

SUMMARY REPORT
416 ALBATROSS DRIVE (FORMERLY 1337 ALBATROSS 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

SUMMARY REPORT
416 ALBATROSS DRIVE (FORMERLY 1337 ALBATROSS 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

Prepared by:



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

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

Table of Contents

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

Tables

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

Appendices

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

List of Acronyms

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

1.0 INTRODUCTION

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

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

This report summarizes the results the environmental investigation activities associated with the storage of home heating oil and the potential release of petroleum constituents at the referenced property. Based on the results of the investigation, a No Further Action (NFA) determination has been made by the South Carolina Department of Health and Environmental Control (SCDHEC) for 416 Albatross Drive (Formerly 1337 Albatross 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 416 Albatross Drive (Formerly 1337 Albatross Drive). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1337 Albatross 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 March 19, 2013, a single 280 gallon heating oil UST was removed from underneath the front concrete porch at 416 Albatross Drive (Formerly 1337 Albatross 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 5'8" 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 416 Albatross Drive (Formerly 1337 Albatross 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 416 Albatross Drive (Formerly 1337 Albatross 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 March 9, 2017, a temporary monitoring well was installed at 416 Albatross Drive (Formerly 1337 Albatross 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 416 Albatross Drive (Formerly 1337 Albatross 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 416 Albatross Drive (Formerly 1337 Albatross 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 – 1337 Albatross Drive, Laurel Bay Military Housing Area*, October 2013.

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

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

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

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

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

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

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

Tables

Table 1
Laboratory Analytical Results - Soil
416 Albatross Drive (Formerly 1337 Albatross Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Results Sample Collected 03/19/13
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)		
Benzene	0.003	ND
Ethylbenzene	1.15	ND
Naphthalene	0.036	ND
Toluene	0.627	ND
Xylenes, Total	13.01	ND
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)		
Benzo(a)anthracene	0.66	0.585
Benzo(b)fluoranthene	0.66	0.678
Benzo(k)fluoranthene	0.66	0.309
Chrysene	0.66	0.129
Dibenz(a,h)anthracene	0.66	0.0531

Notes:

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

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Table 2
Laboratory Analytical Results - Groundwater
416 Albatross Drive (Formerly 1337 Albatross Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

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

Notes:

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

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

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - Not Applicable

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

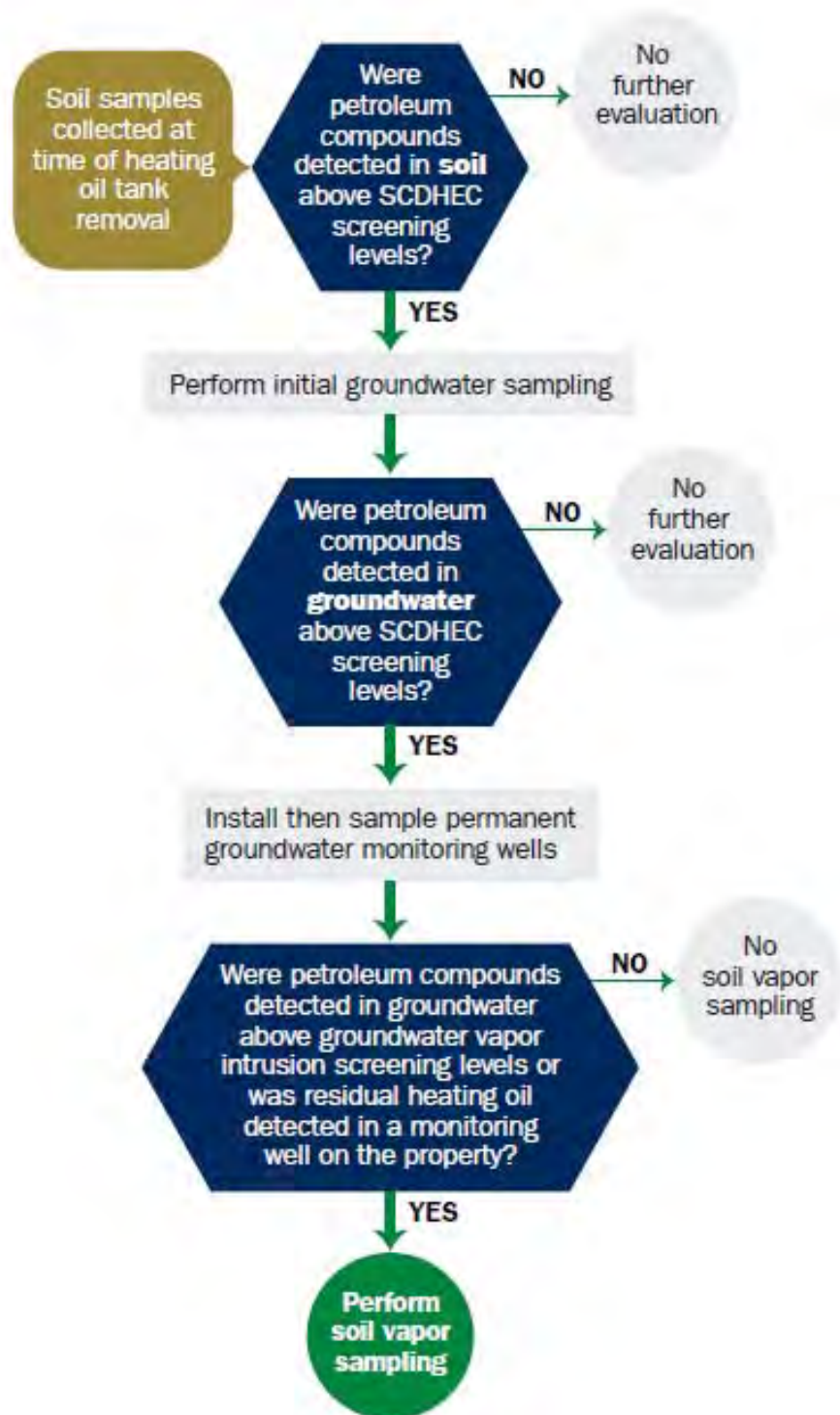
RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

Appendix A
Multi-Media Selection Process for LBMH



Appendix A - Multi-Media Selection Process for LBMH

Appendix B
UST Assessment Report

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

Date Received

State Use Only

Submit Completed Form To:

UST Program

SCDHEC

2600 Bull Street

Columbia, South Carolina 29201

Telephone (803) 896-7957

RECEIVED

OCT 23 2014

SC DHEC - Bureau of
 Land & Waste Management

I. OWNERSHIP OF UST (S)

MCAS Beaufort, Commanding Officer Attn: NREAO (Craig Ehde)

Owner Name (Corporation, Individual, Public Agency, Other)

P.O. Box 55001

Mailing Address

Beaufort,

South Carolina

29904-5001

City

State

Zip Code

843

228-7317

Craig Ehde

Area Code

Telephone Number

Contact Person

II. SITE IDENTIFICATION AND LOCATION

Permit I.D. #

Laurel Bay Military Housing Area, Marine Corps Air Station, Beaufort, SC
 Facility Name or Company Site Identifier

1337 Albatross 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.....

1337 Albatross		
Heating oil		
280 gal		
Late 1950s		
Steel		
Mid 80s		
5'8"		
No		
No		
Removed		
3/19/2013		
Yes		
Yes		

- M. Method of disposal for any USTs removed from the ground (attach disposal manifests)
UST 1337Albatross 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 1337Albatross had been previously filled with sand by others.
- O. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST
Corrosion, pitting and holes were found throughout the tank.

VII. PIPING INFORMATION

- A. Construction Material..(ex. Steel, FRP).....
- B. Distance from UST to Dispenser.....
- C. Number of Dispensers.....
- D. Type of System Pressure or Suction.....
- E. Was Piping Removed from the Ground? Y/N
- F. Visible Corrosion or Pitting Y/N.....
- G. Visible Holes Y/N.....
- H. Age.....

1337 Albatross		
Steel & Copper		
N/A		
N/A		
Suction		
No		
Yes		
No		
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 #
1337 Albatros	Excav at fill end	Soil	Sand	5'8"	3/19/13 1445 hrs	P. Shaw	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

* = Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

Provide a detailed description of the methods used to collect and store the samples. Also include the preservative used for each sample. Please use the space provided below.

Sampling was performed in accordance with SC DHEC R.61-92 Part 280 and SC DHEC Assessment Guidelines. Sample containers were prepared by the testing laboratory. The grab method was utilized to fill the sample containers leaving as little head space as possible and immediately capped. Soil samples were extracted from area below tank. The samples were marked, logged, and immediately placed in a sample cooler packed with ice to maintain an approximate temperature of 4 degrees Centigrade. Tools were thoroughly cleaned and decontaminated with the seven step decon process after each use. The samples remained in custody of SBG-EEG, Inc. until they were transferred to Test America Incorporated for analysis as documented in the Chain of Custody Record.

