SUMMARY REPORT
369 ELDERBERRY DRIVE (FORMERLY 436 ELDERBERRY 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 SUMMARY REPORT
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Prepared by:



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

Contract Number: N62470-14-D-9016

CTO WE52

JUNE 2021



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List of Acronyms

bgs below ground surface

BTEX benzene, toluene, ethylbenzene, and xylenes

CTO Contract Task Order

COPC constituents of potential concern

ft feet

IDIQ Indefinite Delivery, Indefinite Quantity

IGWA Initial Groundwater Assessment

JV Joint Venture

LBMH Laurel Bay Military Housing MCAS Marine Corps Air Station

NAVFAC Mid-Lant Naval Facilities Engineering Command Mid-Atlantic

NFA No Further Action

PAH polynuclear aromatic hydrocarbon QAPP Quality Assurance Program Plan

RBSL risk-based screening level

SCDHEC South Carolina Department of Health and Environmental Control

Site LBMH area at MCAS Beaufort, South Carolina

UST underground storage tank
VISL vapor intrusion screening level



1.0 INTRODUCTION

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

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

This report summarizes the results the environmental investigation activities associated with the storage of home heating oil and the potential release of petroleum constituents at the referenced property. Based on the results of the investigation, a No Further Action (NFA) determination has been made by the South Carolina Department of Health and Environmental Control (SCDHEC) for 369 Elderberry Drive (Formerly 436 Elderberry 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, February 2016) and the Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service, (SCDHEC, 2018), are as follows:

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

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



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

The results of the soil sampling at each former UST location were used to determine if a potential for groundwater contamination exists (i.e., soil results greater than RBSLs) and subsequently to select properties for follow-up initial groundwater assessment (IGWA) sampling. The 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 369 Elderberry Drive (Formerly 436 Elderberry Drive). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 436 Elderberry 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 – November and December 2015* (Resolution Consultants, 2016). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C.

2.1 UST Removal and Soil Sampling

On February 4, 2013, a single 280 gallon heating oil UST was removed from underneath the front concrete porch at 369 Elderberry Drive (Formerly 436 Elderberry 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 5'4" 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 369 Elderberry Drive (Formerly 436 Elderberry Drive) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated July 1, 2015, SCDHEC requested an IGWA for 369 Elderberry Drive (Formerly 436 Elderberry 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 November 12, 2015, a temporary monitoring well was installed at 369 Elderberry Drive (Formerly 436 Elderberry Drive), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated May 27, 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 – November and December 2015* (Resolution Consultants, 2016).



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

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 369 Elderberry Drive (Formerly 436 Elderberry 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 369 Elderberry Drive (Formerly 436 Elderberry Drive). This NFA determination was obtained in a letter dated June 8, 2016. SCDHEC's NFA letter is provided in Appendix D.

4.0 REFERENCES

Marine Corps Air Station Beaufort, 2013. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 436 Elderberry Drive, Laurel Bay Military Housing Area, October 2013.

Resolution Consultants, 2016. *Initial Groundwater Investigation Report – November and December 2015 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, April 2016.





- 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 369 Elderberry Drive (Formerly 436 Elderberry Drive) Laurel Bay Military Housing Area

Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Results Sample Collected 02/04/13		
Volatile Organic Compounds Analyz	ed by EPA Method 8260B (mg/kg)			
Benzene	0.003	ND		
Ethylbenzene	1.15	0.832		
Naphthalene	0.036	8.50		
Toluene	0.627	0.0267		
Xylenes, Total	13.01	4.80		
Semivolatile Organic Compounds A	nalyzed by EPA Method 8270D (mg/kg)			
Benzo(a)anthracene	0.66	0.0766		
Benzo(b)fluoranthene	0.66	0.0312		
Benzo(k)fluoranthene	0.66	0.0619		
Chrysene	0.66	0.140		
Dibenz(a,h)anthracene	0.66	ND		

Notes:

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

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Table 2

Laboratory Analytical Results - Groundwater 369 Elderberry Drive (Formerly 436 Elderberry 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 11/13/15					
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 Ana	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:

(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 1x10⁻⁶, 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

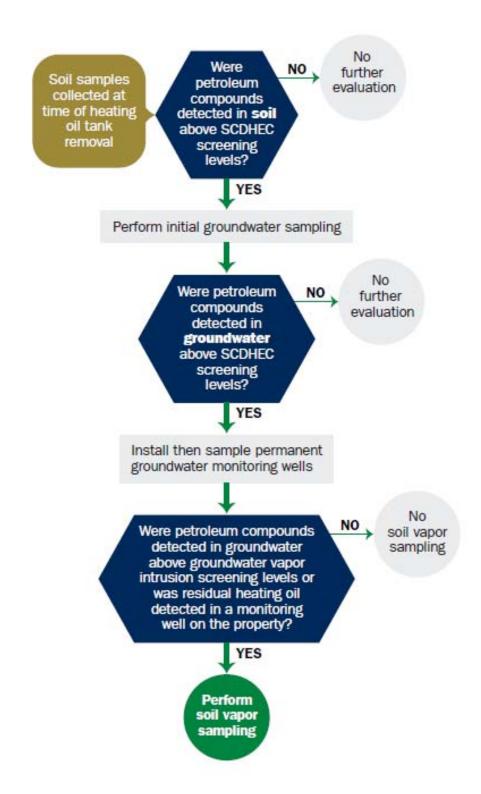
μg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

⁽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).

Appendix A Multi-Media Selection Process for LBMH





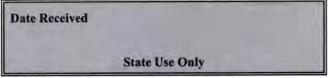
Appendix A - Multi-Media Selection Process for LBMH

Appendix B UST Assessment Report



South Carolina Department of Health and Environmental Control (SCDHEC)

Underground Storage Tank (UST) Assessment Report



RECEIVED

OCT 2 3 20143

SC DMEC - Bureau of Land & Waste Management Submit Completed Form To: UST Program SCDHEC 2600 Bull Street Columbia, South Carolina 29201 Telephone (803) 896-7957

I. OWNERSHIP OF UST (S)

	ommanding Officer Attn: Ni n, Individual, Public Agency, Other)	REAO (Craig Ehde)
P.O. Box 55001 Mailing Address		
Beaufort,	South Carolina	29904-5001
City	State	Zip Code
843	228-7317	Craig Ehde
Area Code	Telephone Number	Contact Person

II. SITE IDENTIFICATION AND LOCATION

5 1.75 //	_				
Permit I.D. #	The second of the second second		ace of each		00
Laurel Bay Milita	ry Housing Area, Mari	ne Corps Alr	Station,	Beaufort,	SC
Facility Name or Company	Site Identifier				
		44	COLUMN TO THE REAL PROPERTY.		
436 Elderberry D	rive, Laurel Bay Milit	ary Housing	Area		
Street Address or State Ros	ad (as applicable)				
Beaufort,	Beaufort				
City	County				

Attachment 2

III. INSURANCE INFORMATION

m. Insurance in ordanon
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 1 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	436 Elderberry
P	roduct(ex. Gas, Kerosene)	Heating oil
(Capacity(ex. 1k, 2k)	280 gal
A	ge	Late 1950s
C	Construction Material(ex. Steel, FRP)	Steel
N	Month/Year of Last Use	Mid 1980s
D	Pepth (ft.) To Base of Tank	5'4"
S	pill Prevention Equipment Y/N	No
O	Overfill Prevention Equipment Y/N	No
N	Method of Closure Removed/Filled	Removed
D	Date Tanks Removed/Filled	2/4/2013
v	isible Corrosion or Pitting Y/N	Yes
V	isible Holes Y/N	Yes
N	Method of disposal for any USTs removed from the UST 436Elderberry was removed from	
	Subtitle "D" landfill. See Attach	

