

**SUMMARY REPORT**  
**376 CAMELLIA DRIVE (FORMERLY 693 CAMELLIA DRIVE)**  
**LAUREL BAY MILITARY HOUSING AREA**  
**MARINE CORPS AIR STATION BEAUFORT**  
**BEAUFORT, SC**

**Revision: 0**  
**Prepared for:**

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

**and**



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

**JUNE 2021**

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**Prepared by:**



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

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

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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 376 Camellia Drive (Formerly 693 Camellia Drive). 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 376 Camellia Drive (Formerly 693 Camellia Drive). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 693 Camellia Drive* (MCAS Beaufort, 2013). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Initial Groundwater Investigation Report – February and March 2017* (Resolution Consultants, 2017). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C.

### **2.1 UST Removal and Soil Sampling**

On December 3, 2012, a single 280 gallon heating oil UST was removed from underneath the front concrete porch at 376 Camellia Drive (Formerly 693 Camellia Drive). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The UST was removed, cleaned, and shipped offsite for recycling. There was no visual evidence (i.e.,

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

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

## **2.2 Soil Analytical Results**

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

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST location were used by MCAS Beaufort, in consultation with SCDHEC, to determine a path forward (i.e., additional sampling or NFA) for the property. The soil results collected from 376 Camellia Drive (Formerly 693 Camellia Drive) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated August 24, 2016, SCDHEC requested an IGWA for 376 Camellia Drive (Formerly 693 Camellia Drive) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

## **2.3 Groundwater Sampling**

On February 28, 2017, a temporary monitoring well was installed at 376 Camellia Drive (Formerly 693 Camellia Drive), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST. The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – February and March 2017* (Resolution Consultants, 2017).



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

## **2.4 Groundwater Analytical Results**

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

The groundwater results collected from 376 Camellia Drive (Formerly 693 Camellia Drive) 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 376 Camellia Drive (Formerly 693 Camellia Drive). This NFA determination was obtained in a letter dated July 27, 2017. SCDHEC's NFA letter is provided in Appendix D.

## **4.0 REFERENCES**

Marine Corps Air Station Beaufort, 2013. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 693 Camellia Drive, Laurel Bay Military Housing Area*, April 2013.

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

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

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

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

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

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

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

## Tables

**Table 1**  
**Laboratory Analytical Results - Soil**  
**376 Camellia Drive (Formerly 693 Camellia Drive)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Results Sample Collected 12/03/12
<b>Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)</b>		
Benzene	0.003	ND
Ethylbenzene	1.15	ND
Naphthalene	0.036	ND
Toluene	0.627	ND
Xylenes, Total	13.01	ND
<b>Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)</b>		
Benzo(a)anthracene	0.66	<b>0.0686</b>
Benzo(b)fluoranthene	0.66	<b>0.123</b>
Benzo(k)fluoranthene	0.66	<b>0.0309</b>
Chrysene	0.66	ND
Dibenz(a,h)anthracene	0.66	ND

**Notes:**

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

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

**Table 2**  
**Laboratory Analytical Results - Groundwater**  
**376 Camellia Drive (Formerly 693 Camellia Drive)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Site-Specific Groundwater VISLs (µg/L) <sup>(2)</sup>	Results Sample Collected 03/01/17
<b>Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)</b>			
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	ND
Naphthalene	25	29.33	ND
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	ND
<b>Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)</b>			
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:**

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

<sup>(2)</sup> Site-specific groundwater VISLs were calculated using the EPA JE Model Spreadsheets (Version 3.1, February 2004) and conservative modeling inputs representative of a small single-story house with an 8 foot ceiling. Site-specific groundwater VISLs were developed based on a target risk level of  $1 \times 10^{-6}$ , a target hazard quotient of 1 (per target organ), and a default residential exposure scenario, assuming exposure for 24 hours/day, 350 days/year, for 26 years. Modeling was performed for a range of depths to groundwater for application as appropriate in different areas of the Laurel Bay Military Housing Area. The most conservative levels are presented for comparison. Refer to Appendix H of the Uniform Federal Policy Sampling Analysis and Sampling Plan for Vapor Media, Revision 4 (Resolution Consultants, April 2017) for additional information.

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - Not Applicable

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

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



Appendix A - Multi-Media Selection Process for LBMH

**Appendix B**  
**UST Assessment Report**



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

<b>Date Received</b>  <div style="border: 1px solid black; height: 40px; margin-top: 10px;"></div>
<b>State Use Only</b>

**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	
693 Camellia Drive, Laurel Bay Military Housing Area	
Street Address or State Road (as applicable)	
Beaufort,	Beaufort
City	County

### III. INSURANCE INFORMATION

#### Insurance Statement

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

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

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

My policy provider is: \_\_\_\_\_

The policy deductible is: \_\_\_\_\_

The policy limit is: \_\_\_\_\_

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

### IV. REQUEST FOR SUPERB FUNDING

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

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

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

\_\_\_\_\_  
Name (Type or print.)

\_\_\_\_\_  
Signature

#### To be completed by Notary Public:

Sworn before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
(Name)

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

## VI. UST INFORMATION

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

693Camellia				
Heating oil				
280 gal				
Late 1950s				
Steel				
Mid 1980s				
6'				
No				
No				
Removed				
12/3/2012				
Yes				
Yes				

- M. Method of disposal for any USTs removed from the ground (attach disposal manifests)  
UST 693Camellia was removed from the ground and disposed at a  
Subtitle "D" landfill. See Attachment "A".
- 
- N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)  
UST 693Camellia had been previously filled with sand by others.
- 
- O. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST  
Corrosion, pitting and holes were found throughout the tank.
-

## VII. PIPING INFORMATION

A. Construction Material..(ex. Steel, FRP).....	693Camellia				
	Steel & Copper				
B. Distance from UST to Dispenser.....	N/A				
C. Number of Dispensers.....	N/A				
D. Type of System Pressure or Suction.....	Suction				
E. Was Piping Removed from the Ground? Y/N	No				
F. Visible Corrosion or Pitting Y/N.....	Yes				
G. Visible Holes Y/N.....	No				
H. Age.....	Late 1950s				
I. If any corrosion, pitting, or holes were observed, describe the location and extent for each piping run.					

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

## VIII. BRIEF SITE DESCRIPTION AND HISTORY

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

## IX. SITE CONDITIONS

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

## X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
693 Camellia	Excav at fill end	Soil	Sandy	6'	12/3/12 1545 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.

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## XII. RECEPTORS

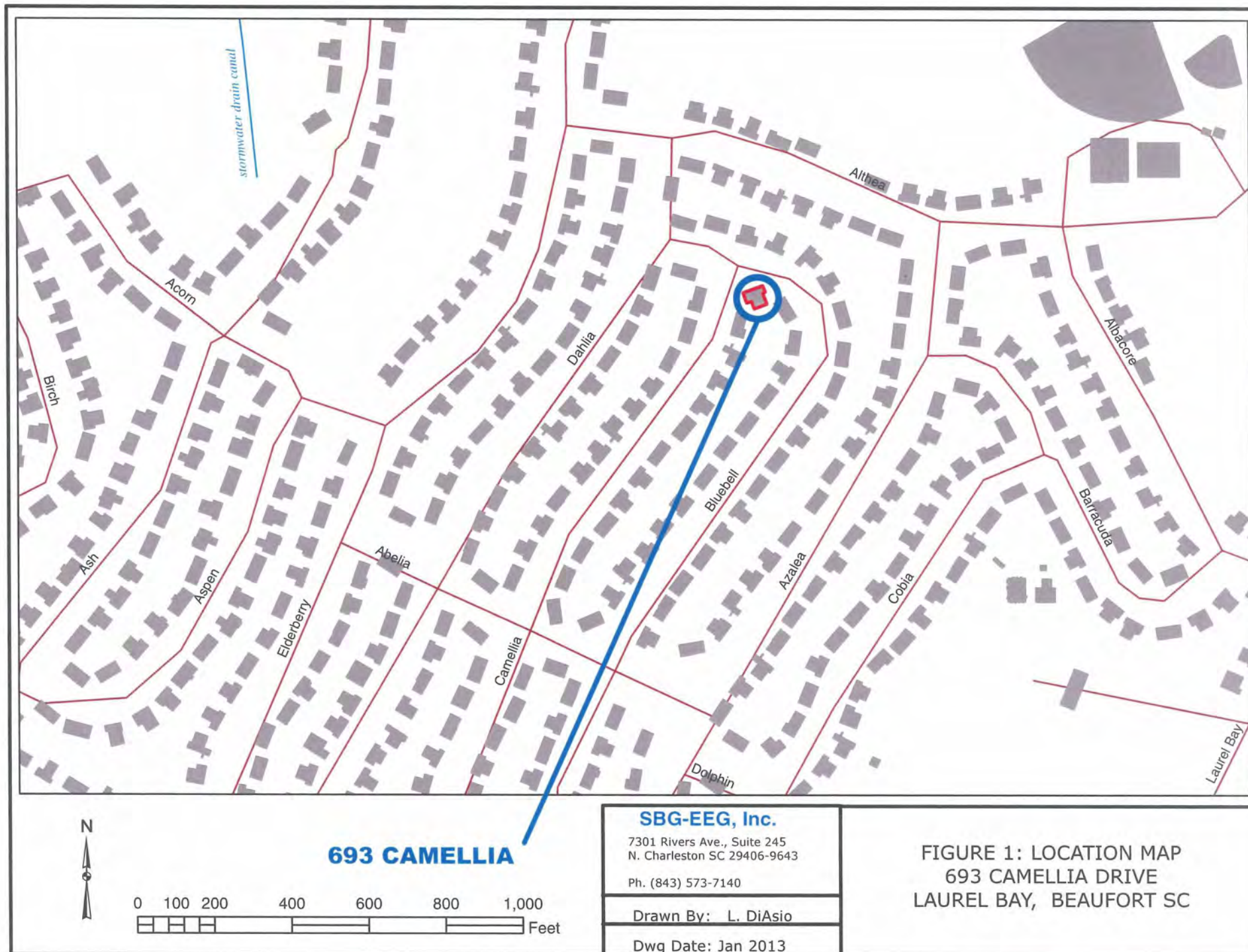
	Yes	No
<p>A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?</p> <p>If yes, indicate type of receptor, distance, and direction on site map.</p>		X
<p>B. Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?</p>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