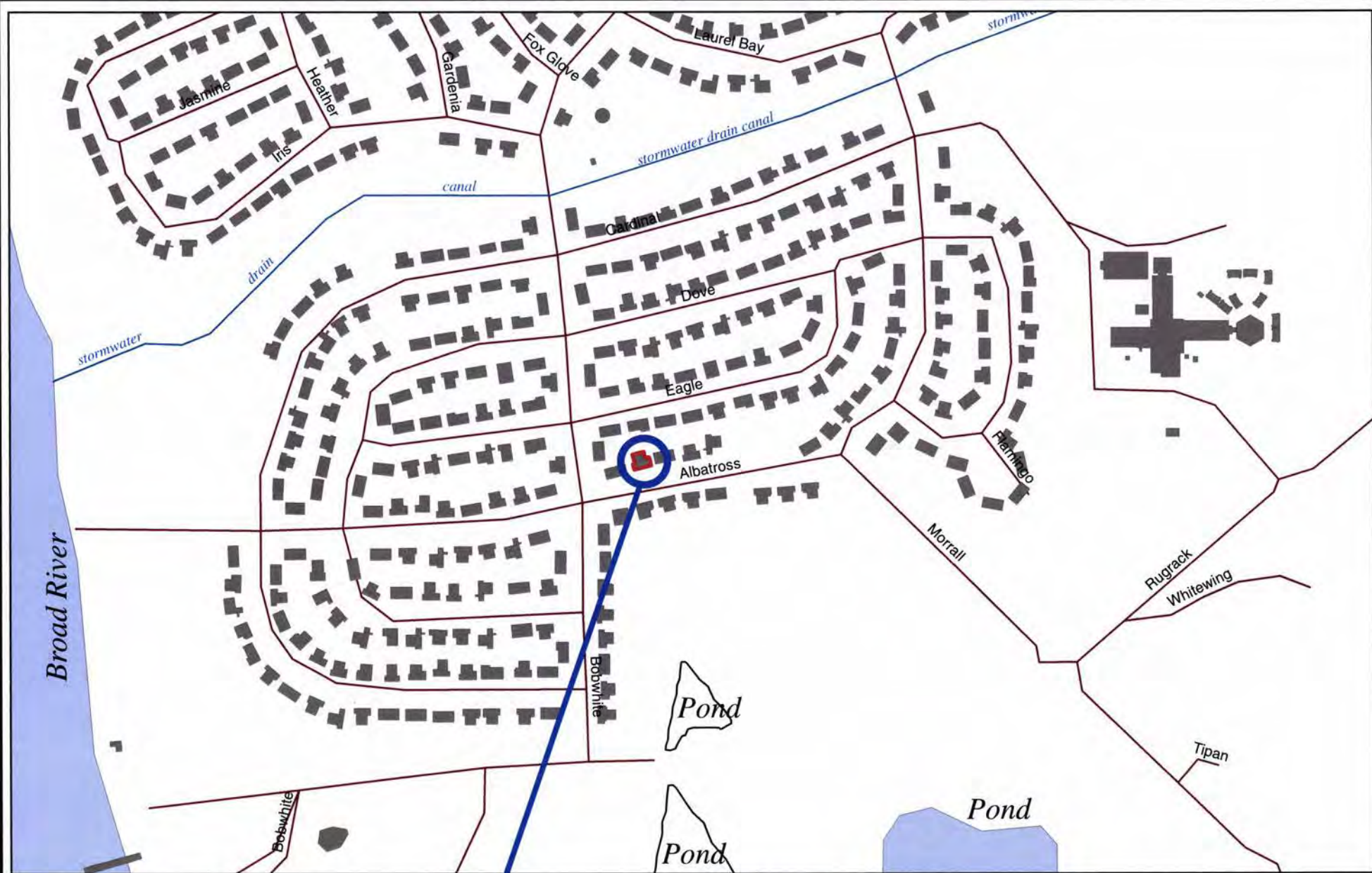
XII. RECEPTORS

	Yes	No
<p>A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?</p> <p style="text-align: right;">*Pond</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 & geothermal</p> <p>If yes, indicate the type of utility, distance, and direction on the site map.</p>	*X	
<p>E. Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete?</p> <p>If yes, indicate the area of contaminated soil on the site map.</p>		X

XIII. SITE MAP

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

(Attach Site Map Here)



0 100 200 400 600 800 1,000
Feet

1337 ALBATROSS

SBG-EEG, Inc.

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

Ph. (843) 573-7140

Drawn By: L. DiAsio

Dwg Date: Apr 2013

FIGURE 1: LOCATION MAP
1337 ALBATROSS DRIVE
LAUREL BAY, BEAUFORT SC



POND \approx 590'

1337 ALBATROSS DR.
LAUREL BAY MILITARY HOUSING
MCAS BEAUFORT, SC

UST 1337ALBATROSS

GRAPHIC SCALE

0 5' 10' 20'

TANK DEPTH BELOW GRADE
1337ALBATROSS = 32"

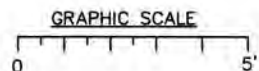
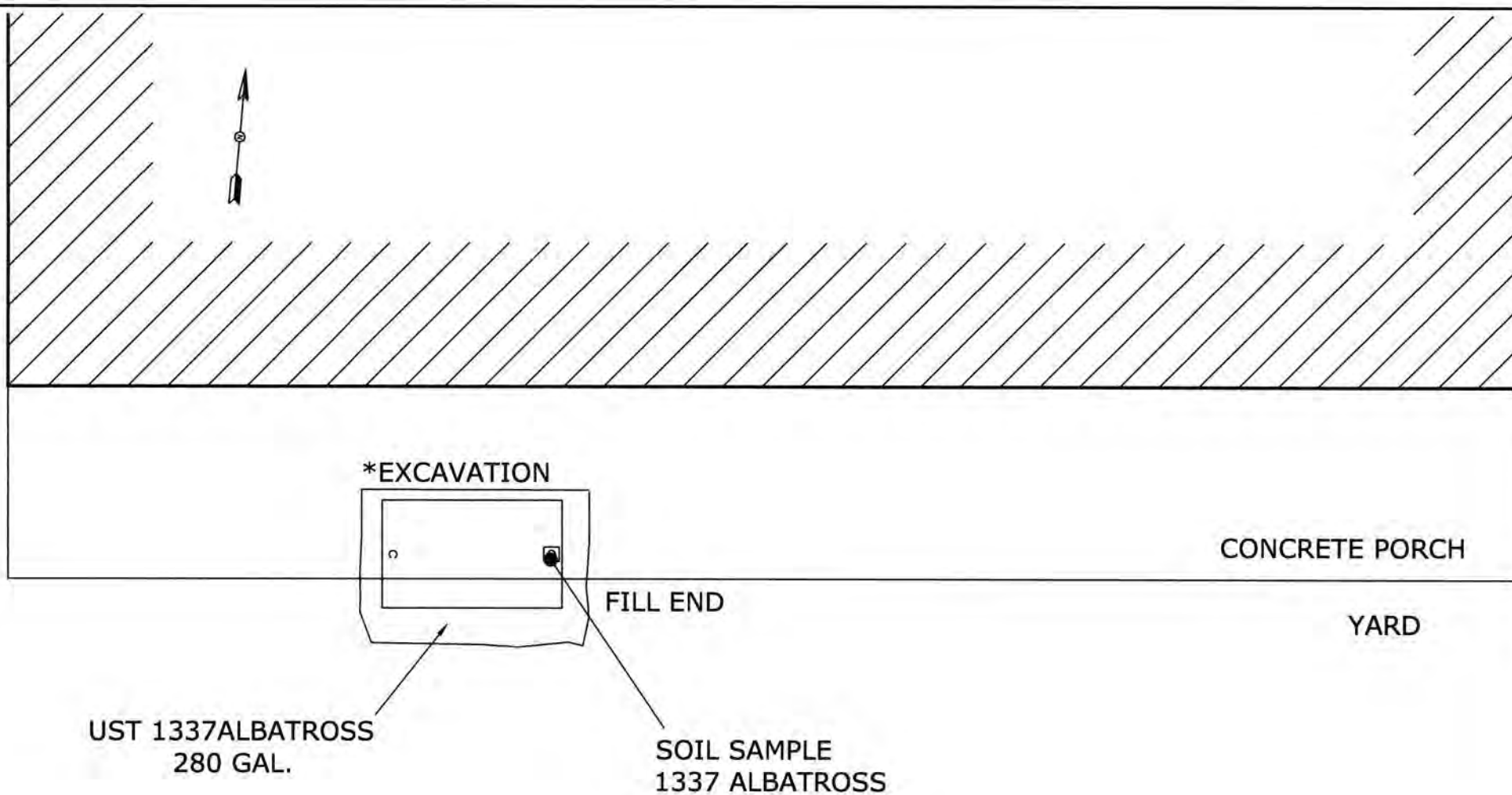
SBG-EEG

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

FIGURE 2 SITE MAP
1337 ALBATROSS DR., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE APR 2013



*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
1337 ALBATROSS DR., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE APR 2013



Picture 1: Location of UST 1337Albatross.



Picture 2: UST 1337Albatross being removed from the excavation.

XIV. SUMMARY OF ANALYSIS RESULTS

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

CoC	UST	1337Albatross					
Benzene		ND					
Toluene		ND					
Ethylbenzene		ND					
Xylenes		ND					
Naphthalene		ND					
Benzo (a) anthracene		0.585 mg/kg					
Benzo (b) fluoranthene		0.678 mg/kg					
Benzo (k) fluoranthene		0.309 mg/kg					
Chrysene		0.129 mg/kg					
Dibenz (a, h) anthracene		0.0531 mg/kg					
TPH (EPA 3550)							

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

SUMMARY OF ANALYSIS RESULTS (cont'd)

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

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

XV. ANALYTICAL RESULTS

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

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

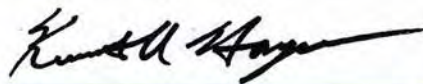
TestAmerica Job ID: 490-22932-1

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:
4/10/2013 12:34:58 PM

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

LINKS

Review your project
results through

TotalAccess

Have a Question?