VII. PIPING INFORMATION

	Elderberry	
	Steel	
Construction Material(ex. Steel, FRP)	& Copper	
Construction Material(ex. Sieel, FRF)	5.0	
Distance from UST to Dispenser	N/A	
Number of Dispensers	N/A	
Type of System Pressure or Suction	Suction	
Was Piping Removed from the Ground? Y/N	No	
Visible Corrosion or Pitting Y/N	Yes	
Visible Holes Y/N	No	
Age	Late 1950s	
If any corrosion, pitting, or holes were observed,	describe the location and ext	ent for each piping
TO 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Corrosion and pitting were foun		the steel ve
pipe. Copper supply and return	lines were sound.	
		232
VIII. BRIEF SITE DESCI		
The USTs at the residences are o	constructed of singl	e wall steel
The USTs at the residences are of and formerly contained fuel oil	constructed of single for heating. These	e wall steel USTs were
The USTs at the residences are o	constructed of single for heating. These	e wall steel USTs were
The USTs at the residences are of and formerly contained fuel oil	constructed of single for heating. These	e wall steel USTs were
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The USTs at the residences are of and formerly contained fuel oil	constructed of single for heating. These	e wall steel USTs were

IX. SITE CONDITIONS

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

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
136 Elderb'y	Excav at fill end	Soil	Sandy	5'4"	2/4/13 1530 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 <u>and</u> store the samples. Also include the preservative used for each sample. Please use the space provided below.

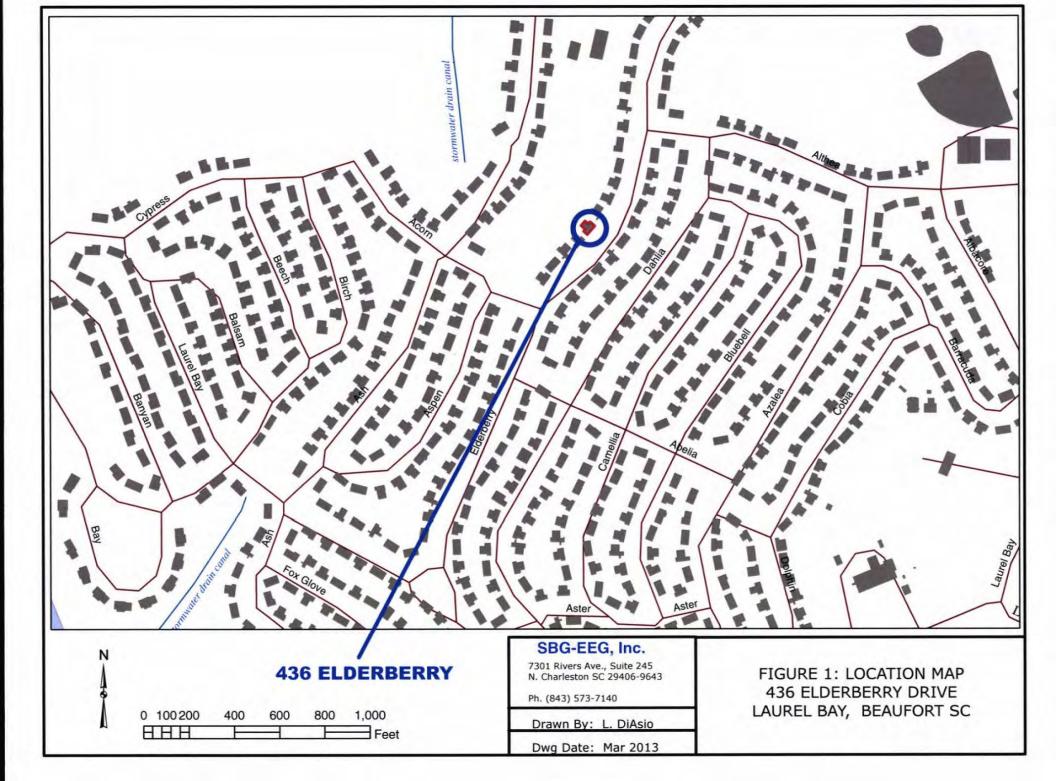
XII. RECEPTORS

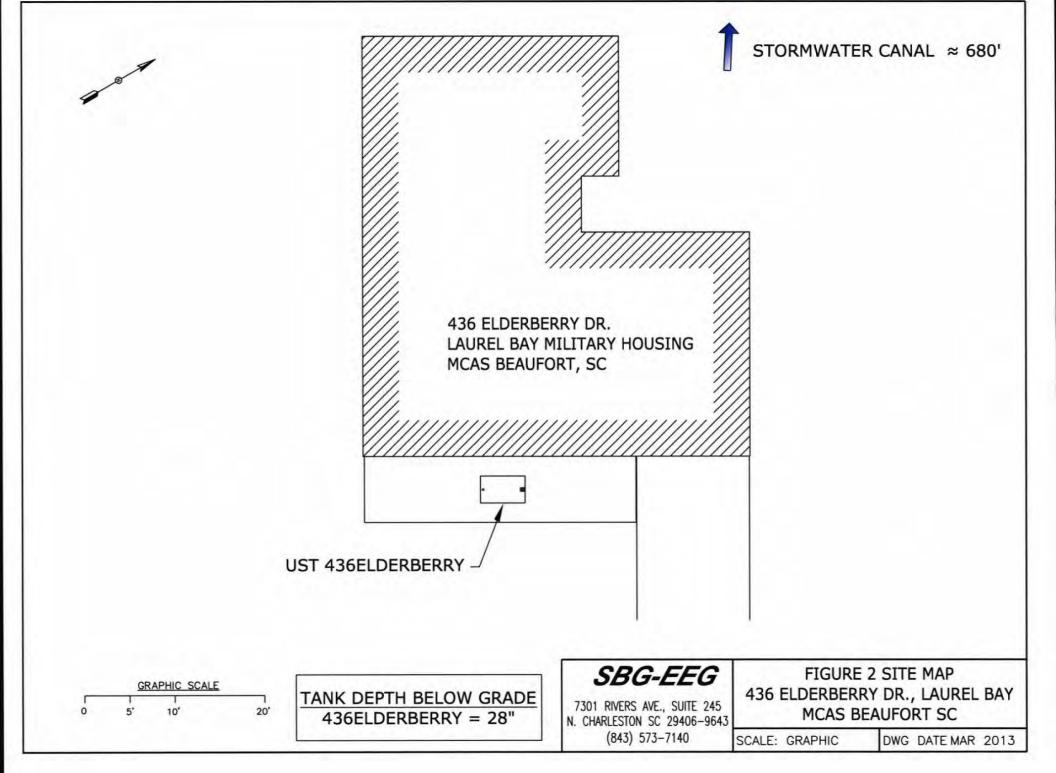
		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system? *Stormwater drainage	*X	
	If yes, indicate type of receptor, distance, and direction on site map.		
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		Х
	If yes, indicate type of well, distance, and direction on site map.		
C.	Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?		х
	If yes, indicate type of structure, distance, and direction on site map.		
D.	Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination? *Sewer, water, electric	*X	
	cable, fiber optic & getting of the street o	other	rmal
E.	Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete?		Х
	If yes, indicate the area of contaminated soil on the site map.		