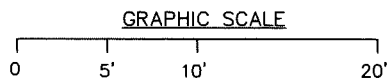
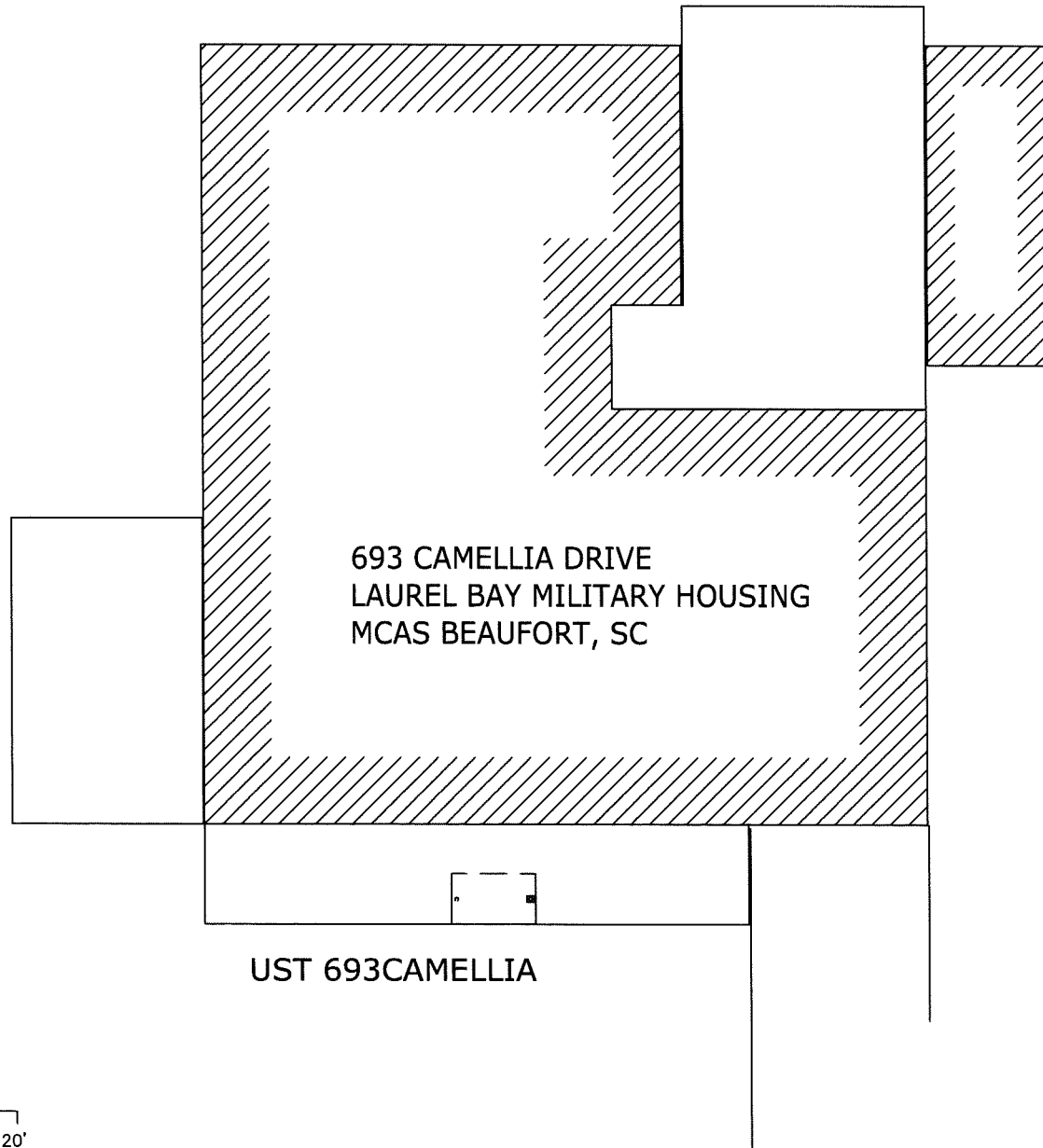


### **XIII. SITE MAP**

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

(Attach Site Map Here)





TANK DEPTH BELOW GRADE  
693CAMELLIA = 36"

**SBG-EEG**

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

FIGURE 2 SITE MAP  
693 CAMELLIA DRIVE, LAUREL BAY  
MCAS BEAUFORT SC

SCALE: GRAPHIC

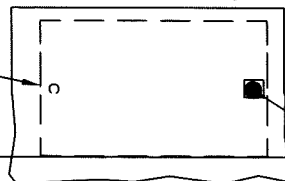
DWG DATE JAN 2013

693 CAMELLIA DRIVE  
LAUREL BAY MILITARY HOUSING  
MCAS BEAUFORT, SC



UST 693CAMELLIA  
280 GAL.

\* EXCAVATION

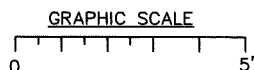


FILL END

PORCH

SOIL SAMPLE  
693 CAMELLIA

ASPHALT  
DRIVEWAY



\* A PORTION OF THE PORCH WAS  
REMOVED TO FACILITATE TANK  
EXTRACTION.

**SBG-EEG**

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

FIGURE 3 UST SAMPLE LOCATIONS  
693 CAMELLIA DRIVE, LAUREL BAY  
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE JAN 2013





Picture 1: Location of UST 693 Camellia.



Picture 2: UST 693 Camellia 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.

<b>CoC</b>	UST	693Camellia						
<b>Benzene</b>		ND						
<b>Toluene</b>		ND						
<b>Ethylbenzene</b>		ND						
<b>Xylenes</b>		ND						
<b>Naphthalene</b>		ND						
<b>Benzo (a) anthracene</b>		0.0686 mg/kg						
<b>Benzo (b) fluoranthene</b>		0.123 mg/kg						
<b>Benzo (k) fluoranthene</b>		0.0309 mg/kg						
<b>Chrysene</b>		ND						
<b>Dibenz (a, h) anthracene</b>		ND						
<b>TPH (EPA 3550)</b>								

<b>CoC</b>								
<b>Benzene</b>								
<b>Toluene</b>								
<b>Ethylbenzene</b>								
<b>Xylenes</b>								
<b>Naphthalene</b>								
<b>Benzo (a) anthracene</b>								
<b>Benzo (b) fluoranthene</b>								
<b>Benzo (k) fluoranthene</b>								
<b>Chrysene</b>								
<b>Dibenz (a, h) anthracene</b>								
<b>TPH (EPA 3550)</b>								

### SUMMARY OF ANALYSIS RESULTS (cont'd)

Enter the ground water analytical data for each sample for all CoC in the table below. If free product is present, indicate the measured thickness to the nearest 0.01 feet.

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

## **XV. ANALYTICAL RESULTS**

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

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



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

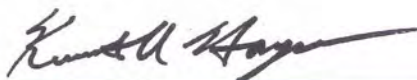
TestAmerica Job ID: 490-14327-1

Client Project/Site: Laurel Bay Housing Project

For:

Environmental Enterprise Group  
10179 Highway 78  
Ladson, South Carolina 29456

Attn: Mr. Tom McElwee



Authorized for release by:  
12/20/2012 10:53:39 AM

Ken Hayes  
Project Manager I  
[ken.hayes@testamericainc.com](mailto:ken.hayes@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?

**Ask  
The  
Expert**

Visit us at:

[www.testamericainc.com](http://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: Laurel Bay Housing Project

TestAmerica Job ID: 490-14327-1



Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-14327-1	1315 Albatross	Soil	12/03/12 15:15	12/12/12 08:00
490-14327-2	1338 Albatross	Soil	12/04/12 13:35	12/12/12 08:00
490-14327-3	705 Bluebell	Soil	12/05/12 13:45	12/12/12 08:00
490-14327-4	731 Bluebell	Soil	12/06/12 13:50	12/12/12 08:00
490-14327-5	693 Camellia	Soil	12/03/12 15:45	12/12/12 08:00
490-14327-6	1342 Albatross	Soil	12/04/12 14:30	12/12/12 08:00
490-14327-7	714 Bluebell	Soil	12/05/12 14:15	12/12/12 08:00
490-14327-8	726 Bluebell	Soil	12/06/12 14:00	12/12/12 08:00



TestAmerica Nashville

## Case Narrative

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

TestAmerica Job ID: 490-14327-1

Job ID: 490-14327-1

Laboratory: TestAmerica Nashville

4

### Narrative

### Job Narrative 490-14327-1

### Comments

No additional comments.

### Receipt

The samples were received on 12/12/2012 8:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.8° C.

### GC/MS VOA

Method(s) 8260B: The continuing calibration verification (CCV) for Toluene associated with batch 43876 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 43876.

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: 693 Camellia (490-14327-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: Internal standard responses were outside of acceptance limits for the following sample(s): 693 Camellia (490-14327-5). The sample(s) shows evidence of matrix interference.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 44506 was outside control limits. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision met acceptance criteria.

Method(s) 8260B: The following sample(s) was diluted due to the nature of the sample matrix: 693 Camellia (490-14327-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following sample(s) required a dilution which was performed outside of the analytical holding time: 693 Camellia (490-14327-5).

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: Laurel Bay Housing Project

TestAmerica Job ID: 490-14327-1

### 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
F	RPD of the MS and MSD exceeds the control limits

#### GC/MS Semi VOA

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

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☐	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, 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)