**Ask
The
Expert**

Visit us at:

www.testamericainc.com

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

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

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

1
2
3
4
5
6
7
8
9
10
11
12
13

Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Case Narrative	4
Definitions	5
Client Sample Results	6
QC Sample Results	13
QC Association	18
Chronicle	20
Method Summary	22
Certification Summary	23
Chain of Custody	24
Receipt Checklists	27



Sample Summary

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

TestAmerica Job ID: 490-22932-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-22932-1	1337 Albatross	Solid	03/19/13 14:45	03/27/13 08:30
490-22932-2	902 Barracuda	Solid	03/20/13 12:00	03/27/13 08:30
490-22932-3	1233 Dove	Solid	03/21/13 11:45	03/27/13 08:30
490-22932-4	403 Elderberry	Solid	03/18/13 12:15	03/27/13 08:30
490-22932-5	1330 Albatross	Solid	03/19/13 15:30	03/27/13 08:30
490-22932-6	779 Laurel Bay	Solid	03/20/13 14:30	03/27/13 08:30
490-22932-7	1254 Dove	Solid	03/21/13 15:00	03/27/13 08:30

Case Narrative

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

TestAmerica Job ID: 490-22932-1

Job ID: 490-22932-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-22932-1

Comments

No additional comments.

Receipt

The samples were received on 3/27/2013 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9° C.

GC/MS VOA

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 69194 and 69466.

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: 490-22932-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

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

TestAmerica Job ID: 490-22932-1

Client Sample ID: 1337 Albatross

Lab Sample ID: 490-22932-1

Date Collected: 03/19/13 14:45

Matrix: Solid

Date Received: 03/27/13 08:30

Percent Solids: 93.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00253	0.000848	mg/Kg	☐	03/28/13 16:10	04/01/13 21:51	1
Ethylbenzene	ND		0.00253	0.000848	mg/Kg	☐	03/28/13 16:10	04/01/13 21:51	1
Naphthalene	ND		0.00633	0.00215	mg/Kg	☐	03/28/13 16:10	04/01/13 21:51	1
Toluene	ND		0.00253	0.000937	mg/Kg	☐	03/28/13 16:10	04/01/13 21:51	1
Xylenes, Total	ND		0.00633	0.000848	mg/Kg	☐	03/28/13 16:10	04/01/13 21:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	03/28/13 16:10	04/01/13 21:51	1
4-Bromofluorobenzene (Surr)	112		70 - 130	03/28/13 16:10	04/01/13 21:51	1
Dibromofluoromethane (Surr)	95		70 - 130	03/28/13 16:10	04/01/13 21:51	1
Toluene-d8 (Surr)	109		70 - 130	03/28/13 16:10	04/01/13 21:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0705	0.0105	mg/Kg	☐	03/30/13 08:16	03/30/13 23:36	1
Acenaphthylene	ND		0.0705	0.00947	mg/Kg	☐	03/30/13 08:16	03/30/13 23:36	1
Anthracene	ND		0.0705	0.00947	mg/Kg	☐	03/30/13 08:16	03/30/13 23:36	1
Benzo[a]anthracene	0.585		0.0705	0.0158	mg/Kg	☐	03/30/13 08:16	03/30/13 23:36	1
Benzo[a]pyrene	0.292		0.0705	0.0126	mg/Kg	☐	03/30/13 08:16	03/30/13 23:36	1
Benzo[b]fluoranthene	0.678		0.0705	0.0126	mg/Kg	☐	03/30/13 08:16	03/30/13 23:36	1
Benzo[g,h,i]perylene	0.143		0.0705	0.00947	mg/Kg	☐	03/30/13 08:16	03/30/13 23:36	1
Benzo[k]fluoranthene	0.309		0.0705	0.0147	mg/Kg	☐	03/30/13 08:16	03/30/13 23:36	1
1-Methylnaphthalene	ND		0.0705	0.0147	mg/Kg	☐	03/30/13 08:16	03/30/13 23:36	1
Pyrene	0.698		0.0705	0.0126	mg/Kg	☐	03/30/13 08:16	03/30/13 23:36	1
Phenanthrene	0.0429	J	0.0705	0.00947	mg/Kg	☐	03/30/13 08:16	03/30/13 23:36	1
Chrysene	0.129		0.0705	0.00947	mg/Kg	☐	03/30/13 08:16	03/30/13 23:36	1
Dibenz(a,h)anthracene	0.0531	J	0.0705	0.00737	mg/Kg	☐	03/30/13 08:16	03/30/13 23:36	1
Fluoranthene	0.726		0.0705	0.00947	mg/Kg	☐	03/30/13 08:16	03/30/13 23:36	1
Fluorene	ND		0.0705	0.0126	mg/Kg	☐	03/30/13 08:16	03/30/13 23:36	1
Indeno[1,2,3-cd]pyrene	0.149		0.0705	0.0105	mg/Kg	☐	03/30/13 08:16	03/30/13 23:36	1
Naphthalene	ND		0.0705	0.00947	mg/Kg	☐	03/30/13 08:16	03/30/13 23:36	1
2-Methylnaphthalene	ND		0.0705	0.0168	mg/Kg	☐	03/30/13 08:16	03/30/13 23:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	83		29 - 120	03/30/13 08:16	03/30/13 23:36	1
Terphenyl-d14 (Surr)	85		13 - 120	03/30/13 08:16	03/30/13 23:36	1
Nitrobenzene-d5 (Surr)	74		27 - 120	03/30/13 08:16	03/30/13 23:36	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10	0.10	%			03/29/13 08:10	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-22932-1

Client Sample ID: 902 Barracuda

Lab Sample ID: 490-22932-2

Date Collected: 03/20/13 12:00

Matrix: Solid

Date Received: 03/27/13 08:30

Percent Solids: 95.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00223	0.000749	mg/Kg	☐	03/28/13 16:10	04/02/13 14:57	1
Ethylbenzene	ND		0.00223	0.000749	mg/Kg	☐	03/28/13 16:10	04/02/13 14:57	1
Naphthalene	ND		0.00559	0.00190	mg/Kg	☐	03/28/13 16:10	04/02/13 14:57	1
Toluene	ND		0.00223	0.000827	mg/Kg	☐	03/28/13 16:10	04/02/13 14:57	1
Xylenes, Total	ND		0.00559	0.000749	mg/Kg	☐	03/28/13 16:10	04/02/13 14:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	03/28/13 16:10	04/02/13 14:57	1
4-Bromofluorobenzene (Surr)	107		70 - 130	03/28/13 16:10	04/02/13 14:57	1
Dibromofluoromethane (Surr)	98		70 - 130	03/28/13 16:10	04/02/13 14:57	1
Toluene-d8 (Surr)	107		70 - 130	03/28/13 16:10	04/02/13 14:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0696	0.0104	mg/Kg	☐	03/30/13 08:16	03/31/13 02:39	1
Acenaphthylene	ND		0.0696	0.00935	mg/Kg	☐	03/30/13 08:16	03/31/13 02:39	1
Anthracene	ND		0.0696	0.00935	mg/Kg	☐	03/30/13 08:16	03/31/13 02:39	1
Benzo[a]anthracene	ND		0.0696	0.0156	mg/Kg	☐	03/30/13 08:16	03/31/13 02:39	1
Benzo[a]pyrene	ND		0.0696	0.0125	mg/Kg	☐	03/30/13 08:16	03/31/13 02:39	1
Benzo[b]fluoranthene	ND		0.0696	0.0125	mg/Kg	☐	03/30/13 08:16	03/31/13 02:39	1
Benzo[g,h,i]perylene	ND		0.0696	0.00935	mg/Kg	☐	03/30/13 08:16	03/31/13 02:39	1
Benzo[k]fluoranthene	ND		0.0696	0.0145	mg/Kg	☐	03/30/13 08:16	03/31/13 02:39	1
1-Methylnaphthalene	ND		0.0696	0.0145	mg/Kg	☐	03/30/13 08:16	03/31/13 02:39	1
Pyrene	ND		0.0696	0.0125	mg/Kg	☐	03/30/13 08:16	03/31/13 02:39	1
Phenanthrene	ND		0.0696	0.00935	mg/Kg	☐	03/30/13 08:16	03/31/13 02:39	1
Chrysene	ND		0.0696	0.00935	mg/Kg	☐	03/30/13 08:16	03/31/13 02:39	1
Dibenz(a,h)anthracene	ND		0.0696	0.00727	mg/Kg	☐	03/30/13 08:16	03/31/13 02:39	1
Fluoranthene	ND		0.0696	0.00935	mg/Kg	☐	03/30/13 08:16	03/31/13 02:39	1
Fluorene	ND		0.0696	0.0125	mg/Kg	☐	03/30/13 08:16	03/31/13 02:39	1
Indeno[1,2,3-cd]pyrene	ND		0.0696	0.0104	mg/Kg	☐	03/30/13 08:16	03/31/13 02:39	1
Naphthalene	ND		0.0696	0.00935	mg/Kg	☐	03/30/13 08:16	03/31/13 02:39	1
2-Methylnaphthalene	ND		0.0696	0.0166	mg/Kg	☐	03/30/13 08:16	03/31/13 02:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	85		29 - 120	03/30/13 08:16	03/31/13 02:39	1
Terphenyl-d14 (Surr)	81		13 - 120	03/30/13 08:16	03/31/13 02:39	1
Nitrobenzene-d5 (Surr)	73		27 - 120	03/30/13 08:16	03/31/13 02:39	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	96		0.10	0.10	%			03/29/13 08:10	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-22932-1

