dibromofluoromethane	99		85-115							

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 \geq 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

Level 1 Report v2.1

Semivolatile Organic Compounds by GC/MS (SIM)

Client: AECOM - Resolution Consultants

Laboratory ID: QE28007-015

Description: BEALB380TW01WG20150529

Matrix: Aqueous

Date Sampled: 05/29/2015 0930

Date Received: 05/30/2015

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D (SIM)	1	06/02/2015 1823	RBH	06/01/2015 1430	76221

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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	
2-Methylnaphthalene-d10	68	15-139		
Fluoranthene-d10	82	23-154		

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Q = Surrogate failure

ND = Not detected at or above the MDL

J = Estimated result < PQL and \geq 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

Level 1 Report v2.1

Appendix D
Regulatory Correspondence

D H E C

PROMOTE PROTECT PROSPER

Catherine B. Templeton, Director

May 15, 2014

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

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

Dear Mr. Drawdy,

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

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

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

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

Sincerely,



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

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

D H E C

PROMOTE PROTECT PROSPER

Catherine B. Templeton, Director

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

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

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

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

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



Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

Division of Waste Management
Bureau of Land and Waste Management

February 22, 2016

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

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

Dear Mr. Drawdy,

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

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

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

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

Sincerely,

Laurel Petrus
RCRA Federal Facilities Section

Attachment: Specific Property Recommendations

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

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

Draft Final Initial Groundwater Investigation Report for (143 addresses)

Permanent Monitoring Well Investigation recommendation (52 addresses)

273 Birch Drive	1192 Bobwhite Drive
325 Ash Street	1194 Bobwhite Drive
326 Ash Street	1272 Albatross Drive
336 Ash Street	1352 Cardinal Lane
343 Ash Street	1356 Cardinal Lane
353 Ash Street	1359 Cardinal Lane
430 Elderberry Drive	1360 Cardinal Lane
440 Elderberry Drive	1362 Cardinal Lane
456 Elderberry Drive	1370 Cardinal Lane
458 Elderberry Drive	1382 Dove Lane
468 Dogwood Drive	1384 Dove lane
518 Laurel Bay Blvd	1385 Dove Lane
635 Dahlia Drive	1389 Dove Lane
638 Dahlia Drive	1392 Dove Lane
640 Dahlia Drive	1393 Dove Lane
647 Dahlia Drive	1407 Eagle Lane
648 Dahlia Drive	1411 Eagle Lane
650 Dahlia Drive	1418 Albatross Drive
652 Dahlia Drive	1420 Albatross Drive
760 Althea Street	1426 Albatross Drive
1102 Iris Lane	1429 Albatross Drive
1132 Iris Lane	1434 Dove Lane
1133 Iris Lane	1436 Dove Lane
1144 Iris Lane	1440 Dove Lane
1148 Iris Lane	1442 Dove Lane
1186 Bobwhite Drive	1444 Dove Lane

No Further Action recommendation (91 addresses):

137 Laurel Bay Blvd	771 Althea Street
139 Laurel Bay Blvd	927 Albacore Street
229 Cypress Street	1015 Foxglove Street
261 Beech Street	1046 Gardenia Drive
276 Birch Drive	1062 Gardenia Drive
278 Birch Drive	1070 Heather Street
291 Birch Drive	1072 Heather Street

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

Attachment to: Petrus to Drawdy

Subject: Draft Final Initial Groundwater Investigation Report-May and June 2015

Specific Property Recommendations

Dated February 22, 2016, Page 2