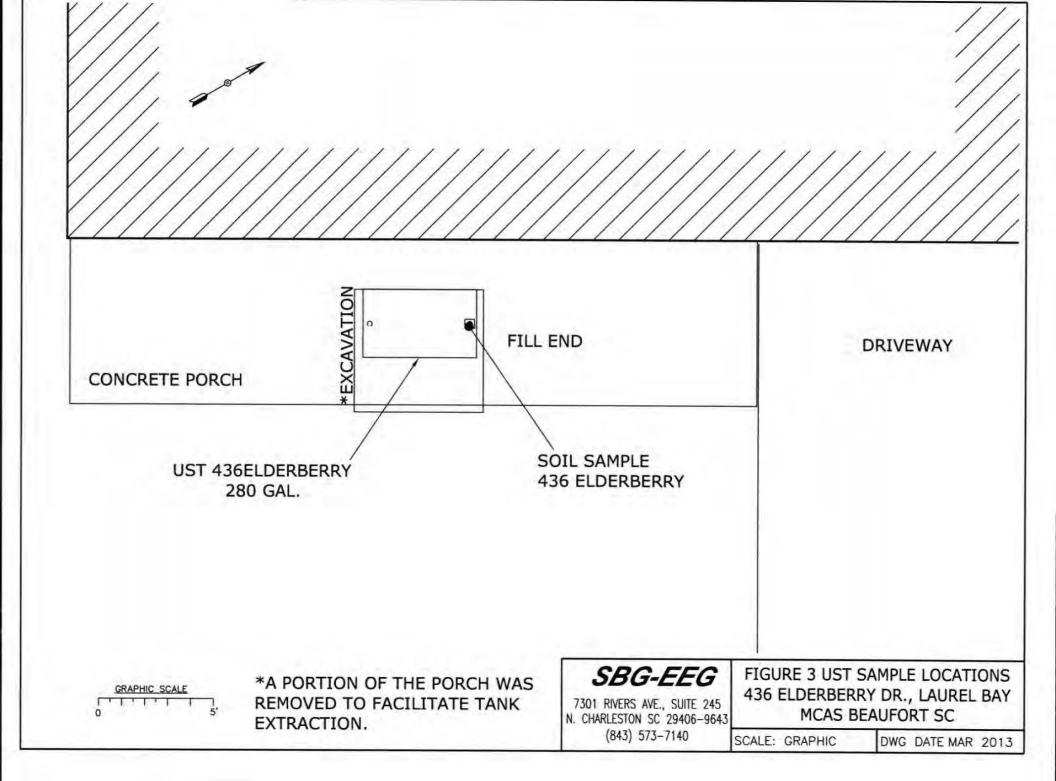
XIII. SITE MAP

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

(Attach Site Map Here)









Picture 1: Location of UST 436Elderberry.



Picture 2: UST 436Elderberry 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	436Elderberry
Benzene	ND
Toluene	0.0267 mg/kg
Ethylbenzene	0.832 mg/kg
Xylenes	4.80 mg/kg
Naphthalene	8.50 mg/kg
Benzo (a) anthracene	0.0766 mg/kg
Benzo (b) fluoranthene	0.0312 mg/kg
Benzo (k) fluoranthene	0.0619 mg/kg
Chrysene	0.140 mg/kg
Dibenz (a, h) anthracene	ND ND
TPH (EPA 3550)	
CoC	
Benzene	
Toluene	
Ethylbenzene	
Xylenes	
Naphthalene	
Benzo (a) anthracene	
Benzo (b) fluoranthene	
Benzo (k) fluoranthene	
Chrysene	
Dibenz (a, h) anthracene	
TPH (EPA 3550)	

SUMMARY OF ANALYSIS RESULTS (cont'd)

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

CoC	RBSL (µg/l)	W-1	W-2	W -3	W -4
Free Product Thickness	None				
Benzene	5				
Toluene	1,000				
Ethylbenzene	700				
Xylenes	10,000				
Total BTEX	N/A				
МТВЕ	40				
Naphthalene	25				
Benzo (a) anthracene	10				
Benzo (b) flouranthene	10				
Benzo (k) flouranthene	10				7
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)



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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: 490-19382-1

Client Project/Site: Laurel Bay Housing Project

For:

Environmental Enterprise Group 10179 Highway 78 Ladson, South Carolina 29456

Attn: Mr. Tom McElwee

Kuth Haye

Authorized for release by: 2/25/2013 6:35:06 PM

Ken Hayes Project Manager I

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

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Sample Summary

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-19382-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-19382-1	436 Elderberry	Solid	02/04/13 15:30	02/13/13 08:30
490-19382-2	486 Laural Bay	Solid	02/05/13 14:10	02/13/13 08:30
490-19382-3	835 Azalea	Solid	02/06/13 13:30	02/13/13 08:30
490-19382-4	834 Azalea	Solid	02/07/13 10:45	02/13/13 08:30
490-19382-5	452 Elderberry	Solid	02/04/13 15:30	02/13/13 08:30
490-19382-6	513 Laurel Bay	Solid	02/05/13 14:00	02/13/13 08:30
490-19382-7	602 Dahlia	Solid	02/05/13 16:00	02/13/13 08:30
490-19382-8	837 Azalea	Solid	02/06/13 12:45	02/13/13 08:30

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Case Narrative

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-19382-1

Job ID: 490-19382-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-19382-1

Comments

No additional comments.

Receipt

The samples were received on 2/13/2013 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0° C.

GC/MS VOA

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: 436 Elderberry (490-19382-1), 486 Laural Bay (490-19382-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: The naphthalene in this samples is likely due to carryover. The second attempt to run this sample resulted in all three internal standards failing.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 58742.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 58452.

No other analytical or quality issues were noted.

GC/MS Semi VOA

Method(s) 8270D: The matrix spike / matrix spike duplicate (MS/MSD) percent recoveries and %RPD for batch 58454 were outside control limits. This is attributed to an abundance of target analytes at concentrations significantly higher than the spike concentration.

Method(s) 8270D: Surrogate recovery for the following sample(s) was outside control limits: 436 Elderberry (490-19382-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No other 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

Relative error ratio

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

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

TestAmerica Job ID: 490-19382-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
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.	
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.	
E	Result exceeded calibration range.	
F	MS or MSD exceeds the control limits	

RER

RPD TEF

TEQ

RL

Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
O	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-19382-1