Client Sample ID: 1233 Dove

Date Collected: 03/21/13 11:45

Date Received: 03/27/13 08:30

Lab Sample ID: 490-22932-3

Matrix: Solid

Percent Solids: 74.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00326	0.00109	mg/Kg	☒	03/28/13 16:10	04/02/13 15:24	1
Ethylbenzene	ND		0.00326	0.00109	mg/Kg	☒	03/28/13 16:10	04/02/13 15:24	1
Naphthalene	ND		0.00816	0.00277	mg/Kg	☒	03/28/13 16:10	04/02/13 15:24	1
Toluene	ND		0.00326	0.00121	mg/Kg	☒	03/28/13 16:10	04/02/13 15:24	1
Xylenes, Total	ND		0.00816	0.00109	mg/Kg	☒	03/28/13 16:10	04/02/13 15:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	03/28/13 16:10	04/02/13 15:24	1
4-Bromofluorobenzene (Surr)	105		70 - 130	03/28/13 16:10	04/02/13 15:24	1
Dibromofluoromethane (Surr)	97		70 - 130	03/28/13 16:10	04/02/13 15:24	1
Toluene-d8 (Surr)	107		70 - 130	03/28/13 16:10	04/02/13 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0901	0.0134	mg/Kg	☒	03/30/13 08:16	03/31/13 03:02	1
Acenaphthylene	ND		0.0901	0.0121	mg/Kg	☒	03/30/13 08:16	03/31/13 03:02	1
Anthracene	ND		0.0901	0.0121	mg/Kg	☒	03/30/13 08:16	03/31/13 03:02	1
Benzo[a]anthracene	ND		0.0901	0.0202	mg/Kg	☒	03/30/13 08:16	03/31/13 03:02	1
Benzo[a]pyrene	ND		0.0901	0.0161	mg/Kg	☒	03/30/13 08:16	03/31/13 03:02	1
Benzo[b]fluoranthene	ND		0.0901	0.0161	mg/Kg	☒	03/30/13 08:16	03/31/13 03:02	1
Benzo[g,h,i]perylene	ND		0.0901	0.0121	mg/Kg	☒	03/30/13 08:16	03/31/13 03:02	1
Benzo[k]fluoranthene	ND		0.0901	0.0188	mg/Kg	☒	03/30/13 08:16	03/31/13 03:02	1
1-Methylnaphthalene	ND		0.0901	0.0188	mg/Kg	☒	03/30/13 08:16	03/31/13 03:02	1
Pyrene	ND		0.0901	0.0161	mg/Kg	☒	03/30/13 08:16	03/31/13 03:02	1
Phenanthrene	ND		0.0901	0.0121	mg/Kg	☒	03/30/13 08:16	03/31/13 03:02	1
Chrysene	ND		0.0901	0.0121	mg/Kg	☒	03/30/13 08:16	03/31/13 03:02	1
Dibenz(a,h)anthracene	ND		0.0901	0.00941	mg/Kg	☒	03/30/13 08:16	03/31/13 03:02	1
Fluoranthene	ND		0.0901	0.0121	mg/Kg	☒	03/30/13 08:16	03/31/13 03:02	1
Fluorene	ND		0.0901	0.0161	mg/Kg	☒	03/30/13 08:16	03/31/13 03:02	1
Indeno[1,2,3-cd]pyrene	ND		0.0901	0.0134	mg/Kg	☒	03/30/13 08:16	03/31/13 03:02	1
Naphthalene	ND		0.0901	0.0121	mg/Kg	☒	03/30/13 08:16	03/31/13 03:02	1
2-Methylnaphthalene	ND		0.0901	0.0215	mg/Kg	☒	03/30/13 08:16	03/31/13 03:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	79		29 - 120	03/30/13 08:16	03/31/13 03:02	1
Terphenyl-d14 (Surr)	81		13 - 120	03/30/13 08:16	03/31/13 03:02	1
Nitrobenzene-d5 (Surr)	73		27 - 120	03/30/13 08:16	03/31/13 03:02	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	74		0.10	0.10	%			03/29/13 08:10	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-22932-1

Client Sample ID: 403 Elderberry

Date Collected: 03/18/13 12:15

Date Received: 03/27/13 08:30

Lab Sample ID: 490-22932-4

Matrix: Solid

Percent Solids: 97.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00227	0.000761	mg/Kg	☒	03/28/13 16:10	04/01/13 17:48	1
Ethylbenzene	ND		0.00227	0.000761	mg/Kg	☒	03/28/13 16:10	04/01/13 17:48	1
Naphthalene	ND		0.00568	0.00193	mg/Kg	☒	03/28/13 16:10	04/01/13 17:48	1
Toluene	ND		0.00227	0.000841	mg/Kg	☒	03/28/13 16:10	04/01/13 17:48	1
Xylenes, Total	ND		0.00568	0.000761	mg/Kg	☒	03/28/13 16:10	04/01/13 17:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	03/28/13 16:10	04/01/13 17:48	1
4-Bromofluorobenzene (Surr)	110		70 - 130	03/28/13 16:10	04/01/13 17:48	1
Dibromofluoromethane (Surr)	96		70 - 130	03/28/13 16:10	04/01/13 17:48	1
Toluene-d8 (Surr)	108		70 - 130	03/28/13 16:10	04/01/13 17:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0685	0.0102	mg/Kg	☒	03/30/13 08:16	03/31/13 03:25	1
Acenaphthylene	ND		0.0685	0.00920	mg/Kg	☒	03/30/13 08:16	03/31/13 03:25	1
Anthracene	ND		0.0685	0.00920	mg/Kg	☒	03/30/13 08:16	03/31/13 03:25	1
Benzo[a]anthracene	0.200		0.0685	0.0153	mg/Kg	☒	03/30/13 08:16	03/31/13 03:25	1
Benzo[a]pyrene	0.120		0.0685	0.0123	mg/Kg	☒	03/30/13 08:16	03/31/13 03:25	1
Benzo[b]fluoranthene	0.255		0.0685	0.0123	mg/Kg	☒	03/30/13 08:16	03/31/13 03:25	1
Benzo[g,h,i]perylene	0.0508 J		0.0685	0.00920	mg/Kg	☒	03/30/13 08:16	03/31/13 03:25	1
Benzo[k]fluoranthene	0.110		0.0685	0.0143	mg/Kg	☒	03/30/13 08:16	03/31/13 03:25	1
1-Methylnaphthalene	ND		0.0685	0.0143	mg/Kg	☒	03/30/13 08:16	03/31/13 03:25	1
Pyrene	0.219		0.0685	0.0123	mg/Kg	☒	03/30/13 08:16	03/31/13 03:25	1
Phenanthrene	ND		0.0685	0.00920	mg/Kg	☒	03/30/13 08:16	03/31/13 03:25	1
Chrysene	0.228		0.0685	0.00920	mg/Kg	☒	03/30/13 08:16	03/31/13 03:25	1
Dibenz(a,h)anthracene	ND		0.0685	0.00716	mg/Kg	☒	03/30/13 08:16	03/31/13 03:25	1
Fluoranthene	0.229		0.0685	0.00920	mg/Kg	☒	03/30/13 08:16	03/31/13 03:25	1
Fluorene	ND		0.0685	0.0123	mg/Kg	☒	03/30/13 08:16	03/31/13 03:25	1
Indeno[1,2,3-cd]pyrene	0.0480 J		0.0685	0.0102	mg/Kg	☒	03/30/13 08:16	03/31/13 03:25	1
Naphthalene	ND		0.0685	0.00920	mg/Kg	☒	03/30/13 08:16	03/31/13 03:25	1
2-Methylnaphthalene	ND		0.0685	0.0164	mg/Kg	☒	03/30/13 08:16	03/31/13 03:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	78		29 - 120	03/30/13 08:16	03/31/13 03:25	1
Terphenyl-d14 (Surr)	84		13 - 120	03/30/13 08:16	03/31/13 03:25	1
Nitrobenzene-d5 (Surr)	71		27 - 120	03/30/13 08:16	03/31/13 03:25	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	97		0.10	0.10	%			03/29/13 08:10	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-22932-1