## Client Sample Results

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

TestAmerica Job ID: 490-14327-1

**Client Sample ID: 1315 Albatross**

Date Collected: 12/03/12 15:15

Date Received: 12/12/12 08:00

**Lab Sample ID: 490-14327-1**

Matrix: Soil

Percent Solids: 94.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00233	0.000779	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/14/12 22:39	1
Ethylbenzene	ND		0.00233	0.000779	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/14/12 22:39	1
Naphthalene	ND		0.00582	0.00198	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/14/12 22:39	1
Toluene	ND		0.00233	0.000861	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/14/12 22:39	1
Xylenes, Total	ND		0.00582	0.000779	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/14/12 22:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 130	12/13/12 10:46	12/14/12 22:39	1
4-Bromofluorobenzene (Surr)	113		70 - 130	12/13/12 10:46	12/14/12 22:39	1
Dibromofluoromethane (Surr)	93		70 - 130	12/13/12 10:46	12/14/12 22:39	1
Toluene-d8 (Surr)	116		70 - 130	12/13/12 10:46	12/14/12 22:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0691	0.0103	mg/Kg	12/13/12 11:42	12/14/12 16:34	1	
Acenaphthylene	ND		0.0691	0.00929	mg/Kg	12/13/12 11:42	12/14/12 16:34	1	
Anthracene	0.0117	J	0.0691	0.00929	mg/Kg	12/13/12 11:42	12/14/12 16:34	1	
Benzo[a]anthracene	0.172		0.0691	0.0155	mg/Kg	12/13/12 11:42	12/14/12 16:34	1	
Benzo[a]pyrene	0.0480	J	0.0691	0.0124	mg/Kg	12/13/12 11:42	12/14/12 16:34	1	
Benzo[b]fluoranthene	0.128		0.0691	0.0124	mg/Kg	12/13/12 11:42	12/14/12 16:34	1	
Benzo[g,h,i]perylene	ND		0.0691	0.00929	mg/Kg	12/13/12 11:42	12/14/12 16:34	1	
Benzo[k]fluoranthene	0.0770		0.0691	0.0144	mg/Kg	12/13/12 11:42	12/14/12 16:34	1	
1-Methylnaphthalene	ND		0.0691	0.0144	mg/Kg	12/13/12 11:42	12/14/12 16:34	1	
Pyrene	0.557		0.0691	0.0124	mg/Kg	12/13/12 11:42	12/14/12 16:34	1	
Phenanthrene	0.0849		0.0691	0.00929	mg/Kg	12/13/12 11:42	12/14/12 16:34	1	
Chrysene	0.145		0.0691	0.00929	mg/Kg	12/13/12 11:42	12/14/12 16:34	1	
Dibenz[a,h]anthracene	ND		0.0691	0.00722	mg/Kg	12/13/12 11:42	12/14/12 16:34	1	
Fluoranthene	0.620		0.0691	0.00929	mg/Kg	12/13/12 11:42	12/14/12 16:34	1	
Fluorene	ND		0.0691	0.0124	mg/Kg	12/13/12 11:42	12/14/12 16:34	1	
Indeno[1,2,3-cd]pyrene	ND		0.0691	0.0103	mg/Kg	12/13/12 11:42	12/14/12 16:34	1	
Naphthalene	ND		0.0691	0.00929	mg/Kg	12/13/12 11:42	12/14/12 16:34	1	
2-Methylnaphthalene	ND		0.0691	0.0165	mg/Kg	12/13/12 11:42	12/14/12 16:34	1	

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	75		29 - 120	12/13/12 11:42	12/14/12 16:34	1
Terphenyl-d14 (Surr)	93		13 - 120	12/13/12 11:42	12/14/12 16:34	1
Nitrobenzene-d5 (Surr)	62		27 - 120	12/13/12 11:42	12/14/12 16:34	1

### General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	95		0.10	0.10	%			12/13/12 10:21	1

TestAmerica Nashville

# Client Sample Results

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

TestAmerica Job ID: 490-14327-1

Client Sample ID: 1338 Albatross

Date Collected: 12/04/12 13:35

Date Received: 12/12/12 08:00

Lab Sample ID: 490-14327-2

Matrix: Soil

Percent Solids: 89.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00256	0.000859	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/14/12 23:09	1
Ethylbenzene	ND		0.00256	0.000859	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/14/12 23:09	1
Naphthalene	ND		0.00641	0.00218	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/14/12 23:09	1
Toluene	ND		0.00256	0.000948	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/14/12 23:09	1
Xylenes, Total	ND		0.00641	0.000859	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/14/12 23:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 130	12/13/12 10:46	12/14/12 23:09	1
4-Bromofluorobenzene (Surr)	112		70 - 130	12/13/12 10:46	12/14/12 23:09	1
Dibromofluoromethane (Surr)	103		70 - 130	12/13/12 10:46	12/14/12 23:09	1
Toluene-d8 (Surr)	123		70 - 130	12/13/12 10:46	12/14/12 23:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0737	0.0110	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 17:37	1
Acenaphthylene	ND		0.0737	0.00990	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 17:37	1
Anthracene	ND		0.0737	0.00990	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 17:37	1
Benzo[a]anthracene	0.0761		0.0737	0.0165	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 17:37	1
Benzo[a]pyrene	ND		0.0737	0.0132	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 17:37	1
Benzo[b]fluoranthene	0.132		0.0737	0.0132	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 17:37	1
Benzo[g,h,i]perylene	ND		0.0737	0.00990	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 17:37	1
Benzo[k]fluoranthene	0.0504	J	0.0737	0.0154	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 17:37	1
1-Methylnaphthalene	ND		0.0737	0.0154	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 17:37	1
Pyrene	0.203		0.0737	0.0132	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 17:37	1
Phenanthrene	ND		0.0737	0.00990	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 17:37	1
Chrysene	0.120		0.0737	0.00990	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 17:37	1
Dibenz(a,h)anthracene	ND		0.0737	0.00770	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 17:37	1
Fluoranthene	0.215		0.0737	0.00990	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 17:37	1
Fluorene	ND		0.0737	0.0132	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 17:37	1
Indeno[1,2,3-cd]pyrene	ND		0.0737	0.0110	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 17:37	1
Naphthalene	ND		0.0737	0.00990	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 17:37	1
2-Methylnaphthalene	ND		0.0737	0.0176	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 17:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	68		29 - 120	12/13/12 11:42	12/14/12 17:37	1
Terphenyl-d14 (Surr)	82		13 - 120	12/13/12 11:42	12/14/12 17:37	1
Nitrobenzene-d5 (Surr)	63		27 - 120	12/13/12 11:42	12/14/12 17:37	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10	0.10	%	12/13/12 10:21	12/13/12 10:21	12/13/12 10:21	1

TestAmerica Nashville

## Client Sample Results

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

TestAmerica Job ID: 490-14327-1

**Client Sample ID: 705 Bluebell**

Date Collected: 12/05/12 13:45

Date Received: 12/12/12 08:00

**Lab Sample ID: 490-14327-3**

Matrix: Soil

Percent Solids: 88.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00260	0.000871	mg/Kg	☒	12/13/12 10:46	12/14/12 23:39	1
Ethylbenzene	ND		0.00260	0.000871	mg/Kg	☒	12/13/12 10:46	12/14/12 23:39	1
Naphthalene	ND		0.00650	0.00221	mg/Kg	☒	12/13/12 10:46	12/14/12 23:39	1
Toluene	ND		0.00260	0.000961	mg/Kg	☒	12/13/12 10:46	12/14/12 23:39	1
Xylenes, Total	ND		0.00650	0.000871	mg/Kg	☒	12/13/12 10:46	12/14/12 23:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 130	12/13/12 10:46	12/14/12 23:39	1
4-Bromofluorobenzene (Surr)	110		70 - 130	12/13/12 10:46	12/14/12 23:39	1
Dibromofluoromethane (Surr)	104		70 - 130	12/13/12 10:46	12/14/12 23:39	1
Toluene-d8 (Surr)	115		70 - 130	12/13/12 10:46	12/14/12 23:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0744	0.0111	mg/Kg	☒	12/13/12 11:42	12/14/12 17:58	1
Acenaphthylene	ND		0.0744	0.00999	mg/Kg	☒	12/13/12 11:42	12/14/12 17:58	1
Anthracene	ND		0.0744	0.00999	mg/Kg	☒	12/13/12 11:42	12/14/12 17:58	1
Benzo[a]anthracene	ND		0.0744	0.0166	mg/Kg	☒	12/13/12 11:42	12/14/12 17:58	1
Benzo[a]pyrene	ND		0.0744	0.0133	mg/Kg	☒	12/13/12 11:42	12/14/12 17:58	1
Benzo[b]fluoranthene	ND		0.0744	0.0133	mg/Kg	☒	12/13/12 11:42	12/14/12 17:58	1
Benzo[g,h,i]perylene	ND		0.0744	0.00999	mg/Kg	☒	12/13/12 11:42	12/14/12 17:58	1
Benzo[k]fluoranthene	ND		0.0744	0.0155	mg/Kg	☒	12/13/12 11:42	12/14/12 17:58	1
1-Methylnaphthalene	ND		0.0744	0.0155	mg/Kg	☒	12/13/12 11:42	12/14/12 17:58	1
Pyrene	ND		0.0744	0.0133	mg/Kg	☒	12/13/12 11:42	12/14/12 17:58	1
Phenanthrene	ND		0.0744	0.00999	mg/Kg	☒	12/13/12 11:42	12/14/12 17:58	1
Chrysene	ND		0.0744	0.00999	mg/Kg	☒	12/13/12 11:42	12/14/12 17:58	1
Dibenz(a,h)anthracene	ND		0.0744	0.00777	mg/Kg	☒	12/13/12 11:42	12/14/12 17:58	1
Fluoranthene	ND		0.0744	0.00999	mg/Kg	☒	12/13/12 11:42	12/14/12 17:58	1
Fluorene	ND		0.0744	0.0133	mg/Kg	☒	12/13/12 11:42	12/14/12 17:58	1
Indeno[1,2,3-cd]pyrene	ND		0.0744	0.0111	mg/Kg	☒	12/13/12 11:42	12/14/12 17:58	1
Naphthalene	ND		0.0744	0.00999	mg/Kg	☒	12/13/12 11:42	12/14/12 17:58	1
2-Methylnaphthalene	ND		0.0744	0.0178	mg/Kg	☒	12/13/12 11:42	12/14/12 17:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	67		29 - 120	12/13/12 11:42	12/14/12 17:58	1
Terphenyl-d14 (Surr)	87		13 - 120	12/13/12 11:42	12/14/12 17:58	1
Nitrobenzene-d5 (Surr)	62		27 - 120	12/13/12 11:42	12/14/12 17:58	1