Client Sample ID: 436 Elderberry

Date Collected: 02/04/13 15:30 Date Received: 02/13/13 08:30

General Chemistry

Analyte

Percent Solids

Lab Sample ID: 490-19382-1

Matrix: Solid

Percent Solids: 81.0

Method: 8260B - Volatile Organ Analyte		Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	dudinier	0.00214	0.000717	mg/Kg	D	02/13/13 15:19	02/14/13 13:14	1
Ethylbenzene	0.832		0.139	0.0473	mg/Kg	E	02/13/13 15:17	02/15/13 10:37	1
Naphthalene	8,50		0.347	0.118	mg/Kg	22	02/13/13 15:17	02/15/13 10:37	1
Toluene	0.0267		0.00214	0.000792	mg/Kg	301	02/13/13 15:19	02/14/13 13:14	1
Xylenes, Total	4.80		0.347		mg/Kg	Ø	02/13/13 15:17	02/15/13 10:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	-88		70 - 130				02/13/13 15:19	02/14/13 13:14	1
1,2-Dichloroethane-d4 (Surr)	78		70 - 130				02/13/13 15:17	02/15/13 10:37	1
4-Bromofluorobenzene (Surr)	450	X	70 - 130				02/13/13 15:19	02/14/13 13:14	1
4-Bromofluorobenzene (Surr)	106		70 - 130				02/13/13 15:17	02/15/13 10:37	1
Dibromofluoromethane (Surr)	96		70 - 130				02/13/13 15:19	02/14/13 13:14	1
Dibromofluoromethane (Surr)	93		70 - 130				02/13/13 15:17	02/15/13 10:37	1
Toluene-d8 (Surr)	146	X	70 - 130				02/13/13 15:19	02/14/13 13:14	1
Toluene-d8 (Surr)	88		70 - 130				02/13/13 15:17	02/15/13 10:37	1
Method: 8270D - Semivolatile	Organic Compou	nds (GC/MS	3)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.535		0.0817	0.0122	mg/Kg	Ē	02/14/13 06:01	02/14/13 18:07	1
Acenaphthylene	0.553		0.0817	0.0110	mg/Kg	F	02/14/13 06:01	02/14/13 18:07	1
Anthracene	0.333		0.0817	0.0110	mg/Kg	12	02/14/13 06:01	02/14/13 18:07	1
Benzo[a]anthracene	0.0766	J	0.0817	0.0183	mg/Kg	12	02/14/13 06:01	02/14/13 18:07	1
Benzo[a]pyrene	ND		0.0817	0.0146	mg/Kg	12	02/14/13 06:01	02/14/13 18:07	1
Benzo[b]fluoranthene	0.0312	J	0.0817	0.0146	mg/Kg	B	02/14/13 06:01	02/14/13 18:07	1
Benzo[g,h,i]perylene	ND		0.0817	0.0110	mg/Kg	12	02/14/13 06:01	02/14/13 18:07	1
Benzo[k]fluoranthene	0.0619	J	0.0817	0.0171	mg/Kg	to	02/14/13 06:01	02/14/13 18:07	1
1-Methylnaphthalene	9.80		0.408	0.0853	mg/Kg	13	02/14/13 06:01	02/15/13 17:48	5
Pyrene	0.590		0.0817	0.0146	mg/Kg	E.	02/14/13 06:01	02/14/13 18:07	1
Phenanthrene	2.65		0.408	0.0548	mg/Kg	DI	02/14/13 06:01	02/15/13 17:48	5
Chrysene	0.140		0.0817	0.0110	mg/Kg	\$.\$	02/14/13 06:01	02/14/13 18:07	1
Dibenz(a,h)anthracene	ND		0.0817	0.00853	mg/Kg	in.	02/14/13 06:01	02/14/13 18:07	1
Fluoranthene	ND		0.0817	0.0110	mg/Kg	EX	02/14/13 06:01	02/14/13 18:07	1
Fluorene	2.15		0.0817	0.0146	mg/Kg	101	02/14/13 06:01	02/14/13 18:07	1
Indeno[1,2,3-cd]pyrene	ND		0.0817	0.0122	mg/Kg	13	02/14/13 06:01	02/14/13 18:07	1
Naphthalene	2.95		0.408	0.0548	mg/Kg	22	02/14/13 06:01	02/15/13 17:48	5
2-Methylnaphthalene	14.7		0.408	0.0975	mg/Kg	63	02/14/13 06:01	02/15/13 17:48	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	67		29 - 120				02/14/13 06:01	02/14/13 18:07	1
Terphenyl-d14 (Surr)	84		13 - 120				02/14/13 06:01	02/14/13 18:07	1
Nitrobenzene-d5 (Surr)	50		27 - 120				02/14/13 06:01	02/14/13 18:07	1

Analyzed

02/13/13 14:23

RL

0.10

RL Unit

0.10 %

Prepared

Result Qualifier

81

Dil Fac

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-19382-1

Client Sample ID: 486 Laural Bay

Date Collected: 02/05/13 14:10 Date Received: 02/13/13 08:30

Lab Sample ID: 490-19382-2

Matrix: Solid

Percent Solids: 97.6

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00221	0.000741	mg/Kg	D	02/13/13 15:19	02/14/13 13:45	1
Ethylbenzene	ND		0.00221	0.000741	mg/Kg	12:	02/13/13 15:19	02/14/13 13:45	1
Naphthalene	0.0460		0.00553	0.00188	mg/Kg	D	02/13/13 15:19	02/14/13 13:45	1
Toluene	ND		0.00221	0.000818	mg/Kg	- 11	02/13/13 15:19	02/14/13 13:45	1
Xylenes, Total	0.000766	J	0.00553	0.000741	mg/Kg	122	02/13/13 15:19	02/14/13 13:45	1

Comment of the commen					
Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1.2-Dichloroethane-d4 (Surr)	88	70 - 130	02/13/13 15:19	02/14/13 13:45	1
4-Bromofluorobenzene (Surr)	108	70 - 130	02/13/13 15:19	02/14/13 13:45	.1
Dibromofluoromethane (Surr)	97	70 - 130	02/13/13 15:19	02/14/13 13:45	1
Toluene-d8 (Surr)	69 X	70 - 130	02/13/13 15:19	02/14/13 13:45	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1.2-Dichloroethane-d4 (Surr)	88		70 - 130				02/13/13 15:19	02/14/13 13:45	1
4-Bromofluorobenzene (Surr)	108		70 - 130				02/13/13 15:19	02/14/13 13:45	.1
Dibromofluoromethane (Surr)	97		70 - 130				02/13/13 15:19	02/14/13 13:45	1
Toluene-d8 (Surr)	69	X	70 - 130				02/13/13 15:19	02/14/13 13:45	1
Method: 8270D - Semivolatile	Organic Compou	nds (GC/MS	5)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0675	0.0101	mg/Kg	D	02/14/13 06:01	02/14/13 19:10	1
Acenaphthylene	ND		0.0675	0.00907	mg/Kg	E3	02/14/13 06:01	02/14/13 19:10	1
Anthracene	ND		0.0675	0.00907	mg/Kg	10	02/14/13 06:01	02/14/13 19:10	1
Benzo[a]anthracene	ND		0.0675	0.0151	mg/Kg	(D)	02/14/13 06:01	02/14/13 19:10	1
Benzo[a]pyrene	ND		0.0675	0.0121	mg/Kg	10	02/14/13 06:01	02/14/13 19:10	1
Benzo[b]fluoranthene	ND		0.0675	0.0121	mg/Kg	18	02/14/13 06:01	02/14/13 19:10	1
Benzo[g,h,i]perylene	ND		0.0675	0.00907	mg/Kg	-03	02/14/13 06:01	02/14/13 19:10	1
Benzo[k]fluoranthene	ND		0.0675	0.0141	mg/Kg	D	02/14/13 06:01	02/14/13 19:10	1
1-Methylnaphthalene	ND		0.0675	0.0141	mg/Kg	D	02/14/13 06:01	02/14/13 19:10	1
Pyrene	0.0486	J	0.0675	0.0121	mg/Kg	100	02/14/13 06:01	02/14/13 19:10	1
Phenanthrene	ND		0.0675	0.00907	mg/Kg	n	02/14/13 06:01	02/14/13 19:10	1
Chrysene	ND		0.0675	0.00907	mg/Kg	10	02/14/13 06:01	02/14/13 19:10	1
Dibenz(a,h)anthracene	ND		0.0675	0.00706	mg/Kg	128	02/14/13 06:01	02/14/13 19:10	1
Fluoranthene	ND		0.0675	0.00907	mg/Kg	10	02/14/13 06:01	02/14/13 19:10	1
Fluorene	ND		0.0675	0.0121	mg/Kg	130	02/14/13 06:01	02/14/13 19:10	1
Indeno[1,2,3-cd]pyrene	ND		0.0675	0.0101	mg/Kg	15	02/14/13 06:01	02/14/13 19:10	1
Naphthalene	ND		0.0675	0.00907	mg/Kg	Jac.	02/14/13 06:01	02/14/13 19:10	1
2-Methylnaphthalene	ND		0.0675	0.0161	mg/Kg	-	02/14/13 06:01	02/14/13 19:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	50		29 - 120				02/14/13 06:01	02/14/13 19:10	1
Terphenyl-d14 (Surr)	83		13 - 120				02/14/13 06:01	02/14/13 19:10	1
Nitrobenzene-d5 (Surr)	46		27 - 120				02/14/13 06:01	02/14/13 19:10	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	7,710,237	D	Prepared	Analyzed	Dil Fac
Percent Solids	98		0.10	0.10	%			02/13/13 14:23	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	50		29 - 120				02/14/13 06:01	02/14/13 19:10	1
Terphenyl-d14 (Surr)	83		13 - 120				02/14/13 06:01	02/14/13 19:10	1
Nitrobenzene-d5 (Surr)	46		27 - 120				02/14/13 06:01	02/14/13 19:10	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	98		0.10	0.10	%			02/13/13 14:23	1