Client Sample ID: 1330 Albatross

Date Collected: 03/19/13 15:30

Date Received: 03/27/13 08:30

Lab Sample ID: 490-22932-5

Matrix: Solid

Percent Solids: 95.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00230	0.000770	mg/Kg	☐	03/28/13 16:10	04/02/13 14:30	1
Ethylbenzene	0.00191	J	0.00230	0.000770	mg/Kg	☐	03/28/13 16:10	04/02/13 14:30	1
Naphthalene	0.0321		0.00575	0.00195	mg/Kg	☐	03/28/13 16:10	04/02/13 14:30	1
Toluene	ND		0.00230	0.000850	mg/Kg	☐	03/28/13 16:10	04/02/13 14:30	1
Xylenes, Total	0.00874		0.00575	0.000770	mg/Kg	☐	03/28/13 16:10	04/02/13 14:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 130	03/28/13 16:10	04/02/13 14:30	1
4-Bromofluorobenzene (Surr)	110		70 - 130	03/28/13 16:10	04/02/13 14:30	1
Dibromofluoromethane (Surr)	100		70 - 130	03/28/13 16:10	04/02/13 14:30	1
Toluene-d8 (Surr)	107		70 - 130	03/28/13 16:10	04/02/13 14:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0178	J	0.0693	0.0103	mg/Kg	☐	03/30/13 08:16	03/31/13 17:33	1
Acenaphthylene	ND		0.0693	0.00931	mg/Kg	☐	03/30/13 08:16	03/31/13 17:33	1
Anthracene	ND		0.0693	0.00931	mg/Kg	☐	03/30/13 08:16	03/31/13 17:33	1
Benzo[a]anthracene	0.0671	J	0.0693	0.0155	mg/Kg	☐	03/30/13 08:16	03/31/13 17:33	1
Benzo[a]pyrene	ND		0.0693	0.0124	mg/Kg	☐	03/30/13 08:16	03/31/13 17:33	1
Benzo[b]fluoranthene	0.0549	J	0.0693	0.0124	mg/Kg	☐	03/30/13 08:16	03/31/13 17:33	1
Benzo[g,h,i]perylene	ND		0.0693	0.00931	mg/Kg	☐	03/30/13 08:16	03/31/13 17:33	1
Benzo[k]fluoranthene	0.0260	J	0.0693	0.0145	mg/Kg	☐	03/30/13 08:16	03/31/13 17:33	1
1-Methylnaphthalene	0.221		0.0693	0.0145	mg/Kg	☐	03/30/13 08:16	03/31/13 17:33	1
Pyrene	0.117		0.0693	0.0124	mg/Kg	☐	03/30/13 08:16	03/31/13 17:33	1
Phenanthrene	0.117		0.0693	0.00931	mg/Kg	☐	03/30/13 08:16	03/31/13 17:33	1
Chrysene	0.0733		0.0693	0.00931	mg/Kg	☐	03/30/13 08:16	03/31/13 17:33	1
Dibenz(a,h)anthracene	ND		0.0693	0.00724	mg/Kg	☐	03/30/13 08:16	03/31/13 17:33	1
Fluoranthene	0.162		0.0693	0.00931	mg/Kg	☐	03/30/13 08:16	03/31/13 17:33	1
Fluorene	0.0422	J	0.0693	0.0124	mg/Kg	☐	03/30/13 08:16	03/31/13 17:33	1
Indeno[1,2,3-cd]pyrene	ND		0.0693	0.0103	mg/Kg	☐	03/30/13 08:16	03/31/13 17:33	1
Naphthalene	0.0377	J	0.0693	0.00931	mg/Kg	☐	03/30/13 08:16	03/31/13 17:33	1
2-Methylnaphthalene	0.323		0.0693	0.0165	mg/Kg	☐	03/30/13 08:16	03/31/13 17:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	77		29 - 120	03/30/13 08:16	03/31/13 17:33	1
Terphenyl-d14 (Surr)	81		13 - 120	03/30/13 08:16	03/31/13 17:33	1
Nitrobenzene-d5 (Surr)	71		27 - 120	03/30/13 08:16	03/31/13 17:33	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	96		0.10	0.10	%			03/29/13 08:10	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-22932-1

Client Sample ID: 779 Laurel Bay

Date Collected: 03/20/13 14:30

Date Received: 03/27/13 08:30

Lab Sample ID: 490-22932-6

Matrix: Solid

Percent Solids: 92.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00241	0.000809	mg/Kg	☐	03/28/13 16:10	04/02/13 15:51	1
Ethylbenzene	ND		0.00241	0.000809	mg/Kg	☐	03/28/13 16:10	04/02/13 15:51	1
Naphthalene	ND		0.00604	0.00205	mg/Kg	☐	03/28/13 16:10	04/02/13 15:51	1
Toluene	ND		0.00241	0.000893	mg/Kg	☐	03/28/13 16:10	04/02/13 15:51	1
Xylenes, Total	ND		0.00604	0.000809	mg/Kg	☐	03/28/13 16:10	04/02/13 15:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	03/28/13 16:10	04/02/13 15:51	1
4-Bromofluorobenzene (Surr)	107		70 - 130	03/28/13 16:10	04/02/13 15:51	1
Dibromofluoromethane (Surr)	96		70 - 130	03/28/13 16:10	04/02/13 15:51	1
Toluene-d8 (Surr)	106		70 - 130	03/28/13 16:10	04/02/13 15:51	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	☐	03/30/13 08:16	03/31/13 17:55	1
Acenaphthylene	ND		0.0723	0.00971	mg/Kg	☐	03/30/13 08:16	03/31/13 17:55	1
Anthracene	ND		0.0723	0.00971	mg/Kg	☐	03/30/13 08:16	03/31/13 17:55	1
Benzo[a]anthracene	ND		0.0723	0.0162	mg/Kg	☐	03/30/13 08:16	03/31/13 17:55	1
Benzo[a]pyrene	ND		0.0723	0.0129	mg/Kg	☐	03/30/13 08:16	03/31/13 17:55	1
Benzo[b]fluoranthene	ND		0.0723	0.0129	mg/Kg	☐	03/30/13 08:16	03/31/13 17:55	1
Benzo[g,h,i]perylene	ND		0.0723	0.00971	mg/Kg	☐	03/30/13 08:16	03/31/13 17:55	1
Benzo[k]fluoranthene	ND		0.0723	0.0151	mg/Kg	☐	03/30/13 08:16	03/31/13 17:55	1
1-Methylnaphthalene	ND		0.0723	0.0151	mg/Kg	☐	03/30/13 08:16	03/31/13 17:55	1
Pyrene	ND		0.0723	0.0129	mg/Kg	☐	03/30/13 08:16	03/31/13 17:55	1
Phenanthrene	ND		0.0723	0.00971	mg/Kg	☐	03/30/13 08:16	03/31/13 17:55	1
Chrysene	ND		0.0723	0.00971	mg/Kg	☐	03/30/13 08:16	03/31/13 17:55	1
Dibenz(a,h)anthracene	ND		0.0723	0.00755	mg/Kg	☐	03/30/13 08:16	03/31/13 17:55	1
Fluoranthene	ND		0.0723	0.00971	mg/Kg	☐	03/30/13 08:16	03/31/13 17:55	1
Fluorene	ND		0.0723	0.0129	mg/Kg	☐	03/30/13 08:16	03/31/13 17:55	1
Indeno[1,2,3-cd]pyrene	ND		0.0723	0.0108	mg/Kg	☐	03/30/13 08:16	03/31/13 17:55	1
Naphthalene	ND		0.0723	0.00971	mg/Kg	☐	03/30/13 08:16	03/31/13 17:55	1
2-Methylnaphthalene	ND		0.0723	0.0173	mg/Kg	☐	03/30/13 08:16	03/31/13 17:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	64		29 - 120	03/30/13 08:16	03/31/13 17:55	1
Terphenyl-d14 (Surr)	65		13 - 120	03/30/13 08:16	03/31/13 17:55	1
Nitrobenzene-d5 (Surr)	56		27 - 120	03/30/13 08:16	03/31/13 17:55	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10	0.10	%			03/29/13 08:10	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-22932-1

Client Sample ID: 1254 Dove

Date Collected: 03/21/13 15:00

Date Received: 03/27/13 08:30

Lab Sample ID: 490-22932-7

Matrix: Solid

Percent Solids: 96.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00227	0.000759	mg/Kg	☒	03/28/13 16:10	04/02/13 16:18	1
Ethylbenzene	ND		0.00227	0.000759	mg/Kg	☒	03/28/13 16:10	04/02/13 16:18	1
Naphthalene	ND		0.00567	0.00193	mg/Kg	☒	03/28/13 16:10	04/02/13 16:18	1
Toluene	ND		0.00227	0.000839	mg/Kg	☒	03/28/13 16:10	04/02/13 16:18	1
Xylenes, Total	ND		0.00567	0.000759	mg/Kg	☒	03/28/13 16:10	04/02/13 16:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	03/28/13 16:10	04/02/13 16:18	1
4-Bromofluorobenzene (Surr)	109		70 - 130	03/28/13 16:10	04/02/13 16:18	1
Dibromofluoromethane (Surr)	98		70 - 130	03/28/13 16:10	04/02/13 16:18	1
Toluene-d8 (Surr)	107		70 - 130	03/28/13 16:10	04/02/13 16:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0677	0.0101	mg/Kg	☒	03/30/13 08:16	03/31/13 18:18	1
Acenaphthylene	ND		0.0677	0.00910	mg/Kg	☒	03/30/13 08:16	03/31/13 18:18	1
Anthracene	ND		0.0677	0.00910	mg/Kg	☒	03/30/13 08:16	03/31/13 18:18	1
Benzo[a]anthracene	ND		0.0677	0.0152	mg/Kg	☒	03/30/13 08:16	03/31/13 18:18	1
Benzo[a]pyrene	ND		0.0677	0.0121	mg/Kg	☒	03/30/13 08:16	03/31/13 18:18	1
Benzo[b]fluoranthene	ND		0.0677	0.0121	mg/Kg	☒	03/30/13 08:16	03/31/13 18:18	1
Benzo[g,h,i]perylene	ND		0.0677	0.00910	mg/Kg	☒	03/30/13 08:16	03/31/13 18:18	1
Benzo[k]fluoranthene	ND		0.0677	0.0142	mg/Kg	☒	03/30/13 08:16	03/31/13 18:18	1
1-Methylnaphthalene	ND		0.0677	0.0142	mg/Kg	☒	03/30/13 08:16	03/31/13 18:18	1
Pyrene	ND		0.0677	0.0121	mg/Kg	☒	03/30/13 08:16	03/31/13 18:18	1
Phenanthrene	ND		0.0677	0.00910	mg/Kg	☒	03/30/13 08:16	03/31/13 18:18	1
Chrysene	ND		0.0677	0.00910	mg/Kg	☒	03/30/13 08:16	03/31/13 18:18	1
Dibenz(a,h)anthracene	ND		0.0677	0.00708	mg/Kg	☒	03/30/13 08:16	03/31/13 18:18	1
Fluoranthene	ND		0.0677	0.00910	mg/Kg	☒	03/30/13 08:16	03/31/13 18:18	1
Fluorene	ND		0.0677	0.0121	mg/Kg	☒	03/30/13 08:16	03/31/13 18:18	1
Indeno[1,2,3-cd]pyrene	ND		0.0677	0.0101	mg/Kg	☒	03/30/13 08:16	03/31/13 18:18	1
Naphthalene	ND		0.0677	0.00910	mg/Kg	☒	03/30/13 08:16	03/31/13 18:18	1
2-Methylnaphthalene	ND		0.0677	0.0162	mg/Kg	☒	03/30/13 08:16	03/31/13 18:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	79		29 - 120	03/30/13 08:16	03/31/13 18:18	1
Terphenyl-d14 (Surr)	82		13 - 120	03/30/13 08:16	03/31/13 18:18	1
Nitrobenzene-d5 (Surr)	69		27 - 120	03/30/13 08:16	03/31/13 18:18	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	96		0.10	0.10	%			03/29/13 08:10	1