### General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10	0.10	%			12/13/12 10:21	1

TestAmerica Nashville



# Client Sample Results

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

TestAmerica Job ID: 490-14327-1

**Client Sample ID: 731 Bluebell**

Date Collected: 12/06/12 13:50

Date Received: 12/12/12 08:00

**Lab Sample ID: 490-14327-4**

Matrix: Soil  
Percent Solids: 96.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00232	0.000779	mg/Kg	☒	12/13/12 10:46	12/15/12 00:09	1
Ethylbenzene	ND		0.00232	0.000779	mg/Kg	☒	12/13/12 10:46	12/15/12 00:09	1
Naphthalene	ND		0.00581	0.00198	mg/Kg	☒	12/13/12 10:46	12/15/12 00:09	1
Toluene	ND		0.00232	0.000860	mg/Kg	☒	12/13/12 10:46	12/15/12 00:09	1
Xylenes, Total	ND		0.00581	0.000779	mg/Kg	☒	12/13/12 10:46	12/15/12 00:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 130	12/13/12 10:46	12/15/12 00:09	1
4-Bromofluorobenzene (Surr)	114		70 - 130	12/13/12 10:46	12/15/12 00:09	1
Dibromofluoromethane (Surr)	103		70 - 130	12/13/12 10:46	12/15/12 00:09	1
Toluene-d8 (Surr)	117		70 - 130	12/13/12 10:46	12/15/12 00:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0693	0.0103	mg/Kg	☒	12/13/12 11:42	12/14/12 18:19	1
Acenaphthylene	ND		0.0693	0.00931	mg/Kg	☒	12/13/12 11:42	12/14/12 18:19	1
Anthracene	ND		0.0693	0.00931	mg/Kg	☒	12/13/12 11:42	12/14/12 18:19	1
Benzo[a]anthracene	ND		0.0693	0.0155	mg/Kg	☒	12/13/12 11:42	12/14/12 18:19	1
Benzo[a]pyrene	ND		0.0693	0.0124	mg/Kg	☒	12/13/12 11:42	12/14/12 18:19	1
Benzo[b]fluoranthene	ND		0.0693	0.0124	mg/Kg	☒	12/13/12 11:42	12/14/12 18:19	1
Benzo[g,h,i]perylene	ND		0.0693	0.00931	mg/Kg	☒	12/13/12 11:42	12/14/12 18:19	1
Benzo[k]fluoranthene	ND		0.0693	0.0145	mg/Kg	☒	12/13/12 11:42	12/14/12 18:19	1
1-Methylnaphthalene	ND		0.0693	0.0145	mg/Kg	☒	12/13/12 11:42	12/14/12 18:19	1
Pyrene	ND		0.0693	0.0124	mg/Kg	☒	12/13/12 11:42	12/14/12 18:19	1
Phenanthrene	ND		0.0693	0.00931	mg/Kg	☒	12/13/12 11:42	12/14/12 18:19	1
Chrysene	ND		0.0693	0.00931	mg/Kg	☒	12/13/12 11:42	12/14/12 18:19	1
Dibenz(a,h)anthracene	ND		0.0693	0.00724	mg/Kg	☒	12/13/12 11:42	12/14/12 18:19	1
Fluoranthene	ND		0.0693	0.00931	mg/Kg	☒	12/13/12 11:42	12/14/12 18:19	1
Fluorene	ND		0.0693	0.0124	mg/Kg	☒	12/13/12 11:42	12/14/12 18:19	1
Indeno[1,2,3-cd]pyrene	ND		0.0693	0.0103	mg/Kg	☒	12/13/12 11:42	12/14/12 18:19	1
Naphthalene	ND		0.0693	0.00931	mg/Kg	☒	12/13/12 11:42	12/14/12 18:19	1
2-Methylnaphthalene	ND		0.0693	0.0165	mg/Kg	☒	12/13/12 11:42	12/14/12 18:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	66		29 - 120	12/13/12 11:42	12/14/12 18:19	1
Terphenyl-d14 (Surr)	83		13 - 120	12/13/12 11:42	12/14/12 18:19	1
Nitrobenzene-d5 (Surr)	55		27 - 120	12/13/12 11:42	12/14/12 18:19	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	96		0.10	0.10	%			12/13/12 10:21	1

TestAmerica Nashville

# Client Sample Results

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

TestAmerica Job ID: 490-14327-1

Client Sample ID: 693 Camellia

Date Collected: 12/03/12 15:45

Date Received: 12/12/12 08:00

Lab Sample ID: 490-14327-5

Matrix: Soil

Percent Solids: 90.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00250	0.000838	mg/Kg		12/13/12 10:46	12/15/12 00:39	1
Ethylbenzene	ND		0.00250	0.000838	mg/Kg		12/13/12 10:46	12/15/12 00:39	1
Naphthalene	ND	H	0.340	0.115	mg/Kg		12/13/12 10:44	12/18/12 13:12	1
Toluene	ND		0.00250	0.000925	mg/Kg		12/13/12 10:46	12/15/12 00:39	1
Xylenes, Total	ND		0.00625	0.000838	mg/Kg		12/13/12 10:46	12/15/12 00:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 130	12/13/12 10:46	12/15/12 00:39	1
1,2-Dichloroethane-d4 (Surr)	80		70 - 130	12/13/12 10:44	12/18/12 13:12	1
4-Bromofluorobenzene (Surr)	151	X	70 - 130	12/13/12 10:46	12/15/12 00:39	1
4-Bromofluorobenzene (Surr)	109		70 - 130	12/13/12 10:44	12/18/12 13:12	1
Dibromofluoromethane (Surr)	103		70 - 130	12/13/12 10:46	12/15/12 00:39	1
Dibromofluoromethane (Surr)	94		70 - 130	12/13/12 10:44	12/18/12 13:12	1
Toluene-d8 (Surr)	132	X	70 - 130	12/13/12 10:46	12/15/12 00:39	1
Toluene-d8 (Surr)	118		70 - 130	12/13/12 10:44	12/18/12 13:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0724	0.0108	mg/Kg		12/13/12 11:42	12/14/12 18:40	1
Acenaphthylene	ND		0.0724	0.00973	mg/Kg		12/13/12 11:42	12/14/12 18:40	1
Anthracene	ND		0.0724	0.00973	mg/Kg		12/13/12 11:42	12/14/12 18:40	1
Benzo[a]anthracene	0.0686	J	0.0724	0.0162	mg/Kg		12/13/12 11:42	12/14/12 18:40	1
Benzo[a]pyrene	0.164		0.0724	0.0130	mg/Kg		12/13/12 11:42	12/14/12 18:40	1
Benzo[b]fluoranthene	0.123		0.0724	0.0130	mg/Kg		12/13/12 11:42	12/14/12 18:40	1
Benzo[g,h,i]perylene	0.0592	J	0.0724	0.00973	mg/Kg		12/13/12 11:42	12/14/12 18:40	1
Benzo[k]fluoranthene	0.0309	J	0.0724	0.0151	mg/Kg		12/13/12 11:42	12/14/12 18:40	1
1-Methylnaphthalene	ND		0.0724	0.0151	mg/Kg		12/13/12 11:42	12/14/12 18:40	1
Pyrene	ND		0.0724	0.0130	mg/Kg		12/13/12 11:42	12/14/12 18:40	1
Phenanthrene	ND		0.0724	0.00973	mg/Kg		12/13/12 11:42	12/14/12 18:40	1
Chrysene	ND		0.0724	0.00973	mg/Kg		12/13/12 11:42	12/14/12 18:40	1
Dibenz[a,h]anthracene	ND		0.0724	0.00757	mg/Kg		12/13/12 11:42	12/14/12 18:40	1
Fluoranthene	ND		0.0724	0.00973	mg/Kg		12/13/12 11:42	12/14/12 18:40	1
Fluorene	ND		0.0724	0.0130	mg/Kg		12/13/12 11:42	12/14/12 18:40	1
Indeno[1,2,3-cd]pyrene	0.0599	J	0.0724	0.0108	mg/Kg		12/13/12 11:42	12/14/12 18:40	1
Naphthalene	ND		0.0724	0.00973	mg/Kg		12/13/12 11:42	12/14/12 18:40	1
2-Methylnaphthalene	ND		0.0724	0.0173	mg/Kg		12/13/12 11:42	12/14/12 18:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	72		29 - 120	12/13/12 11:42	12/14/12 18:40	1
Terphenyl-d14 (Surr)	71		13 - 120	12/13/12 11:42	12/14/12 18:40	1
Nitrobenzene-d5 (Surr)	63		27 - 120	12/13/12 11:42	12/14/12 18:40	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10	0.10	%			12/13/12 10:21	1

TestAmerica Nashville

## Client Sample Results

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

TestAmerica Job ID: 490-14327-1

**Client Sample ID: 1342 Albatross**

Date Collected: 12/04/12 14:30

Date Received: 12/12/12 08:00

**Lab Sample ID: 490-14327-6**

Matrix: Soil

Percent Solids: 89.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00245	0.000820	mg/Kg	12	12/13/12 10:46	12/15/12 01:09	1
Ethylbenzene	ND		0.00245	0.000820	mg/Kg	12	12/13/12 10:46	12/15/12 01:09	1
Naphthalene	ND		0.00612	0.00208	mg/Kg	12	12/13/12 10:46	12/15/12 01:09	1
Toluene	ND		0.00245	0.000906	mg/Kg	12	12/13/12 10:46	12/15/12 01:09	1
Xylenes, Total	ND		0.00612	0.000820	mg/Kg	12	12/13/12 10:46	12/15/12 01:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 130	12/13/12 10:46	12/15/12 01:09	1
4-Bromofluorobenzene (Surr)	108		70 - 130	12/13/12 10:46	12/15/12 01:09	1
Dibromofluoromethane (Surr)	101		70 - 130	12/13/12 10:46	12/15/12 01:09	1
Toluene-d8 (Surr)	122		70 - 130	12/13/12 10:46	12/15/12 01:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0737	0.0110	mg/Kg	12	12/13/12 11:42	12/14/12 19:01	1
Acenaphthylene	ND		0.0737	0.00991	mg/Kg	12	12/13/12 11:42	12/14/12 19:01	1
Anthracene	ND		0.0737	0.00991	mg/Kg	12	12/13/12 11:42	12/14/12 19:01	1
Benzo[a]anthracene	ND		0.0737	0.0165	mg/Kg	12	12/13/12 11:42	12/14/12 19:01	1
Benzo[a]pyrene	ND		0.0737	0.0132	mg/Kg	12	12/13/12 11:42	12/14/12 19:01	1
Benzo[b]fluoranthene	ND		0.0737	0.0132	mg/Kg	12	12/13/12 11:42	12/14/12 19:01	1
Benzo[g,h,i]perylene	ND		0.0737	0.00991	mg/Kg	12	12/13/12 11:42	12/14/12 19:01	1
Benzo[k]fluoranthene	ND		0.0737	0.0154	mg/Kg	12	12/13/12 11:42	12/14/12 19:01	1
1-Methylnaphthalene	ND		0.0737	0.0154	mg/Kg	12	12/13/12 11:42	12/14/12 19:01	1
Pyrene	ND		0.0737	0.0132	mg/Kg	12	12/13/12 11:42	12/14/12 19:01	1
Phenanthrene	ND		0.0737	0.00991	mg/Kg	12	12/13/12 11:42	12/14/12 19:01	1
Chrysene	ND		0.0737	0.00991	mg/Kg	12	12/13/12 11:42	12/14/12 19:01	1
Dibenz[a,h]anthracene	ND		0.0737	0.00770	mg/Kg	12	12/13/12 11:42	12/14/12 19:01	1
Fluoranthene	ND		0.0737	0.00991	mg/Kg	12	12/13/12 11:42	12/14/12 19:01	1
Fluorene	ND		0.0737	0.0132	mg/Kg	12	12/13/12 11:42	12/14/12 19:01	1
Indeno[1,2,3-cd]pyrene	ND		0.0737	0.0110	mg/Kg	12	12/13/12 11:42	12/14/12 19:01	1
Naphthalene	ND		0.0737	0.00991	mg/Kg	12	12/13/12 11:42	12/14/12 19:01	1
2-Methylnaphthalene	ND		0.0737	0.0176	mg/Kg	12	12/13/12 11:42	12/14/12 19:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	63		29 - 120	12/13/12 11:42	12/14/12 19:01	1
Terphenyl-d14 (Surr)	80		13 - 120	12/13/12 11:42	12/14/12 19:01	1
Nitrobenzene-d5 (Surr)	56		27 - 120	12/13/12 11:42	12/14/12 19:01	1