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-19382-1

Client Sample ID: 835 Azalea

Date Collected: 02/06/13 13:30 Date Received: 02/13/13 08:30

Analyte

Percent Solids

Lab Sample ID: 490-19382-3

Matrix: Solid

Percent Solids: 76.5

Method: 8260B - Volatile Orga Analyte	The second of th	Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	quamer	0.00279	0.000933			02/13/13 15:19	02/15/13 10:07	1
Ethylbenzene	ND		0.00279	0.000933		0	02/13/13 15:19	02/15/13 10:07	1
Naphthalene	ND		0.00696	0.00237	mg/Kg	13	02/13/13 15:19	02/15/13 10:07	1
Toluene	ND		0.00279	0.00103		0	02/13/13 15:19	02/15/13 10:07	1
Xylenes, Total	ND		0.00696	0.000933	100	10	02/13/13 15:19	02/15/13 10:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 130				02/13/13 15:19	02/15/13 10:07	1
4-Bromofluorobenzene (Surr)	109		70 - 130				02/13/13 15:19	02/15/13 10:07	1
Dibromofluoromethane (Surr)	98		70 - 130				02/13/13 15:19	02/15/13 10:07	1
Toluene-d8 (Surr)	94		70 - 130				02/13/13 15:19	02/15/13 10:07	1
Method: 8270D - Semivolatile	Organic Compou	nds (GC/MS	5)						
Analyte	The state of the s	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0865	0.0129	mg/Kg	122	02/14/13 06:01	02/14/13 19:31	1
Acenaphthylene	ND		0.0865	0.0116	mg/Kg	133	02/14/13 06:01	02/14/13 19:31	1
Anthracene	ND		0.0865	0.0116	mg/Kg	日	02/14/13 06:01	02/14/13 19:31	1
Benzo[a]anthracene	ND		0.0865	0.0194	mg/Kg	El	02/14/13 06:01	02/14/13 19:31	1
Benzo[a]pyrene	ND		0.0865	0.0155	mg/Kg		02/14/13 06:01	02/14/13 19:31	1
Benzo[b]fluoranthene	ND		0.0865	0.0155	mg/Kg	H	02/14/13 06:01	02/14/13 19:31	1
Benzo[g,h,i]perylene	ND		0.0865	0.0116	mg/Kg	E	02/14/13 06:01	02/14/13 19:31	1
Benzo[k]fluoranthene	ND		0.0865	0.0181	mg/Kg	12	02/14/13 06:01	02/14/13 19:31	1
1-Methylnaphthalene	ND		0.0865	0.0181	mg/Kg	III	02/14/13 06:01	02/14/13 19:31	1
Pyrene	ND		0.0865	0.0155	mg/Kg	10	02/14/13 06:01	02/14/13 19:31	1
Phenanthrene	ND		0.0865	0.0116	mg/Kg	13	02/14/13 06:01	02/14/13 19:31	1
Chrysene	ND		0.0865	0.0116	mg/Kg	13	02/14/13 06:01	02/14/13 19:31	1
Dibenz(a,h)anthracene	ND		0.0865	0.00904	mg/Kg	12	02/14/13 06:01	02/14/13 19:31	1
Fluoranthene	ND		0.0865	0.0116	mg/Kg	n	02/14/13 06:01	02/14/13 19:31	1
Fluorene	ND		0.0865	0.0155	mg/Kg	D	02/14/13 06:01	02/14/13 19:31	1
Indeno[1,2,3-cd]pyrene	ND		0.0865	0.0129	mg/Kg	C	02/14/13 06:01	02/14/13 19:31	1
Naphthalene	ND		0.0865	0.0116	mg/Kg	43	02/14/13 06:01	02/14/13 19:31	1
2-Methylnaphthalene	ND		0.0865	0.0207	mg/Kg	0	02/14/13 06:01	02/14/13 19:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	45		29 - 120				02/14/13 06:01	02/14/13 19:31	1
Terphenyl-d14 (Surr)	71		13 - 120				02/14/13 06:01	02/14/13 19:31	1
Nitrobenzene-d5 (Surr)	45		27 - 120				02/14/13 06:01	02/14/13 19:31	1
General Chemistry									
					4.4	-	The second second	4 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	

Analyzed

02/13/13 14:23

Dil Fac

RL

0.10

RL Unit

0.10

Prepared

Result Qualifier

76

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-19382-1

Client Sample ID: 834 Azalea

Date Collected: 02/07/13 10:45 Date Received: 02/13/13 08:30

Lab Sample ID: 490-19382-4

Matrix: Solid

Percent Solids: 97.7

C	5
1	
1	6
1	
1	
1	
C	
1	
1	54
1	
1	

Method: 8260B - Volatile		Qualifier	RL	MDL	Unit		Prepared	Analyzed	Dil Fac
Analyte	Result	Qualifier	KL	MUL	Unit	D	Frepared	Analyzeu	Direc
Benzene	ND		0.00264	0.000883	mg/Kg	D	02/13/13 15:19	02/14/13 14:45	1
Ethylbenzene	ND		0.00264	0.000883	mg/Kg	10	02/13/13 15:19	02/14/13 14:45	1
Naphthalene	0.00559	J	0.00659	0.00224	mg/Kg	KX	02/13/13 15:19	02/14/13 14:45	1
Toluene	ND		0.00264	0.000976	mg/Kg	13	02/13/13 15:19	02/14/13 14:45	1
Xylenes, Total	ND		0.00659	0.000883	mg/Kg	12	02/13/13 15:19	02/14/13 14:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qu	ualifier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91	70 - 130	02/13/13 15:19	02/14/13 14:45	1
4-Bromofluorobenzene (Surr)	107	70 - 130	02/13/13 15:19	02/14/13 14:45	1
Dibromofluoromethane (Surr)	97	70 - 130	02/13/13 15:19	02/14/13 14:45	1
Toluene-d8 (Surr)	85	70 - 130	02/13/13 15:19	02/14/13 14:45	1