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-22932-1

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

Lab Sample ID: MB 490-69194/7

Matrix: Solid

Analysis Batch: 69194

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	Result	MB MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			04/01/13 15:05	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			04/01/13 15:05	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			04/01/13 15:05	1
Toluene	ND		0.00200	0.000740	mg/Kg			04/01/13 15:05	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			04/01/13 15:05	1

Surrogate	%Recovery	MB MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 130		04/01/13 15:05	1
4-Bromofluorobenzene (Surr)	106		70 - 130		04/01/13 15:05	1
Dibromofluoromethane (Surr)	99		70 - 130		04/01/13 15:05	1
Toluene-d8 (Surr)	107		70 - 130		04/01/13 15:05	1

Lab Sample ID: LCS 490-69194/3

Matrix: Solid

Analysis Batch: 69194

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS LCS Result Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05191	mg/Kg		104	75 - 127
Ethylbenzene	0.0500	0.05272	mg/Kg		105	80 - 134
Naphthalene	0.0500	0.05468	mg/Kg		109	69 - 150
Toluene	0.0500	0.05512	mg/Kg		110	80 - 132
Xylenes, Total	0.150	0.1574	mg/Kg		105	80 - 137

Surrogate	%Recovery	LCS LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		70 - 130
4-Bromofluorobenzene (Surr)	107		70 - 130
Dibromofluoromethane (Surr)	97		70 - 130
Toluene-d8 (Surr)	108		70 - 130

Lab Sample ID: LCSD 490-69194/4

Matrix: Solid

Analysis Batch: 69194

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD LCSD Result Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.05272	mg/Kg		105	75 - 127	2	50
Ethylbenzene	0.0500	0.05284	mg/Kg		106	80 - 134	0	50
Naphthalene	0.0500	0.05485	mg/Kg		110	69 - 150	0	50
Toluene	0.0500	0.05476	mg/Kg		110	80 - 132	1	50
Xylenes, Total	0.150	0.1592	mg/Kg		106	80 - 137	1	50

Surrogate	%Recovery	LCSD LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		70 - 130
4-Bromofluorobenzene (Surr)	108		70 - 130
Dibromofluoromethane (Surr)	98		70 - 130
Toluene-d8 (Surr)	107		70 - 130

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-22932-1

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

Lab Sample ID: MB 490-69466/7

Matrix: Solid

Analysis Batch: 69466

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			04/02/13 12:42	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			04/02/13 12:42	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			04/02/13 12:42	1
Toluene	ND		0.00200	0.000740	mg/Kg			04/02/13 12:42	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			04/02/13 12:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 130		04/02/13 12:42	1
4-Bromofluorobenzene (Surr)	109		70 - 130		04/02/13 12:42	1
Dibromofluoromethane (Surr)	96		70 - 130		04/02/13 12:42	1
Toluene-d8 (Surr)	107		70 - 130		04/02/13 12:42	1

Lab Sample ID: LCS 490-69466/3

Matrix: Solid

Analysis Batch: 69466

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	0.05031		mg/Kg		101	75 - 127
Ethylbenzene	0.0500	0.05067		mg/Kg		101	80 - 134
Naphthalene	0.0500	0.05598		mg/Kg		112	69 - 150
Toluene	0.0500	0.05235		mg/Kg		105	80 - 132
Xylenes, Total	0.150	0.1535		mg/Kg		102	80 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	109		70 - 130
Dibromofluoromethane (Surr)	98		70 - 130
Toluene-d8 (Surr)	107		70 - 130

Lab Sample ID: LCSD 490-69466/4

Matrix: Solid

Analysis Batch: 69466

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04884		mg/Kg		98	75 - 127	3	50
Ethylbenzene	0.0500	0.04800		mg/Kg		96	80 - 134	5	50
Naphthalene	0.0500	0.05643		mg/Kg		113	69 - 150	1	50
Toluene	0.0500	0.04997		mg/Kg		100	80 - 132	5	50
Xylenes, Total	0.150	0.1457		mg/Kg		97	80 - 137	5	50

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	110		70 - 130
Dibromofluoromethane (Surr)	99		70 - 130
Toluene-d8 (Surr)	107		70 - 130

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-22932-1

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

Lab Sample ID: MB 490-68984/1-A

Matrix: Solid

Analysis Batch: 69035

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 68984

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Anthracene	ND		0.0670	0.00900	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Pyrene	ND		0.0670	0.0120	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Chrysene	ND		0.0670	0.00900	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Fluoranthene	ND		0.0670	0.00900	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Fluorene	ND		0.0670	0.0120	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		03/30/13 08:16	03/30/13 23:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	89		29 - 120	03/30/13 08:16	03/30/13 23:13	1
Terphenyl-d14 (Surr)	92		13 - 120	03/30/13 08:16	03/30/13 23:13	1
Nitrobenzene-d5 (Surr)	82		27 - 120	03/30/13 08:16	03/30/13 23:13	1

Lab Sample ID: LCS 490-68984/2-A

Matrix: Solid

Analysis Batch: 69035

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 68984

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	1.67	1.560		mg/Kg		94	38 - 120
Anthracene	1.67	1.494		mg/Kg		90	46 - 124
Benzo[a]anthracene	1.67	1.504		mg/Kg		90	45 - 120
Benzo[a]pyrene	1.67	1.467		mg/Kg		88	45 - 120
Benzo[b]fluoranthene	1.67	1.505		mg/Kg		90	42 - 120
Benzo[g,h,i]perylene	1.67	1.655		mg/Kg		99	38 - 120
Benzo[k]fluoranthene	1.67	1.450		mg/Kg		87	42 - 120
1-Methylnaphthalene	1.67	1.469		mg/Kg		88	32 - 120
Pyrene	1.67	1.451		mg/Kg		87	43 - 120
Phenanthrene	1.67	1.556		mg/Kg		93	45 - 120
Chrysene	1.67	1.517		mg/Kg		91	43 - 120
Dibenz(a,h)anthracene	1.67	1.632		mg/Kg		98	32 - 128
Fluoranthene	1.67	1.505		mg/Kg		90	46 - 120
Fluorene	1.67	1.490		mg/Kg		89	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	1.613		mg/Kg		97	41 - 121
Naphthalene	1.67	1.537		mg/Kg		92	32 - 120
2-Methylnaphthalene	1.67	1.510		mg/Kg		91	28 - 120

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-22932-1

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

Lab Sample ID: LCS 490-68984/2-A

Matrix: Solid

Analysis Batch: 69035

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 68984

Surrogate	LCS		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl (Surr)	76		29 - 120
Terphenyl-d14 (Surr)	93		13 - 120
Nitrobenzene-d5 (Surr)	65		27 - 120

Lab Sample ID: 490-22932-1 MS

Matrix: Solid

Analysis Batch: 69035

Client Sample ID: 1337 Albatross

Prep Type: Total/NA

Prep Batch: 68984

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Acenaphthylene	ND		1.79	1.511		mg/Kg	☐	84	25 - 120	
Anthracene	ND		1.79	1.474		mg/Kg	☐	82	28 - 125	
Benzo[a]anthracene	0.585		1.79	1.879		mg/Kg	☐	72	23 - 120	
Benzo[a]pyrene	0.292		1.79	1.525		mg/Kg	☐	69	15 - 128	
Benzo[b]fluoranthene	0.678		1.79	1.682		mg/Kg	☐	56	12 - 133	
Benzo[g,h,i]perylene	0.143		1.79	1.579		mg/Kg	☐	80	22 - 120	
Benzo[k]fluoranthene	0.309		1.79	1.616		mg/Kg	☐	73	28 - 120	
1-Methylnaphthalene	ND		1.79	1.436		mg/Kg	☐	80	10 - 120	
Pyrene	0.698		1.79	1.851		mg/Kg	☐	65	20 - 123	
Phenanthrene	0.0429	J	1.79	1.576		mg/Kg	☐	86	21 - 122	
Chrysene	0.129		1.79	1.810		mg/Kg	☐	94	20 - 120	
Dibenz(a,h)anthracene	0.0531	J	1.79	1.535		mg/Kg	☐	83	12 - 128	
Fluoranthene	0.726		1.79	1.953		mg/Kg	☐	69	10 - 143	
Fluorene	ND		1.79	1.434		mg/Kg	☐	80	20 - 120	
Indeno[1,2,3-cd]pyrene	0.149		1.79	1.561		mg/Kg	☐	79	22 - 121	
Naphthalene	ND		1.79	1.500		mg/Kg	☐	84	10 - 120	
2-Methylnaphthalene	ND		1.79	1.502		mg/Kg	☐	84	13 - 120	