### General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10	0.10	%			12/13/12 10:21	1

TestAmerica Nashville

## Client Sample Results

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

TestAmerica Job ID: 490-14327-1

**Client Sample ID: 714 Bluebell**

Date Collected: 12/05/12 14:15

Date Received: 12/12/12 08:00

**Lab Sample ID: 490-14327-7**

Matrix: Soil

Percent Solids: 96.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00210	0.000704	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/15/12 01:40	1
Ethylbenzene	ND		0.00210	0.000704	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/15/12 01:40	1
Naphthalene	ND		0.00525	0.00179	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/15/12 01:40	1
Toluene	ND		0.00210	0.000778	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/15/12 01:40	1
Xylenes, Total	ND		0.00525	0.000704	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/15/12 01:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 130	12/13/12 10:46	12/15/12 01:40	1
4-Bromofluorobenzene (Surr)	109		70 - 130	12/13/12 10:46	12/15/12 01:40	1
Dibromofluoromethane (Surr)	103		70 - 130	12/13/12 10:46	12/15/12 01:40	1
Toluene-d8 (Surr)	113		70 - 130	12/13/12 10:46	12/15/12 01:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0694	0.0104	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:22	1
Acenaphthylene	ND		0.0694	0.00932	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:22	1
Anthracene	ND		0.0694	0.00932	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:22	1
Benzo[a]anthracene	0.474		0.0694	0.0155	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:22	1
Benzo[a]pyrene	0.100		0.0694	0.0124	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:22	1
Benzo[b]fluoranthene	0.323		0.0694	0.0124	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:22	1
Benzo[g,h,i]perylene	0.0408	J	0.0694	0.00932	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:22	1
Benzo[k]fluoranthene	0.128		0.0694	0.0145	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:22	1
1-Methylnaphthalene	ND		0.0694	0.0145	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:22	1
Pyrene	1.40		0.0694	0.0124	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:22	1
Phenanthrene	0.160		0.0694	0.00932	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:22	1
Chrysene	0.383		0.0694	0.00932	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:22	1
Dibenz(a,h)anthracene	ND		0.0694	0.00725	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:22	1
Fluoranthene	1.83		0.0694	0.00932	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:22	1
Fluorene	ND		0.0694	0.0124	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:22	1
Indeno[1,2,3-cd]pyrene	0.0448	J	0.0694	0.0104	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:22	1
Naphthalene	ND		0.0694	0.00932	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:22	1
2-Methylnaphthalene	ND		0.0694	0.0166	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	75		29 - 120	12/13/12 11:42	12/14/12 19:22	1
Terphenyl-d14 (Surr)	88		13 - 120	12/13/12 11:42	12/14/12 19:22	1
Nitrobenzene-d5 (Surr)	60		27 - 120	12/13/12 11:42	12/14/12 19:22	1

### General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	96		0.10	0.10	%	12/13/12 10:21			1

TestAmerica Nashville

## Client Sample Results

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

TestAmerica Job ID: 490-14327-1

**Client Sample ID: 726 Bluebell**

Date Collected: 12/06/12 14:00

Date Received: 12/12/12 08:00

**Lab Sample ID: 490-14327-8**

Matrix: Soil

Percent Solids: 90.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00232	0.000777	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/15/12 02:10	1
Ethylbenzene	ND		0.00232	0.000777	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/15/12 02:10	1
Naphthalene	ND		0.00580	0.00197	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/15/12 02:10	1
Toluene	ND		0.00232	0.000858	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/15/12 02:10	1
Xylenes, Total	ND		0.00580	0.000777	mg/Kg	12/13/12 10:46	12/13/12 10:46	12/15/12 02:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 130	12/13/12 10:46	12/15/12 02:10	1
4-Bromofluorobenzene (Surr)	111		70 - 130	12/13/12 10:46	12/15/12 02:10	1
Dibromofluoromethane (Surr)	102		70 - 130	12/13/12 10:46	12/15/12 02:10	1
Toluene-d8 (Surr)	120		70 - 130	12/13/12 10:46	12/15/12 02:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0723	0.0108	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:43	1
Acenaphthylene	ND		0.0723	0.00971	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:43	1
Anthracene	ND		0.0723	0.00971	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:43	1
Benzo[a]anthracene	ND		0.0723	0.0162	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:43	1
Benzo[a]pyrene	ND		0.0723	0.0129	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:43	1
Benzo[b]fluoranthene	ND		0.0723	0.0129	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:43	1
Benzo[g,h,i]perylene	ND		0.0723	0.00971	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:43	1
Benzo[k]fluoranthene	ND		0.0723	0.0151	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:43	1
1-Methylnaphthalene	ND		0.0723	0.0151	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:43	1
Pyrene	ND		0.0723	0.0129	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:43	1
Phenanthrene	ND		0.0723	0.00971	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:43	1
Chrysene	ND		0.0723	0.00971	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:43	1
Dibenz(a,h)anthracene	ND		0.0723	0.00755	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:43	1
Fluoranthene	ND		0.0723	0.00971	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:43	1
Fluorene	ND		0.0723	0.0129	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:43	1
Indeno[1,2,3-cd]pyrene	ND		0.0723	0.0108	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:43	1
Naphthalene	ND		0.0723	0.00971	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:43	1
2-Methylnaphthalene	ND		0.0723	0.0173	mg/Kg	12/13/12 11:42	12/13/12 11:42	12/14/12 19:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	68		29 - 120	12/13/12 11:42	12/14/12 19:43	1
Terphenyl-d14 (Surr)	84		13 - 120	12/13/12 11:42	12/14/12 19:43	1
Nitrobenzene-d5 (Surr)	60		27 - 120	12/13/12 11:42	12/14/12 19:43	1

### General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10	0.10	%	12/13/12 10:21			1

TestAmerica Nashville



## QC Sample Results

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

TestAmerica Job ID: 490-14327-1

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

Lab Sample ID: 490-14487-B-4-B MS

Matrix: Solid

Analysis Batch: 44506

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 43805

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.00313		0.0435	0.03655		mg/Kg		77	31 - 143
Ethylbenzene	0.00139	J	0.0435	0.03038		mg/Kg		67	23 - 161
Naphthalene	ND		0.0435	0.02210		mg/Kg		51	10 - 176
Toluene	0.00820		0.0435	0.04025		mg/Kg		74	30 - 155
Xylenes, Total	0.00353	J	0.130	0.09091		mg/Kg		68	25 - 162

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		70 - 130
4-Bromofluorobenzene (Surr)	103		70 - 130
Dibromofluoromethane (Surr)	109		70 - 130
Toluene-d8 (Surr)	107		70 - 130

Lab Sample ID: 490-14487-C-4-C MSD

Matrix: Solid

Analysis Batch: 44506

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 43805

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.00313		0.0414	0.04653		mg/Kg		105	31 - 143	24	50
Ethylbenzene	0.00139	J	0.0414	0.04591		mg/Kg		108	23 - 161	41	50
Naphthalene	ND		0.0414	0.03795	F	mg/Kg		92	10 - 176	53	50
Toluene	0.00820		0.0414	0.05951		mg/Kg		124	30 - 155	39	50
Xylenes, Total	0.00353	J	0.124	0.1380		mg/Kg		109	25 - 162	41	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		70 - 130
4-Bromofluorobenzene (Surr)	102		70 - 130
Dibromofluoromethane (Surr)	107		70 - 130
Toluene-d8 (Surr)	115		70 - 130

Lab Sample ID: MB 490-43876/6

Matrix: Solid

Analysis Batch: 43876

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			12/14/12 21:08	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			12/14/12 21:08	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			12/14/12 21:08	1
Toluene	ND		0.00200	0.000740	mg/Kg			12/14/12 21:08	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			12/14/12 21:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	82		70 - 130		12/14/12 21:08	1
4-Bromofluorobenzene (Surr)	109		70 - 130		12/14/12 21:08	1
Dibromofluoromethane (Surr)	101		70 - 130		12/14/12 21:08	1
Toluene-d8 (Surr)	116		70 - 130		12/14/12 21:08	1

TestAmerica Nashville

## QC Sample Results

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

TestAmerica Job ID: 490-14327-1

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

Lab Sample ID: LCS 490-43876/3

Matrix: Solid

Analysis Batch: 43876

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05592		mg/Kg		112	75 - 127
Ethylbenzene	0.0500	0.05321		mg/Kg		106	80 - 134
Naphthalene	0.0500	0.04878		mg/Kg		98	69 - 150
Toluene	0.0500	0.06526		mg/Kg		131	80 - 132
Xylenes, Total	0.150	0.1610		mg/Kg		107	80 - 137

Surrogate	%Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	107		70 - 130
Toluene-d8 (Surr)	116		70 - 130

Lab Sample ID: LCSD 490-43876/4

Matrix: Solid

Analysis Batch: 43876

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.0500	0.05434		mg/Kg		109	75 - 127	3	50
Ethylbenzene	0.0500	0.05277		mg/Kg		106	80 - 134	1	50
Naphthalene	0.0500	0.04783		mg/Kg		96	69 - 150	2	50
Toluene	0.0500	0.06302		mg/Kg		126	80 - 132	4	50
Xylenes, Total	0.150	0.1592		mg/Kg		106	80 - 137	1	50

Surrogate	%Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	107		70 - 130
Toluene-d8 (Surr)	117		70 - 130

Lab Sample ID: MB 490-44506/7

Matrix: Solid

Analysis Batch: 44506

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0340	mg/Kg			12/18/12 09:11	1
Ethylbenzene	ND		0.100	0.0340	mg/Kg			12/18/12 09:11	1
Naphthalene	ND		0.250	0.0850	mg/Kg			12/18/12 09:11	1
Toluene	ND		0.100	0.0370	mg/Kg			12/18/12 09:11	1
Xylenes, Total	ND		0.250	0.0340	mg/Kg			12/18/12 09:11	1