Dibromonuorometnane (Surr)	97		10-130				02/3/13 13.19	02/14/13 14.43	
Toluene-d8 (Surr)	85		70 - 130				02/13/13 15:19	02/14/13 14:45	1
Method: 8270D - Semivolatile	Organic Compou	nds (GC/M	S)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0674	0.0101	mg/Kg	17	02/14/13 06:01	02/14/13 19:53	1
Acenaphthylene	ND		0.0674	0.00905	mg/Kg	12	02/14/13 06:01	02/14/13 19:53	1
Anthracene	ND		0.0674	0.00905	mg/Kg	13	02/14/13 06:01	02/14/13 19:53	1
Benzo[a]anthracene	ND		0.0674	0.0151	mg/Kg	E.	02/14/13 06:01	02/14/13 19:53	1
Benzo[a]pyrene	ND		0.0674	0.0121	mg/Kg	E	02/14/13 06:01	02/14/13 19:53	1
Benzo[b]fluoranthene	ND		0.0674	0.0121	mg/Kg	ET.	02/14/13 06:01	02/14/13 19:53	1
Benzo[g,h,i]perylene	ND		0.0674	0.00905	mg/Kg	E	02/14/13 06:01	02/14/13 19:53	1
Benzo[k]fluoranthene	ND		0.0674	0.0141	mg/Kg	11	02/14/13 06:01	02/14/13 19:53	1
1-Methylnaphthalene	ND		0.0674	0.0141	mg/Kg	13	02/14/13 06:01	02/14/13 19:53	1
Pyrene	ND		0.0674	0.0121	mg/Kg	25	02/14/13 06:01	02/14/13 19:53	1
Phenanthrene	ND		0.0674	0.00905	mg/Kg	H	02/14/13 06:01	02/14/13 19:53	1
Chrysene	ND		0.0674	0.00905	mg/Kg	127	02/14/13 06:01	02/14/13 19:53	1
Dibenz(a,h)anthracene	ND		0.0674	0.00704	mg/Kg	CZ.	02/14/13 06:01	02/14/13 19:53	1
Fluoranthene	ND		0.0674	0.00905	mg/Kg	(3)	02/14/13 06:01	02/14/13 19:53	1
Fluorene	ND		0.0674	0.0121	mg/Kg	0.	02/14/13 06:01	02/14/13 19:53	1
Indeno[1,2,3-cd]pyrene	ND		0.0674	0.0101	mg/Kg	n	02/14/13 06:01	02/14/13 19:53	1
Naphthalene	ND		0.0674	0.00905	mg/Kg	商	02/14/13 06:01	02/14/13 19:53	1
2-Methylnaphthalene	ND		0.0674	0.0161	mg/Kg	13	02/14/13 06:01	02/14/13 19:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	52		29 - 120				02/14/13 06:01	02/14/13 19:53	1
Terphenyl-d14 (Surr)	70		13 - 120				02/14/13 06:01	02/14/13 19:53	1
Nitrobenzene-d5 (Surr)	49		27 - 120				02/14/13 06:01	02/14/13 19:53	1
General Chemistry									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
District Calleta	0.0		0.10	0.10	0/_			02/13/13 14-23	1

Indeno[1,2,3-cd]pyrene	ND		0.0674	0.0101	mg/Kg	12	02/14/13 06:01	02/14/13 19:53	1
Naphthalene	ND		0.0674	0.00905	mg/Kg	超	02/14/13 06:01	02/14/13 19:53	1
2-Methylnaphthalene	ND		0.0674	0.0161	mg/Kg	12	02/14/13 06:01	02/14/13 19:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	52		29 - 120				02/14/13 06:01	02/14/13 19:53	1
Terphenyl-d14 (Surr)	70		13 - 120				02/14/13 06:01	02/14/13 19:53	1
Nitrobenzene-d5 (Surr)	49		27 - 120				02/14/13 06:01	02/14/13 19:53	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	98		0.10	0.10	%			02/13/13 14:23	1

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-19382-1

acceptance of the control of the con

Lab Sample ID: 490-19382-5

Matrix: Solid Percent Solids: 84.0

Client Sample ID: 452 Elderberry

Date Collected: 02/04/13 15:30 Date Received: 02/13/13 08:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00272	0.000911	mg/Kg	E):	02/13/13 15:19	02/14/13 15:15	1
Ethylbenzene	ND		0.00272	0.000911	mg/Kg	E	02/13/13 15:19	02/14/13 15:15	1
Naphthalene	0,00300	J	0.00680	0.00231	mg/Kg	D	02/13/13 15:19	02/14/13 15:15	1
Toluene	ND		0.00272	0.00101	mg/Kg	12	02/13/13 15:19	02/14/13 15:15	1
Xylenes, Total	ND		0.00680	0.000911	mg/Kg	13	02/13/13 15:19	02/14/13 15:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 130				02/13/13 15:19	02/14/13 15:15	1
4 Denmaffranchamana (Cum)	400		70 120				02/12/12 15:10	02/44/42 45-45	4

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91	70 - 130	02/13/13 15:19	02/14/13 15:15	1
4-Bromofluorobenzene (Surr)	108	70 - 130	02/13/13 15:19	02/14/13 15:15	1
Dibromofluoromethane (Surr)	99	70 - 130	02/13/13 15:19	02/14/13 15:15	1
Toluene-d8 (Surr)	90	70 - 130	02/13/13 15:19	02/14/13 15:15	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0783	0.0117	mg/Kg	131	02/14/13 06:01	02/14/13 20:14	1
Acenaphthylene	ND		0.0783	0.0105	mg/Kg	- 13	02/14/13 06:01	02/14/13 20:14	1
Anthracene	ND		0.0783	0.0105	mg/Kg	п	02/14/13 06:01	02/14/13 20:14	1
Benzo[a]anthracene	ND		0.0783	0.0175	mg/Kg	E	02/14/13 06:01	02/14/13 20:14	1
Benzo[a]pyrene	0.0463	J	0.0783	0.0140	mg/Kg	E.	02/14/13 06:01	02/14/13 20:14	1
Benzo[b]fluoranthene	0.0222	J	0.0783	0.0140	mg/Kg	100	02/14/13 06:01	02/14/13 20:14	1
Benzo[g,h,i]perylene	ND		0.0783	0.0105	mg/Kg	10	02/14/13 06:01	02/14/13 20:14	1
Benzo[k]fluoranthene	0.0607	J	0.0783	0.0164	mg/Kg	10	02/14/13 06:01	02/14/13 20:14	1
1-Methylnaphthalene	ND		0.0783	0.0164	mg/Kg	17	02/14/13 06:01	02/14/13 20:14	1
Pyrene	ND		0.0783	0.0140	mg/Kg	13	02/14/13 06:01	02/14/13 20:14	1
Phenanthrene	ND		0.0783	0.0105	mg/Kg	E	02/14/13 06:01	02/14/13 20:14	1
Chrysene	0.0525	J	0.0783	0.0105	mg/Kg	27	02/14/13 06:01	02/14/13 20:14	1
Dibenz(a,h)anthracene	ND		0.0783	0.00818	mg/Kg	.03	02/14/13 06:01	02/14/13 20:14	1
Fluoranthene	ND		0.0783	0.0105	mg/Kg	.07	02/14/13 06:01	02/14/13 20:14	1
Fluorene	ND		0.0783	0.0140	mg/Kg	13	02/14/13 06:01	02/14/13 20:14	1
Indeno[1,2,3-cd]pyrene	ND		0.0783	0.0117	mg/Kg	n	02/14/13 06:01	02/14/13 20:14	1
Naphthalene	ND		0.0783	0.0105	mg/Kg	10	02/14/13 06:01	02/14/13 20:14	1
2-Methylnaphthalene	ND		0.0783	0.0187	mg/Kg	п	02/14/13 06:01	02/14/13 20:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	45		29 - 120				02/14/13 06:01	02/14/13 20:14	1
Terphenyl-d14 (Surr)	74		13 - 120				02/14/13 06:01	02/14/13 20:14	1
			620 100				electronic and a reven	12 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	- 4