Surrogate	MS		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl (Surr)	63		29 - 120
Terphenyl-d14 (Surr)	76		13 - 120
Nitrobenzene-d5 (Surr)	56		27 - 120

Lab Sample ID: 490-22932-1 MSD

Matrix: Solid

Analysis Batch: 69035

Client Sample ID: 1337 Albatross

Prep Type: Total/NA

Prep Batch: 68984

Analyte	Sample	Sample	Spike	MSD		Unit	D	%Rec	%Rec.		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits		RPD	Limit
Acenaphthylene	ND		1.76	1.672		mg/Kg	☐	95	25 - 120		10	50
Anthracene	ND		1.76	1.647		mg/Kg	☐	94	28 - 125		11	49
Benzo[a]anthracene	0.585		1.76	2.356		mg/Kg	☐	101	23 - 120		23	50
Benzo[a]pyrene	0.292		1.76	1.863		mg/Kg	☐	89	15 - 128		20	50
Benzo[b]fluoranthene	0.678		1.76	2.274		mg/Kg	☐	91	12 - 133		30	50
Benzo[g,h,i]perylene	0.143		1.76	1.765		mg/Kg	☐	92	22 - 120		11	50
Benzo[k]fluoranthene	0.309		1.76	1.846		mg/Kg	☐	87	28 - 120		13	45
1-Methylnaphthalene	ND		1.76	1.470		mg/Kg	☐	84	10 - 120		2	50
Pyrene	0.698		1.76	2.220		mg/Kg	☐	86	20 - 123		18	50
Phenanthrene	0.0429	J	1.76	1.780		mg/Kg	☐	99	21 - 122		12	50
Chrysene	0.129		1.76	2.246		mg/Kg	☐	120	20 - 120		22	49

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-22932-1

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

Lab Sample ID: 490-22932-1 MSD

Matrix: Solid

Analysis Batch: 69035

Client Sample ID: 1337 Albatross

Prep Type: Total/NA

Prep Batch: 68984

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Dibenz(a,h)anthracene	0.0531	J	1.76	1.649		mg/Kg	☒	91	12 - 128	7	50
Fluoranthene	0.726		1.76	2.466		mg/Kg	☒	99	10 - 143	23	50
Fluorene	ND		1.76	1.586		mg/Kg	☒	90	20 - 120	10	50
Indeno[1,2,3-cd]pyrene	0.149		1.76	1.761		mg/Kg	☒	92	22 - 121	12	50
Naphthalene	ND		1.76	1.633		mg/Kg	☒	93	10 - 120	8	50
2-Methylnaphthalene	ND		1.76	1.559		mg/Kg	☒	89	13 - 120	4	50
Surrogate											
	MSD	MSD									
	%Recovery	Qualifier	Limits								
2-Fluorobiphenyl (Surr)	72		29 - 120								
Terphenyl-d14 (Surr)	82		13 - 120								
Nitrobenzene-d5 (Surr)	65		27 - 120								

Method: Moisture - Percent Moisture

Lab Sample ID: 490-22181-A-1 DU

Matrix: Solid

Analysis Batch: 68676

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Percent Solids	83		85		%		1	20

TestAmerica Nashville

QC Association Summary

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

TestAmerica Job ID: 490-22932-1

GC/MS VOA

Prep Batch: 68619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22932-1	1337 Albatross	Total/NA	Solid	5035	
490-22932-2	902 Barracuda	Total/NA	Solid	5035	
490-22932-3	1233 Dove	Total/NA	Solid	5035	
490-22932-4	403 Elderberry	Total/NA	Solid	5035	
490-22932-5	1330 Albatross	Total/NA	Solid	5035	
490-22932-6	779 Laurel Bay	Total/NA	Solid	5035	
490-22932-7	1254 Dove	Total/NA	Solid	5035	

Analysis Batch: 69194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22932-1	1337 Albatross	Total/NA	Solid	8260B	68619
490-22932-4	403 Elderberry	Total/NA	Solid	8260B	68619
LCS 490-69194/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-69194/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-69194/7	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 69466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22932-2	902 Barracuda	Total/NA	Solid	8260B	68619
490-22932-3	1233 Dove	Total/NA	Solid	8260B	68619
490-22932-5	1330 Albatross	Total/NA	Solid	8260B	68619
490-22932-6	779 Laurel Bay	Total/NA	Solid	8260B	68619
490-22932-7	1254 Dove	Total/NA	Solid	8260B	68619
LCS 490-69466/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-69466/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-69466/7	Method Blank	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 68984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22932-1	1337 Albatross	Total/NA	Solid	3550C	
490-22932-1 MS	1337 Albatross	Total/NA	Solid	3550C	
490-22932-1 MSD	1337 Albatross	Total/NA	Solid	3550C	
490-22932-2	902 Barracuda	Total/NA	Solid	3550C	
490-22932-3	1233 Dove	Total/NA	Solid	3550C	
490-22932-4	403 Elderberry	Total/NA	Solid	3550C	
490-22932-5	1330 Albatross	Total/NA	Solid	3550C	
490-22932-6	779 Laurel Bay	Total/NA	Solid	3550C	
490-22932-7	1254 Dove	Total/NA	Solid	3550C	
LCS 490-68984/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 490-68984/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 69035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22932-1	1337 Albatross	Total/NA	Solid	8270D	68984
490-22932-1 MS	1337 Albatross	Total/NA	Solid	8270D	68984
490-22932-1 MSD	1337 Albatross	Total/NA	Solid	8270D	68984
490-22932-2	902 Barracuda	Total/NA	Solid	8270D	68984
490-22932-3	1233 Dove	Total/NA	Solid	8270D	68984

TestAmerica Nashville



QC Association Summary

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

TestAmerica Job ID: 490-22932-1

GC/MS Semi VOA (Continued)

Analysis Batch: 69035 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22932-4	403 Elderberry	Total/NA	Solid	8270D	68984
LCS 490-68984/2-A	Lab Control Sample	Total/NA	Solid	8270D	68984
MB 490-68984/1-A	Method Blank	Total/NA	Solid	8270D	68984

Analysis Batch: 69123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22932-5	1330 Albatross	Total/NA	Solid	8270D	68984
490-22932-6	779 Laurel Bay	Total/NA	Solid	8270D	68984
490-22932-7	1254 Dove	Total/NA	Solid	8270D	68984

General Chemistry

Analysis Batch: 68676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22181-A-1 DU	Duplicate	Total/NA	Solid	Moisture	
490-22932-1	1337 Albatross	Total/NA	Solid	Moisture	
490-22932-2	902 Barracuda	Total/NA	Solid	Moisture	
490-22932-3	1233 Dove	Total/NA	Solid	Moisture	
490-22932-4	403 Elderberry	Total/NA	Solid	Moisture	
490-22932-5	1330 Albatross	Total/NA	Solid	Moisture	
490-22932-6	779 Laurel Bay	Total/NA	Solid	Moisture	
490-22932-7	1254 Dove	Total/NA	Solid	Moisture	

TestAmerica Nashville

Lab Chronicle

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

TestAmerica Job ID: 490-22932-1

Client Sample ID: 1337 Albatross

Date Collected: 03/19/13 14:45

Date Received: 03/27/13 08:30

Lab Sample ID: 490-22932-1

Matrix: Solid

Percent Solids: 93.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			68619	03/28/13 16:10	ML	TAL NSH
Total/NA	Analysis	8260B		1	69194	04/01/13 21:51	MH	TAL NSH
Total/NA	Prep	3550C			68984	03/30/13 08:16	AK	TAL NSH
Total/NA	Analysis	8270D		1	69035	03/30/13 23:36	KP	TAL NSH
Total/NA	Analysis	Moisture		1	68676	03/29/13 08:10	RS	TAL NSH

Client Sample ID: 902 Barracuda

Date Collected: 03/20/13 12:00

Date Received: 03/27/13 08:30

Lab Sample ID: 490-22932-2

Matrix: Solid

Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			68619	03/28/13 16:10	ML	TAL NSH
Total/NA	Analysis	8260B		1	69466	04/02/13 14:57	MH	TAL NSH
Total/NA	Prep	3550C			68984	03/30/13 08:16	AK	TAL NSH
Total/NA	Analysis	8270D		1	69035	03/31/13 02:39	KP	TAL NSH
Total/NA	Analysis	Moisture		1	68676	03/29/13 08:10	RS	TAL NSH

Client Sample ID: 1233 Dove

Date Collected: 03/21/13 11:45

Date Received: 03/27/13 08:30

Lab Sample ID: 490-22932-3

Matrix: Solid

Percent Solids: 74.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			68619	03/28/13 16:10	ML	TAL NSH
Total/NA	Analysis	8260B		1	69466	04/02/13 15:24	MH	TAL NSH
Total/NA	Prep	3550C			68984	03/30/13 08:16	AK	TAL NSH
Total/NA	Analysis	8270D		1	69035	03/31/13 03:02	KP	TAL NSH
Total/NA	Analysis	Moisture		1	68676	03/29/13 08:10	RS	TAL NSH

Client Sample ID: 403 Elderberry

Date Collected: 03/18/13 12:15

Date Received: 03/27/13 08:30

Lab Sample ID: 490-22932-4

Matrix: Solid

Percent Solids: 97.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			68619	03/28/13 16:10	ML	TAL NSH
Total/NA	Analysis	8260B		1	69194	04/01/13 17:48	MH	TAL NSH
Total/NA	Prep	3550C			68984	03/30/13 08:16	AK	TAL NSH
Total/NA	Analysis	8270D		1	69035	03/31/13 03:25	KP	TAL NSH
Total/NA	Analysis	Moisture		1	68676	03/29/13 08:10	RS	TAL NSH