Surrogate	%Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	78		70 - 130		12/18/12 09:11	1
4-Bromofluorobenzene (Surr)	108		70 - 130		12/18/12 09:11	1
Dibromofluoromethane (Surr)	96		70 - 130		12/18/12 09:11	1
Toluene-d8 (Surr)	125		70 - 130		12/18/12 09:11	1

TestAmerica Nashville

## QC Sample Results

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

TestAmerica Job ID: 490-14327-1

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

Lab Sample ID: LCS 490-44506/3

Matrix: Solid

Analysis Batch: 44506

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				Limits
Benzene	0.0500	0.04848		mg/Kg		97	75 - 127
Ethylbenzene	0.0500	0.04587		mg/Kg		92	80 - 134
Naphthalene	0.0500	0.04605		mg/Kg		92	69 - 150
Toluene	0.0500	0.05808		mg/Kg		116	80 - 132
Xylenes, Total	0.150	0.1372		mg/Kg		91	80 - 137

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	90		70 - 130
4-Bromofluorobenzene (Surr)	95		70 - 130
Dibromofluoromethane (Surr)	108		70 - 130
Toluene-d8 (Surr)	117		70 - 130

Lab Sample ID: LCSD 490-44506/4

Matrix: Solid

Analysis Batch: 44506

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Added	Result	Qualifier				Limits		
Benzene	0.0500	0.05073		mg/Kg		101	75 - 127	5	50
Ethylbenzene	0.0500	0.05046		mg/Kg		101	80 - 134	10	50
Naphthalene	0.0500	0.04755		mg/Kg		95	69 - 150	3	50
Toluene	0.0500	0.06231		mg/Kg		125	80 - 132	7	50
Xylenes, Total	0.150	0.1555		mg/Kg		104	80 - 137	12	50

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	93		70 - 130
4-Bromofluorobenzene (Surr)	95		70 - 130
Dibromofluoromethane (Surr)	106		70 - 130
Toluene-d8 (Surr)	116		70 - 130

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

Lab Sample ID: MB 490-43519/1-A

Matrix: Solid

Analysis Batch: 43942

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 43519

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acenaphthene	ND		0.0670	0.0100	mg/Kg		12/13/12 11:42	12/14/12 15:51	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		12/13/12 11:42	12/14/12 15:51	1
Anthracene	ND		0.0670	0.00900	mg/Kg		12/13/12 11:42	12/14/12 15:51	1
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		12/13/12 11:42	12/14/12 15:51	1
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		12/13/12 11:42	12/14/12 15:51	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		12/13/12 11:42	12/14/12 15:51	1
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		12/13/12 11:42	12/14/12 15:51	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		12/13/12 11:42	12/14/12 15:51	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		12/13/12 11:42	12/14/12 15:51	1
Pyrene	ND		0.0670	0.0120	mg/Kg		12/13/12 11:42	12/14/12 15:51	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		12/13/12 11:42	12/14/12 15:51	1

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## QC Sample Results

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

TestAmerica Job ID: 490-14327-1

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

Lab Sample ID: MB 490-43519/1-A

Matrix: Solid

Analysis Batch: 43942

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 43519

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chrysene	ND		0.0670	0.00900	mg/Kg		12/13/12 11:42	12/14/12 15:51	1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		12/13/12 11:42	12/14/12 15:51	1
Fluoranthene	ND		0.0670	0.00900	mg/Kg		12/13/12 11:42	12/14/12 15:51	1
Fluorene	ND		0.0670	0.0120	mg/Kg		12/13/12 11:42	12/14/12 15:51	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		12/13/12 11:42	12/14/12 15:51	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		12/13/12 11:42	12/14/12 15:51	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		12/13/12 11:42	12/14/12 15:51	1
Surrogate	MB MB		Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
2-Fluorobiphenyl (Surr)	65		29 - 120				12/13/12 11:42	12/14/12 15:51	1
Terphenyl-d14 (Surr)	84		13 - 120				12/13/12 11:42	12/14/12 15:51	1
Nitrobenzene-d5 (Surr)	58		27 - 120				12/13/12 11:42	12/14/12 15:51	1

Lab Sample ID: LCS 490-43519/2-A

Matrix: Solid

Analysis Batch: 43942

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 43519

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	1.67	1.413		mg/Kg		85	38 - 120
Anthracene	1.67	1.373		mg/Kg		82	46 - 124
Benzo[a]anthracene	1.67	1.400		mg/Kg		84	45 - 120
Benzo[a]pyrene	1.67	1.448		mg/Kg		87	45 - 120
Benzo[b]fluoranthene	1.67	1.370		mg/Kg		82	42 - 120
Benzo[g,h,i]perylene	1.67	1.462		mg/Kg		88	38 - 120
Benzo[k]fluoranthene	1.67	1.537		mg/Kg		92	42 - 120
1-Methylnaphthalene	1.67	1.316		mg/Kg		79	32 - 120
Pyrene	1.67	1.434		mg/Kg		86	43 - 120
Phenanthrene	1.67	1.456		mg/Kg		87	45 - 120
Chrysene	1.67	1.383		mg/Kg		83	43 - 120
Dibenz(a,h)anthracene	1.67	1.449		mg/Kg		87	32 - 128
Fluoranthene	1.67	1.413		mg/Kg		85	46 - 120
Fluorene	1.67	1.398		mg/Kg		84	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	1.448		mg/Kg		87	41 - 121
Naphthalene	1.67	1.333		mg/Kg		80	32 - 120
2-Methylnaphthalene	1.67	1.344		mg/Kg		81	28 - 120
Surrogate	LCS LCS		Limits				%Rec. Limits
	%Recovery	Qualifier					
2-Fluorobiphenyl (Surr)	73		29 - 120				
Terphenyl-d14 (Surr)	97		13 - 120				
Nitrobenzene-d5 (Surr)	63		27 - 120				

Lab Sample ID: 490-14327-1 MS

Matrix: Soil

Analysis Batch: 43942

Client Sample ID: 1315 Albatross

Prep Type: Total/NA

Prep Batch: 43519

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
Acenaphthylene	ND		1.71	1.552		mg/Kg	☐	91	25 - 120
Anthracene	0.0117	J	1.71	1.550		mg/Kg	☐	90	28 - 125

TestAmerica Nashville

# QC Sample Results

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

TestAmerica Job ID: 490-14327-1

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

Lab Sample ID: 490-14327-1 MS

Matrix: Soil

Analysis Batch: 43942

Client Sample ID: 1315 Albatross

Prep Type: Total/NA

Prep Batch: 43519

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Benzo[a]anthracene	0.172		1.71	1.898		mg/Kg	☐	101	23 - 120	
Benzo[a]pyrene	0.0480	J	1.71	1.647		mg/Kg	☐	94	15 - 128	
Benzo[b]fluoranthene	0.128		1.71	1.903		mg/Kg	☐	104	12 - 133	
Benzo[g,h,i]perylene	ND		1.71	1.613		mg/Kg	☐	95	22 - 120	
Benzo[k]fluoranthene	0.0770		1.71	1.596		mg/Kg	☐	89	28 - 120	
1-Methylnaphthalene	ND		1.71	1.400		mg/Kg	☐	82	10 - 120	
Pyrene	0.557		1.71	2.265		mg/Kg	☐	100	20 - 123	
Phenanthrene	0.0849		1.71	1.732		mg/Kg	☐	97	21 - 122	
Chrysene	0.145		1.71	1.859		mg/Kg	☐	100	20 - 120	
Dibenz(a,h)anthracene	ND		1.71	1.618		mg/Kg	☐	95	12 - 128	
Fluoranthene	0.620		1.71	2.394		mg/Kg	☐	104	10 - 143	
Fluorene	ND		1.71	1.524		mg/Kg	☐	89	20 - 120	
Indeno[1,2,3-cd]pyrene	ND		1.71	1.633		mg/Kg	☐	96	22 - 121	
Naphthalene	ND		1.71	1.432		mg/Kg	☐	84	10 - 120	
2-Methylnaphthalene	ND		1.71	1.446		mg/Kg	☐	85	13 - 120	

Surrogate	MS	MS	Limits
%Recovery	Qualifier		
2-Fluorobiphenyl (Surr)	73		29 - 120
Terphenyl-d14 (Surr)	88		13 - 120
Nitrobenzene-d5 (Surr)	59		27 - 120

Lab Sample ID: 490-14327-1 MSD

Matrix: Soil

Analysis Batch: 43942

Client Sample ID: 1315 Albatross

Prep Type: Total/NA

Prep Batch: 43519

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits		RPD	Limit
Acenaphthylene	ND		1.73	1.511		mg/Kg	☐	87	25 - 120		3	50
Anthracene	0.0117	J	1.73	1.546		mg/Kg	☐	89	28 - 125		0	49
Benzo[a]anthracene	0.172		1.73	1.658		mg/Kg	☐	86	23 - 120		14	50
Benzo[a]pyrene	0.0480	J	1.73	1.598		mg/Kg	☐	90	15 - 128		3	50
Benzo[b]fluoranthene	0.128		1.73	1.744		mg/Kg	☐	93	12 - 133		9	50
Benzo[g,h,i]perylene	ND		1.73	1.584		mg/Kg	☐	92	22 - 120		2	50
Benzo[k]fluoranthene	0.0770		1.73	1.473		mg/Kg	☐	81	28 - 120		8	45
1-Methylnaphthalene	ND		1.73	1.469		mg/Kg	☐	85	10 - 120		5	50
Pyrene	0.557		1.73	1.820		mg/Kg	☐	73	20 - 123		22	50
Phenanthrene	0.0849		1.73	1.658		mg/Kg	☐	91	21 - 122		4	50
Chrysene	0.145		1.73	1.616		mg/Kg	☐	85	20 - 120		14	49
Dibenz(a,h)anthracene	ND		1.73	1.587		mg/Kg	☐	92	12 - 128		2	50
Fluoranthene	0.620		1.73	1.908		mg/Kg	☐	74	10 - 143		23	50
Fluorene	ND		1.73	1.517		mg/Kg	☐	88	20 - 120		0	50
Indeno[1,2,3-cd]pyrene	ND		1.73	1.598		mg/Kg	☐	92	22 - 121		2	50
Naphthalene	ND		1.73	1.492		mg/Kg	☐	86	10 - 120		4	50
2-Methylnaphthalene	ND		1.73	1.492		mg/Kg	☐	86	13 - 120		3	50

Surrogate	MSD	MSD	Limits
%Recovery	Qualifier		
2-Fluorobiphenyl (Surr)	71		29 - 120
Terphenyl-d14 (Surr)	89		13 - 120