Terphenyl-d14 (Surr)	74		13 - 120				02/14/13 06:01	02/14/13 20:14	7
Nitrobenzene-d5 (Surr)	42		27 - 120				02/14/13 06:01	02/14/13 20:14	1
General Chemistry Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84		0.10	0.10	%			02/13/13 14:23	1

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-19382-1

Client Sample ID: 513 Laurel Bay

Date Collected: 02/05/13 14:00 Date Received: 02/13/13 08:30

Analyte

Percent Solids

Lab Sample ID: 490-19382-6

Matrix: Solid

Percent Solids: 94.6

								100000000000000000000000000000000000000	
Method: 8260B - Volatile Orga	nic Compounds	(GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00220	0.000737	mg/Kg	a.	02/13/13 15:19	02/14/13 15:45	1
Ethylbenzene	ND		0.00220	0.000737	mg/Kg	0	02/13/13 15:19	02/14/13 15:45	1
Naphthalene	ND		0.00550	0.00187	mg/Kg	13	02/13/13 15:19	02/14/13 15:45	1
Toluene	ND		0.00220	0.000814	mg/Kg	п	02/13/13 15:19	02/14/13 15:45	1
Xylenes, Total	ND		0.00550	0.000737	mg/Kg	G	02/13/13 15:19	02/14/13 15:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 130				02/13/13 15:19	02/14/13 15:45	1
4-Bromofluorobenzene (Surr)	109		70 - 130				02/13/13 15:19	02/14/13 15:45	1
Dibromofluoromethane (Surr)	98		70 - 130				02/13/13 15:19	02/14/13 15:45	1
Toluene-d8 (Surr)	88		70 - 130				02/13/13 15:19	02/14/13 15:45	1
Method: 8270D - Semivolatile	Organic Compou	nds (GC/MS	S)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0692	0.0103	mg/Kg	,u	02/14/13 06:01	02/14/13 20:35	1
Acenaphthylene	ND		0.0692	0.00929	mg/Kg	300	02/14/13 06:01	02/14/13 20:35	1
Anthracene	ND		0.0692	0.00929	mg/Kg	П	02/14/13 06:01	02/14/13 20:35	1
Benzo[a]anthracene	ND		0.0692	0.0155	mg/Kg	12	02/14/13 06:01	02/14/13 20:35	1
Benzo[a]pyrene	ND		0.0692	0.0124	mg/Kg	D	02/14/13 06:01	02/14/13 20:35	1
Benzo[b]fluoranthene	ND		0.0692	0.0124	mg/Kg	D	02/14/13 06:01	02/14/13 20:35	1
Benzo[g,h,i]perylene	ND		0.0692	0.00929	mg/Kg	D	02/14/13 06:01	02/14/13 20:35	1
Benzo[k]fluoranthene	ND		0.0692	0.0145	mg/Kg	D	02/14/13 06:01	02/14/13 20:35	1
1-Methylnaphthalene	ND		0.0692	0.0145	mg/Kg	10	02/14/13 06:01	02/14/13 20:35	1
Pyrene	ND		0.0692	0.0124	mg/Kg	101	02/14/13 06:01	02/14/13 20:35	- 1
Phenanthrene	ND		0.0692	0.00929	mg/Kg	12	02/14/13 06:01	02/14/13 20:35	1
Chrysene	ND		0.0692	0.00929	mg/Kg	п	02/14/13 06:01	02/14/13 20:35	1
Dibenz(a,h)anthracene	ND		0.0692	0.00723	mg/Kg	- 12	02/14/13 06:01	02/14/13 20:35	1
Fluoranthene	ND		0.0692	0.00929	mg/Kg	ET.	02/14/13 06:01	02/14/13 20:35	1
Fluorene	ND		0.0692	0.0124	mg/Kg	п	02/14/13 06:01	02/14/13 20:35	1
Indeno[1,2,3-cd]pyrene	ND		0.0692	0.0103	mg/Kg	D	02/14/13 06:01	02/14/13 20:35	1
Naphthalene	ND		0.0692	0.00929	mg/Kg	Œ	02/14/13 06:01	02/14/13 20:35	1
2-Methylnaphthalene	ND		0.0692	0.0165	mg/Kg	E	02/14/13 06:01	02/14/13 20:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	52		29 - 120				02/14/13 06:01	02/14/13 20:35	1
Terphenyl-d14 (Surr)	75		13 - 120				02/14/13 06:01	02/14/13 20:35	1
Nitrobenzene-d5 (Surr)	48		27 - 120				02/14/13 06:01	02/14/13 20:35	1
General Chemistry									
	D 16	0		DI.	4.0 - 14	-	Descend	Analogad	Dil Con

Analyzed

02/13/13 14:23

Dil Fac

RL

0.10

RL Unit

0.10 %

Prepared

Result Qualifier

95

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

Client Sample ID: 602 Dahlia Date Collected: 02/05/13 16:00

Fluoranthene

Naphthalene

Indeno[1,2,3-cd]pyrene

2-Methylnaphthalene

Fluorene

Analyte

Percent Solids

TestAmerica Job ID: 490-19382-1

Matrix: Solid

ab	Sample	ID:	490-19382-7	

Date Received: 02/13/13 08:30								Percent Soli	ds: 90.6
Method: 8260B - Volatile Orga	nic Compounds	(GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00211	0.000706	mg/Kg	四	02/13/13 15:19	02/14/13 16:16	1
Ethylbenzene	ND		0.00211	0.000706	mg/Kg	22	02/13/13 15:19	02/14/13 16:16	1
Naphthalene	ND		0.00527	0.00179	mg/Kg	\$21	02/13/13 15:19	02/14/13 16:16	1
Toluene	ND		0.00211	0.000780	mg/Kg	12	02/13/13 15:19	02/14/13 16:16	1
Xylenes, Total	ND		0.00527	0.000706	mg/Kg	El.	02/13/13 15:19	02/14/13 16:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 130				02/13/13 15:19	02/14/13 16:16	1
4-Bromofluorobenzene (Surr)	105		70 - 130				02/13/13 15:19	02/14/13 16:16	1
Dibromofluoromethane (Surr)	98		70 - 130				02/13/13 15:19	02/14/13 16:16	1
Toluene-d8 (Surr)	92		70 - 130				02/13/13 15:19	02/14/13 16:16	1
Method: 8270D - Semivolatile	Organic Compou	nds (GC/MS	3)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0735	0.0110	mg/Kg	ET.	02/14/13 06:01	02/14/13 20:56	1
Acenaphthylene	ND		0.0735	0.00987	mg/Kg	12	02/14/13 06:01	02/14/13 20:56	1
Anthracene	ND		0.0735	0.00987	mg/Kg	D	02/14/13 06:01	02/14/13 20:56	1
Benzo[a]anthracene	ND		0.0735	0.0164	mg/Kg	177	02/14/13 06:01	02/14/13 20:56	1
Benzo[a]pyrene	0.0269	J	0.0735	0.0132	mg/Kg	H	02/14/13 06:01	02/14/13 20:56	1
Benzo[b]fluoranthene	0.0146	J	0.0735	0.0132	mg/Kg	E	02/14/13 06:01	02/14/13 20:56	1
Benzo[g,h,i]perylene	0.0400	J	0.0735	0.00987	mg/Kg	10	02/14/13 06:01	02/14/13 20:56	1
Benzo[k]fluoranthene	0.0380	J	0.0735	0.0153	mg/Kg	E	02/14/13 06:01	02/14/13 20:56	1
1-Methylnaphthalene	ND		0.0735	0.0153	mg/Kg	-	02/14/13 06:01	02/14/13 20:56	1
Pyrene	ND		0.0735	0.0132	mg/Kg	- 5	02/14/13 06:01	02/14/13 20:56	1
Phenanthrene	ND		0.0735	0.00987	mg/Kg	Þ	02/14/13 06:01	02/14/13 20:56	1
Chrysene	ND		0.0735	0.00987	mg/Kg	D	02/14/13 06:01	02/14/13 20:56	1
Dibenz(a,h)anthracene	ND		0.0735	0.00767	mg/Kg	D	02/14/13 06:01	02/14/13 20:56	1