TestAmerica Nashville

Lab Chronicle

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

TestAmerica Job ID: 490-22932-1

Client Sample ID: 1330 Albatross

Date Collected: 03/19/13 15:30

Date Received: 03/27/13 08:30

Lab Sample ID: 490-22932-5

Matrix: Solid

Percent Solids: 95.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			68619	03/28/13 16:10	ML	TAL NSH
Total/NA	Analysis	8260B		1	69466	04/02/13 14:30	MH	TAL NSH
Total/NA	Prep	3550C			68984	03/30/13 08:16	AK	TAL NSH
Total/NA	Analysis	8270D		1	69123	03/31/13 17:33	KP	TAL NSH
Total/NA	Analysis	Moisture		1	68676	03/29/13 08:10	RS	TAL NSH

Client Sample ID: 779 Laurel Bay

Date Collected: 03/20/13 14:30

Date Received: 03/27/13 08:30

Lab Sample ID: 490-22932-6

Matrix: Solid

Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			68619	03/28/13 16:10	ML	TAL NSH
Total/NA	Analysis	8260B		1	69466	04/02/13 15:51	MH	TAL NSH
Total/NA	Prep	3550C			68984	03/30/13 08:16	AK	TAL NSH
Total/NA	Analysis	8270D		1	69123	03/31/13 17:55	KP	TAL NSH
Total/NA	Analysis	Moisture		1	68676	03/29/13 08:10	RS	TAL NSH

Client Sample ID: 1254 Dove

Date Collected: 03/21/13 15:00

Date Received: 03/27/13 08:30

Lab Sample ID: 490-22932-7

Matrix: Solid

Percent Solids: 96.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			68619	03/28/13 16:10	ML	TAL NSH
Total/NA	Analysis	8260B		1	69466	04/02/13 16:18	MH	TAL NSH
Total/NA	Prep	3550C			68984	03/30/13 08:16	AK	TAL NSH
Total/NA	Analysis	8270D		1	69123	03/31/13 18:18	KP	TAL NSH
Total/NA	Analysis	Moisture		1	68676	03/29/13 08:10	RS	TAL NSH

Laboratory References:

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

Method Summary

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

TestAmerica Job ID: 490-22932-1

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

TestAmerica Nashville

Certification Summary

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

TestAmerica Job ID: 490-22932-1

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	05-05-14
Arkansas DEQ	State Program	6	88-0737	04-25-13
California	NELAP	9	1168CA	10-31-13
Connecticut	State Program	1	PH-0220	12-31-13
Florida	NELAP	4	E87358	06-30-13
Illinois	NELAP	5	200010	12-09-13
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-13
Kentucky (UST)	State Program	4	19	09-15-13
Louisiana	NELAP	6	30613	06-30-13
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-13
Minnesota	NELAP	5	047-999-345	12-31-13
Mississippi	State Program	4	N/A	06-30-13
Montana (UST)	State Program	8	NA	01-01-15
Nevada	State Program	9	TN00032	07-31-13
New Hampshire	NELAP	1	2963	10-09-13
New Jersey	NELAP	2	TN965	06-30-13
New York	NELAP	2	11342	04-01-13
North Carolina DENR	State Program	4	387	12-31-13
North Dakota	State Program	8	R-146	06-30-13
Ohio VAP	State Program	5	CL0033	01-19-14
Oklahoma	State Program	6	9412	08-31-13
Oregon	NELAP	10	TN200001	04-30-13
Pennsylvania	NELAP	3	68-00585	06-30-13
Rhode Island	State Program	1	LAO00268	12-30-13
South Carolina	State Program	4	84009 (001)	04-30-14
South Carolina	State Program	4	84009 (002)	02-23-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-13
USDA	Federal		S-48469	11-02-13
Utah	NELAP	8	TAN	06-30-13
Virginia	NELAP	3	460152	06-14-13
Washington	State Program	10	C789	07-19-13
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-13
Wyoming (UST)	A2LA	8	453.07	12-31-13

TestAmerica Nashville

COOLER RECEIPT FORM

Charleston



490-22932 Chain of Custody

Cooler Received/Opened On : 03/27/13 @ 0830

Tracking # 9983 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID: 95610068

1. Temperature of rep. sample or temp blank when opened: 3.9 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: 1 Fan

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) [Signature]

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 #

I certify that I unloaded the cooler and answered questions 7-14 (initial) [Signature]

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) [Signature]

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) [Signature]

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

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

TestAmerica

Nashville Division
2960 Foster Creighton
Nashville, TN 37204

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

Client Name/Account #: EEG # 2449

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29455

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

Telephone Number: 843.412.2097

Sample Name: (Print)

Sampler Signature:

Fax No.: 843-879-0401

Site State: SC

PO#: 1035

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
22932

4/10/2013

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Ice	HNO ₃ (Red Label)	HCl (Blue Label)	NaOH (Orange Label)	H ₂ SO ₄ Plastic (Yellow Label)	H ₂ SO ₄ Glass (Yellow Label)	None (Black Label)	Other (Specify)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	BTEX + Napth - 82608	PAH - 8270D	RUSH TAT (Pre-Schedule)	Standard TAT	Fax Results
1337 Albafross	3/19/13	1445	5	X																					
902 BARACUDA	3/20/13	1300	5	X																					
1233 DORA	3/21/13	1145	5	X																					

Special Instructions:

Method of Shipment:

Laboratory Comments:

Temperature Upon Receipt: 3.4

Y N

Relinquished by: [Signature]

Date: 3/26/13

Time: 0900

Received by: [Signature]

Date: 3-27-13

Time: 0830

4/10/2013

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

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

Address: 10179 Highway 78

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

Fax No.: 843-879-0401

Sampler Signature:

1035

Project #:

Compliance Monitoring?	Yes _____	No _____
Enforcement Action?	Yes _____	No _____

Page 26 of 27 [Send QC](#)

Login Sample Receipt Checklist

Client: Environmental Enterprise Group

Job Number: 490-22932-1

Login Number: 22932

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

NON-HAZARDOUS MANIFEST		1. 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 29904		4. Generator's Phone 843-879-0411		Generator's Site Address (If different than mailing):		A. Manifest Number WMNA 01519143				
5. Transporter 1 Company Name <i>Small Business Corp</i>		6. US EPA ID Number		C. State Transporter's ID		D. Transporter's Phone				
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 DRIVE 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 Quantity	14. Unit Wt./Vol.	I. Misc. Comments				
		No.	Type							
a. HEATING OIL TANK FILLED WITH SAND WM Profile # 102655SC		1	200 Lbs	1.80 Ton		706094				
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 <i>1) 779 Laurel Bay ✓ 4) 1254 Dove ✓ 6) 1321 ✓ 8) 1337 Albatross ✓ 9) 902 Barracuda ✓ 5) 1233 Dove ✓</i>										
Purchase Order #		EMERGENCY CONTACT / PHONE NO.:								
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.										
Printed Name <i>W.G. Doherty Jr.</i>		Signature "On behalf of"				Month 4	Day 16	Year 13		
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed Name <i>Pratt Shaw</i>				Signature <i>Pratt Shaw</i>		Month 4	Day 16	Year 13
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed Name <i>JAMES BALDWIN</i>				Signature <i>James Baldwin</i>		Month 4	Day 18	Year 13
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 <i>Tom Cofield</i>		Signature <i>Tom Cofield</i>				Month 4	Day 18	Year 13		

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY

Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY

Appendix C
Laboratory Analytical Report - Groundwater

Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants	Laboratory ID: SC11009-005
Description: BEALB1337TW01WG20170309	Matrix: Aqueous
Date Sampled: 03/09/2017 1050	
Date Received: 03/11/2017	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	03/15/2017 1317	PMV		37143			

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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		108	85-114
Dibromofluoromethane		92	80-119
1,2-Dichloroethane-d4		102	81-118
Toluene-d8		93	89-112

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

Semivolatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Laboratory ID: SC11009-005

Description: BEALB1337TW01WG20170309

Matrix: Aqueous

Date Sampled: 03/09/2017 1050

Date Received: 03/11/2017

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	03/17/2017 2206	RBH	03/15/2017 1020	37108

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzo(a)anthracene	56-55-3	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Chrysene	218-01-9	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Nitrobenzene-d5		58	44-120						
2-Fluorobiphenyl		54	44-119						
Terphenyl-d14		77	50-134						

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Q = Surrogate failure

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

L = LCS/LCSD failure

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

S = MS/MSD failure

Shealy Environmental Services, Inc.

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

Page: 13 of 34

Appendix D

Regulatory Correspondence



August 24, 2016

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

RE: IGWA
Laurel Bay Underground Tank Assessment Reports

Dear Mr. Drawdy:

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

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

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

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

Sincerely,

Laurel Petrus, Environmental Engineer Associate
RCRA Federal Facilities Section

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

Attachment to: Petrus to Drawdy, August 24, 2016
 Subject: IGWA, Laurel Bay Underground Tank Assessment Reports

Draft Final Initial Groundwater Investigation Report for (41 addresses)

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



July 27, 2017

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

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

Dear Mr. Drawdy:

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

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

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

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

Sincerely,

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

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

Attachment to: Petrus to Drawdy Dated July 27, 2017

Draft Final Initial Groundwater Investigation Report for (52 addresses)

Permanent Well Installation recommendation (3 Addresses):

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

No Further Action recommendation (49 addresses):

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