TestAmerica Nashville

## QC Sample Results

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

TestAmerica Job ID: 490-14327-1

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

Lab Sample ID: 490-14327-1 MSD

Matrix: Soil

Analysis Batch: 43942

Client Sample ID: 1315 Albatross

Prep Type: Total/NA

Prep Batch: 43519

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
Nitrobenzene-d5 (Surr)	62		27 - 120

### Method: Moisture - Percent Moisture

Lab Sample ID: 490-14327-1 DU

Matrix: Soil

Analysis Batch: 43438

Client Sample ID: 1315 Albatross

Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Percent Solids	95		95		%		0.3	20

TestAmerica Nashville

## QC Association Summary

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

TestAmerica Job ID: 490-14327-1

### GC/MS VOA

#### Prep Batch: 43459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-14327-5	693 Camellia	Total/NA	Soil	5035	

#### Prep Batch: 43461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-14327-1	1315 Albatross	Total/NA	Soil	5035	
490-14327-2	1338 Albatross	Total/NA	Soil	5035	
490-14327-3	705 Bluebell	Total/NA	Soil	5035	
490-14327-4	731 Bluebell	Total/NA	Soil	5035	
490-14327-5	693 Camellia	Total/NA	Soil	5035	
490-14327-6	1342 Albatross	Total/NA	Soil	5035	
490-14327-7	714 Bluebell	Total/NA	Soil	5035	
490-14327-8	726 Bluebell	Total/NA	Soil	5035	

#### Prep Batch: 43805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-14487-B-4-B MS	Matrix Spike	Total/NA	Solid	5035	
490-14487-C-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

#### Analysis Batch: 43876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-14327-1	1315 Albatross	Total/NA	Soil	8260B	43461
490-14327-2	1338 Albatross	Total/NA	Soil	8260B	43461
490-14327-3	705 Bluebell	Total/NA	Soil	8260B	43461
490-14327-4	731 Bluebell	Total/NA	Soil	8260B	43461
490-14327-5	693 Camellia	Total/NA	Soil	8260B	43461
490-14327-6	1342 Albatross	Total/NA	Soil	8260B	43461
490-14327-7	714 Bluebell	Total/NA	Soil	8260B	43461
490-14327-8	726 Bluebell	Total/NA	Soil	8260B	43461
LCS 490-43876/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-43876/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-43876/6	Method Blank	Total/NA	Solid	8260B	

#### Analysis Batch: 44506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-14327-5	693 Camellia	Total/NA	Soil	8260B	43459
490-14487-B-4-B MS	Matrix Spike	Total/NA	Solid	8260B	43805
490-14487-C-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	43805
LCS 490-44506/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-44506/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-44506/7	Method Blank	Total/NA	Solid	8260B	

### GC/MS Semi VOA

#### Prep Batch: 43519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-14327-1	1315 Albatross	Total/NA	Soil	3550C	
490-14327-1 MS	1315 Albatross	Total/NA	Soil	3550C	
490-14327-1 MSD	1315 Albatross	Total/NA	Soil	3550C	
490-14327-2	1338 Albatross	Total/NA	Soil	3550C	
490-14327-3	705 Bluebell	Total/NA	Soil	3550C	

TestAmerica Nashville

## QC Association Summary

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

TestAmerica Job ID: 490-14327-1

### GC/MS Semi VOA (Continued)

#### Prep Batch: 43519 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-14327-4	731 Bluebell	Total/NA	Soil	3550C	
490-14327-5	693 Camellia	Total/NA	Soil	3550C	
490-14327-6	1342 Albatross	Total/NA	Soil	3550C	
490-14327-7	714 Bluebell	Total/NA	Soil	3550C	
490-14327-8	726 Bluebell	Total/NA	Soil	3550C	
LCS 490-43519/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 490-43519/1-A	Method Blank	Total/NA	Solid	3550C	

#### Analysis Batch: 43942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-14327-1	1315 Albatross	Total/NA	Soil	8270D	43519
490-14327-1 MS	1315 Albatross	Total/NA	Soil	8270D	43519
490-14327-1 MSD	1315 Albatross	Total/NA	Soil	8270D	43519
490-14327-2	1338 Albatross	Total/NA	Soil	8270D	43519
490-14327-3	705 Bluebell	Total/NA	Soil	8270D	43519
490-14327-4	731 Bluebell	Total/NA	Soil	8270D	43519
490-14327-5	693 Camellia	Total/NA	Soil	8270D	43519
490-14327-6	1342 Albatross	Total/NA	Soil	8270D	43519
490-14327-7	714 Bluebell	Total/NA	Soil	8270D	43519
490-14327-8	726 Bluebell	Total/NA	Soil	8270D	43519
LCS 490-43519/2-A	Lab Control Sample	Total/NA	Solid	8270D	43519
MB 490-43519/1-A	Method Blank	Total/NA	Solid	8270D	43519

### General Chemistry

#### Analysis Batch: 43438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-14327-1	1315 Albatross	Total/NA	Soil	Moisture	
490-14327-1 DU	1315 Albatross	Total/NA	Soil	Moisture	
490-14327-2	1338 Albatross	Total/NA	Soil	Moisture	
490-14327-3	705 Bluebell	Total/NA	Soil	Moisture	
490-14327-4	731 Bluebell	Total/NA	Soil	Moisture	
490-14327-5	693 Camellia	Total/NA	Soil	Moisture	
490-14327-6	1342 Albatross	Total/NA	Soil	Moisture	
490-14327-7	714 Bluebell	Total/NA	Soil	Moisture	
490-14327-8	726 Bluebell	Total/NA	Soil	Moisture	

TestAmerica Nashville

## Lab Chronicle

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

TestAmerica Job ID: 490-14327-1

### Client Sample ID: 1315 Albatross

Date Collected: 12/03/12 15:15

Date Received: 12/12/12 08:00

### Lab Sample ID: 490-14327-1

Matrix: Soil  
Percent Solids: 94.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			43461	12/13/12 10:46	ML	TAL NSH
Total/NA	Analysis	8260B		1	43876	12/14/12 22:39	AF	TAL NSH
Total/NA	Prep	3550C			43519	12/13/12 11:42	AK	TAL NSH
Total/NA	Analysis	8270D		1	43942	12/14/12 16:34	WS	TAL NSH
Total/NA	Analysis	Moisture		1	43438	12/13/12 10:21	RS	TAL NSH

### Client Sample ID: 1338 Albatross

Date Collected: 12/04/12 13:35

Date Received: 12/12/12 08:00

### Lab Sample ID: 490-14327-2

Matrix: Soil  
Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			43461	12/13/12 10:46	ML	TAL NSH
Total/NA	Analysis	8260B		1	43876	12/14/12 23:09	AF	TAL NSH
Total/NA	Prep	3550C			43519	12/13/12 11:42	AK	TAL NSH
Total/NA	Analysis	8270D		1	43942	12/14/12 17:37	WS	TAL NSH
Total/NA	Analysis	Moisture		1	43438	12/13/12 10:21	RS	TAL NSH

### Client Sample ID: 705 Bluebell

Date Collected: 12/05/12 13:45

Date Received: 12/12/12 08:00

### Lab Sample ID: 490-14327-3

Matrix: Soil  
Percent Solids: 88.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			43461	12/13/12 10:46	ML	TAL NSH
Total/NA	Analysis	8260B		1	43876	12/14/12 23:39	AF	TAL NSH
Total/NA	Prep	3550C			43519	12/13/12 11:42	AK	TAL NSH
Total/NA	Analysis	8270D		1	43942	12/14/12 17:58	WS	TAL NSH
Total/NA	Analysis	Moisture		1	43438	12/13/12 10:21	RS	TAL NSH

### Client Sample ID: 731 Bluebell

Date Collected: 12/06/12 13:50

Date Received: 12/12/12 08:00

### Lab Sample ID: 490-14327-4

Matrix: Soil  
Percent Solids: 96.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			43461	12/13/12 10:46	ML	TAL NSH
Total/NA	Analysis	8260B		1	43876	12/15/12 00:09	AF	TAL NSH
Total/NA	Prep	3550C			43519	12/13/12 11:42	AK	TAL NSH
Total/NA	Analysis	8270D		1	43942	12/14/12 18:19	WS	TAL NSH
Total/NA	Analysis	Moisture		1	43438	12/13/12 10:21	RS	TAL NSH

TestAmerica Nashville



## Lab Chronicle

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

TestAmerica Job ID: 490-14327-1

### Client Sample ID: 693 Camellia

Date Collected: 12/03/12 15:45

Date Received: 12/12/12 08:00

### Lab Sample ID: 490-14327-5

Matrix: Soil  
Percent Solids: 90.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			43461	12/13/12 10:46	ML	TAL NSH
Total/NA	Analysis	8260B		1	43876	12/15/12 00:39	AF	TAL NSH
Total/NA	Prep	5035			43459	12/13/12 10:44	ML	TAL NSH
Total/NA	Analysis	8260B		1	44506	12/18/12 13:12	AF	TAL NSH
Total/NA	Prep	3550C			43519	12/13/12 11:42	AK	TAL NSH
Total/NA	Analysis	8270D		1	43942	12/14/12 18:40	WS	TAL NSH
Total/NA	Analysis	Moisture		1	43438	12/13/12 10:21	RS	TAL NSH



### Client Sample ID: 1342 Albatross

Date Collected: 12/04/12 14:30

Date Received: 12/12/12 08:00

### Lab Sample ID: 490-14327-6

Matrix: Soil  
Percent Solids: 89.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			43461	12/13/12 10:46	ML	TAL NSH
Total/NA	Analysis	8260B		1	43876	12/15/12 01:09	AF	TAL NSH
Total/NA	Prep	3550C			43519	12/13/12 11:42	AK	TAL NSH
Total/NA	Analysis	8270D		1	43942	12/14/12 19:01	WS	TAL NSH
Total/NA	Analysis	Moisture		1	43438	12/13/12 10:21	RS	TAL NSH

### Client Sample ID: 714 Bluebell

Date Collected: 12/05/12 14:15

Date Received: 12/12/12 08:00

### Lab Sample ID: 490-14327-7

Matrix: Soil  
Percent Solids: 96.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			43461	12/13/12 10:46	ML	TAL NSH
Total/NA	Analysis	8260B		1	43876	12/15/12 01:40	AF	TAL NSH
Total/NA	Prep	3550C			43519	12/13/12 11:42	AK	TAL NSH
Total/NA	Analysis	8270D		1	43942	12/14/12 19:22	WS	TAL NSH
Total/NA	Analysis	Moisture		1	43438	12/13/12 10:21	RS	TAL NSH

### Client Sample ID: 726 Bluebell

Date Collected: 12/06/12 14:00

Date Received: 12/12/12 08:00

### Lab Sample ID: 490-14327-8

Matrix: Soil  
Percent Solids: 90.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			43461	12/13/12 10:46	ML	TAL NSH
Total/NA	Analysis	8260B		1	43876	12/15/12 02:10	AF	TAL NSH
Total/NA	Prep	3550C			43519	12/13/12 11:42	AK	TAL NSH
Total/NA	Analysis	8270D		1	43942	12/14/12 19:43	WS	TAL NSH
Total/NA	Analysis	Moisture		1	43438	12/13/12 10:21	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: Laurel Bay Housing Project

TestAmerica Job ID: 490-14327-1

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

### Protocol References:

EPA = US Environmental Protection Agency

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

### Laboratory References:

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



## Certification Summary

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

TestAmerica Job ID: 490-14327-1

### Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
	ACIL		393	10-30-13
A2LA	ISO/IEC 17025		0453.07	12-31-13
Alabama	State Program	4	41150	05-31-13
Alaska (UST)	State Program	10	UST-087	07-24-13
Arizona	State Program	9	AZ0473	05-05-13
Arkansas DEQ	State Program	6	88-0737	04-25-13
California	NELAC	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	NELAC	4	E87358	06-30-13
Illinois	NELAC	5	200010	12-09-13
Iowa	State Program	7	131	05-01-14
Kansas	NELAC	7	E-10229	10-31-13
Kentucky	State Program	4	90038	12-31-12
Kentucky (UST)	State Program	4	19	09-15-13
Louisiana	NELAC	6	LA120025	12-31-12
Louisiana	NELAC	6	30613	06-30-13
Maryland	State Program	3	316	03-31-13
Massachusetts	State Program	1	M-TN032	06-30-13
Minnesota	NELAC	5	047-999-345	12-31-12
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	NELAC	1	2963	10-09-13
New Jersey	NELAC	2	TN965	06-30-13
New York	NELAC	2	11342	04-01-13
North Carolina DENR	State Program	4	387	12-31-12
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	NELAC	10	TN200001	04-30-13
Pennsylvania	NELAC	3	68-00585	06-30-13
Rhode Island	State Program	1	LAO00268	12-30-12
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	NELAC	6	T104704077-09-TX	08-31-13
USDA	Federal		S-48469	11-02-13
Utah	NELAC	8	TAN	06-30-13
Virginia	NELAC	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

TestAmerica Nashville

### COOLER RECEIPT FORM



490-14327 Chain of Custody

Cooler Received/Opened On 12/12/2012 @ 0800

1. Tracking # 6106 (last 4 digits, FedEx)

Courier: Fedex IR Gun ID 14740456

2. Temperature of rep. sample or temp blank when opened: 5.8 Degrees Celsius

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

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 2 Front/Back

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

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

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

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

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

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

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

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

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

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

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

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

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

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) W

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) W

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

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

# TestAmerica

Nashville Division  
2680 Foster Creighton  
Nashville, TN 37204  
Phone: 615-728-0177  
Toll Free: 800-788-0880  
Fax: 615-728-3404

Client Name/Account #: EEG - SBG # 2449

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29456

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

Telephone Number: 843.412.2097

Sampler Name (Print): Chris Tinsell

Sampler Signature: *[Signature]*

Fax No.: 843-879-0401

Site State: SC

PO#: 1063

TA Quote #:

Project ID: Laurel Bay Housing Project

Project #:

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 ☐

Loc: 490  
14327

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Ice	HNO <sub>3</sub> (Red Label)	HCL (Blue Label)	MeOH (Orange Label)	H <sub>2</sub> SO <sub>4</sub> Plastic (Yellow Label)	H <sub>2</sub> SO <sub>4</sub> Glass (Yellow Label)	None (Black Label)	Other (Specify)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (Specify):	BTEX + Napth - 8280	PAH - 8270D	Analyze For	RUSH TAT (Pre-Schedule)
1315 H104/ross	12/3/12	1515	5	X																				
1338 Albataross	12/4/12	1335	5	X																				
705 Bluebell	12/5/12	1345	5	X																				
731 Bluebell	12/6/12	1350	5	X																				

Special Instructions:

Method of Shipment:

FEDEX

Laboratory Comments:

Temperature Upon Receipt: 56  
VOCs Free of Headspace?

Y

Relinquished by: <i>[Signature]</i>	Date: 12/11/12	Time: 0900	Received by: <i>[Signature]</i>	Date: 12-12-12	Time: 0800
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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Nashville Division  
2960 Foster Creighton  
Nashville, TN 37204

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

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29456

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

Telephone Number: 843.412.2097

Sample Name: (Print)

Sampler Signature:

Fax No.: 843-879-0401

Site State: SC

PO#: 1063

TA Quote #:

Project ID: Laurel Bay Housing Project

Project #:

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

Compliance Monitoring?  
Enforcement Action?

Yes \_\_\_ No \_\_\_  
Yes \_\_\_ No \_\_\_

Loc: 490  
14327  
#1  
A

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Ice	HNO <sub>3</sub> (Red Label)	NaOH (Orange Label)	H <sub>2</sub> SO <sub>4</sub> Plastic (Yellow Label)	H <sub>2</sub> SO <sub>4</sub> Glass (Yellow Label)	None (Black Label)	Other (Specify)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	BTEX + Napth - 8260E	PAH - 8270D	RUSH TAT (Pre-Schedule)
693 Camel/1.4	12/3/12	1545	5	X																X		5
1342 Albarkoss	12/4/12	1430	5	X																X		4
714 Bluebell	12/5/12	1415	5	X																X		7
726 Bluebell	12/6/12	1400	5	X																X		8

Special Instructions:

Method of Shipment:

Laboratory Comments:  
Temperature Upon Receipt: 58c  
VOCs Free of Headspace?

Relinquished by:	Date	Time	Received by:	Date	Time
<i>[Signature]</i>	12/11/10	0900	<i>[Signature]</i>	12-12-12	0800

## Login Sample Receipt Checklist

Client: Environmental Enterprise Group

Job Number: 490-14327-1

Login Number: 14327

List Source: TestAmerica Nashville

List Number: 1

Creator: McBride, Mike

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

ATTACHMENT A



# NON-HAZARDOUS MANIFEST

<b>NON-HAZARDOUS MANIFEST</b>		Generator's US EPA ID No.	Manifest Doc No.		2. Page 1 of 1		
3. Generator's Mailing Address: MCAS, BEAUFORT LAUREL BAY HOUSING BEAUFORT, SC 29907		Generator's Site Address (If different than mailing):		A. Manifest Number <b>WMNA</b> 00316844			
4. Generator's Phone 843-228-6461				B. State Generator's ID			
5. Transporter 1 Company Name EEG, INC.		6. US EPA ID Number		C. State Transporter's ID			
				D. Transporter's Phone 843-879-0411			
7. Transporter 2 Company Name		8. US EPA ID Number		E. State Transporter's ID			
				F. Transporter's Phone			
9. Designated Facility Name and Site Address HICKORY HILL LANDFILL 2621 LOW COUNTRY ROAD RIDGELAND, SC 29936		10. US EPA ID Number		G. State Facility ID			
				H. State Facility Phone 843-987-4643			
11. Description of Waste Materials		12. Containers		13. Total	14. Unit	I. Misc. Comments	
		No.	Type	Quantity	Wt./Vol.		
a. HEATING OIL TANKS FILLED WITH SAND  WM Profile # 102655SC				20 y			
b.  WM Profile #							
c.  WM Profile #							
d.  WM Profile #							
J. Additional Descriptions for Materials Listed Above		K. Disposal Location					
		Cell	Level				
		Grid					
15. Special Handling Instructions and Additional Information AST's from: 2) 1460 Cardinal 4) 1316 Albatross 1) 1443 Cardinal 3) 1436 Dove ✓ 5) 593 Aster ✓ 6) 693 America ✓							
Purchase Order #		EMERGENCY CONTACT / PHONE NO.:					
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.							
Printed Name		Signature "On behalf of"			Month	Day	Year
					12	4	12
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed Name		Signature			Month	Day	Year
JAMES BALDWIN		James Baldwin			12	5	12
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed Name		Signature			Month	Day	Year
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.							
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.							
Printed Name		Signature			Month	Day	Year
Tom Cofield		Tom Cofield			12	5	12

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY

**Appendix C**  
**Laboratory Analytical Report - Groundwater**



# Volatile Organic Compounds by GC/MS

Client: <b>AECOM - Resolution Consultants</b>				Laboratory ID: <b>SC03027-005</b>			
Description: <b>BEALB693TW01WG20170301</b>				Matrix: <b>Aqueous</b>			
Date Sampled: <b>03/01/2017 1050</b>							
Date Received: <b>03/03/2017</b>							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/07/2017 1043	PMV		36403

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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		105	85-114
Dibromofluoromethane		109	80-119
1,2-Dichloroethane-d4		100	81-118
Toluene-d8		97	89-112

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

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

# Semivolatile Organic Compounds by GC/MS

Client: <b>AECOM - Resolution Consultants</b>	Laboratory ID: <b>SC03027-005</b>
Description: <b>BEALB693TW01WG20170301</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>03/01/2017 1050</b>	
Date Received: <b>03/03/2017</b>	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	03/10/2017 2243	RBH	03/05/2017 1656	36264

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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Nitrobenzene-d5		67	44-120
2-Fluorobiphenyl		62	44-119
Terphenyl-d14		81	50-134

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

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## **Appendix D**

### **Regulatory Correspondence**



August 24, 2016

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

RE: IGWA  
Laurel Bay Underground Tank Assessment Reports

Dear Mr. Drawdy:

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

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

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

If you have any questions, please contact me at [petruslb@dhec.sc.gov](mailto:petruslb@dhec.sc.gov) or 803-898-0294.

Sincerely,

Laurel Petrus, Environmental Engineer Associate  
RCRA Federal Facilities Section

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

Attachment to: Petrus to Drawdy, August 24, 2016

Subject: IGWA, Laurel Bay Underground Tank Assessment Reports

Draft Final Initial Groundwater Investigation Report for (41 addresses)

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



July 27, 2017

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

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

Dear Mr. Drawdy:

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

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

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

If you have any questions, please contact me at [petruslb@dhec.sc.gov](mailto:petruslb@dhec.sc.gov) or 803-898-0294.

Sincerely,

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

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

Attachment to: Petrus to Drawdy Dated July 27, 2017

Draft Final Initial Groundwater Investigation Report for (52 addresses)

Permanent Well Installation recommendation (3 Addresses):

---

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

No Further Action recommendation (49 addresses):

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