Surroyate	Mecovery Qualifier	Lillins	Frepareu	Allalyzeu	Direc
2-Fluorobiphenyl (Surr)	55	29 - 120	02/14/13 06:01	02/14/13 20:56	1
Terphenyl-d14 (Surr)	78	13 - 120	02/14/13 06:01	02/14/13 20:56	1
Nitrobenzene-d5 (Surr)	52	27 - 120	02/14/13 06:01	02/14/13 20:56	1
General Chemistry					

RL

0.10

0.0735

0.0735

0.0735

0.0735

0.0735

0.00987 mg/Kg

0.0132 mg/Kg

0.0110 mg/Kg

0.00987 mg/Kg

0.0175 mg/Kg

RL Unit

0.10 %

E

02/14/13 06:01

02/14/13 06:01

02/14/13 06:01

02/14/13 06:01

02/14/13 06:01

Prepared

02/14/13 20:56

02/14/13 20:56

02/14/13 20:56

02/14/13 20:56

02/14/13 20:56

Analyzed

02/13/13 14:23

Dil Fac

ND

ND

0.0272 J

ND

ND

Result Qualifier

91

TestAmerica Nashville

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-19382-1

Client Sample ID: 837 Azalea

Date Collected: 02/06/13 12:45 Date Received: 02/13/13 08:30

Analyte

Percent Solids

Lab Sample ID: 490-19382-8

Percent

M	atrix	C; S	olic	
t S	olio	s: S	95.2	

Benzene ND	1 1 1 1 1 DII Fac
Naphthalene ND 0.00564 0.00192 mg/kg 0.013/13 15:19 02/14/13 16:46 Toluene ND 0.00226 0.000835 mg/kg 0.02/13/13 15:19 02/14/13 16:46 Xylenes, Total ND 0.00564 0.00075 mg/kg 0.02/13/13 15:19 02/14/13 16:46 Xylenes, Total ND 0.00564 0.00075 mg/kg 0.02/13/13 15:19 02/14/13 16:46 Xylenes, Total ND 0.00564 0.00075 mg/kg 0.02/13/13 15:19 02/14/13 16:46 Xylenes, Total ND 0.00564 0.00075 mg/kg 0.02/13/13 15:19 02/14/13 16:46 O.00750 mg/kg 0.02/14/13 16:46 O.00750 mg/kg 0.02/14/13 16:46 O.00750 mg/kg 0.02/14/13 06:01 02/14/1	1 1 1 Dil Fac
Toluene ND 0.00226 0.00835 mg/kg 0.2/13/13 15:19 02/14/13 16:46 Xylenes, Total ND 0.00564 0.000756 mg/kg 0.2/13/13 15:19 02/14/13 16:46 Surrogate %Recovery Qualifier Limits	1 Dil Fac 1 1
Xylenes, Total ND	1 Dil Fac 1 1 1
Surrogate %Recovery Qualifier Limits Description 1.2-Dichloroethane-d4 (Surr) 94 70 - 130 02/13/13 15:19 02/14/13 16:46 02/13/13 15:19 02/14/13 16:46 02/13/13 15:19 02/14/13 16:46 02/13/13 15:19 02/14/13 16:46 02/13/13 15:19 02/14/13 16:46 02/13/13 15:19 02/14/13 16:46 02/13/13 15:19 02/14/13 16:46 02/13/13 15:19 02/14/13 16:46 02/13/13 15:19 02/14/13 16:46 02/13/13 15:19 02/14/13 16:46 02/13/13 15:19 02/14/13 16:46 02/13/13 15:19 02/14/13 16:46 02/13/13 15:19 02/14/13 16:46 02/13/13 15:19 02/14/13 16:46 02/13/13 15:19 02/14/13 16:46 02/13/13 15:19 02/14/13 16:46 02/13/13 15:19 02/14/13 16:46 02/13/13 15:19	Dil Fac 1 1
1,2-Dichiloroethane-d4 (Surr) 94 70 - 130 02/14/13 15:19 02/14/13 16:46 4-Bromofluorobenzene (Surr) 107 70 - 130 02/14/13 15:19 02/14/13 16:46 Dibromofluoromethane (Surr) 98 70 - 130 02/13/13 15:19 02/14/13 16:46 Dibromofluoromethane (Surr) 92 70 - 130 02/13/13 15:19 02/14/13 16:46 O2/13/13 15:19 02/14/13 16:46 O2/14/13 06:01 02/14/13 16:46 O2/14/13 06:01 02/14/13 12:17 O2/14/13 06:01 02/14/13 12:17 O2/14/13 06:01 02/14/13	1 1
### A-Bromofluorobenzene (Surr) 107 70 - 130 02/13/13 15:19 02/14/13 16:46 Dibromofluoromethane (Surr) 98 70 - 130 02/13/13 15:19 02/13/13 15:19 02/13/13 15:19 02/14/13 16:46 Method: 8270D - Semivolatile Organic Compounds (GC/MS) Analyte Result Qualifier RL MDL Method: 8270D - Semivolatile Organic Compounds (GC/MS) Analyte Result Qualifier ND 0.0696 0.0104 Mg/Kg 0.0214/13 06:01 02/14/13 21:17 Acenaphthylene ND 0.0696 0.00935 Mg/Kg 0.02/14/13 06:01 02/14/13 06:01 02/14/13 21:17 Anthracene ND 0.0696 0.0156 Mg/Kg 0.02/14/13 06:01 02/14/13 06:01 02/14/13 21:17 Benzo(a)aphracene ND 0.0696 0.0155 Mg/Kg 0.02/14/13 06:01 02/14/13 06:01 02/14/13 21:17 Benzo(b)fluoranthene ND 0.0696 0.0125 Mg/Kg 0.02/14/13 06:01 02/14/13 06:01 02/14/13 21:17 Benzo(b)fluoranthene ND 0.0696 0.0125 Mg/Kg 0.02/14/13 06:01 02/14/13 06:01 02/14/13 21:17 Benzo(b)fluoranthene ND 0.0696 0.0125 Mg/Kg 0.02/14/13 06:01 02/14/13 06:01 02/14/13 21:17 Benzo(b)fluoranthene ND 0.0696 0.0125 Mg/Kg 0.02/14/13 06:01 02/14/13 06:01 02/14/13 21:17 Pyrene ND 0.0696 0.0125 Mg/Kg 0.02/14/13 06:01 02/14/13 06:01 02/14/13 21:17 Pyrene ND 0.0696 0.0125 Mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Pyrene ND 0.0696 0.0125 Mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Pyrene ND 0.0696 0.0125 Mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Phenanthrene ND 0.0696 0.0125 Mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Phenanthrene ND 0.0696 0.00935 Mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Phenanthrene ND 0.0696 0.00935 Mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Phenanthrene ND 0.0696 0.00935 Mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Phenanthrene ND 0.0696 0.00935 Mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Phenanthrene ND 0.0696 0.00935 Mg/Kg 0.014/13 06:01 02/14/13 21:17 Phenanthrene ND 0.0696 0.00935 Mg/Kg 0.014/13 06:01 02/14/13 21:17 Phenanthrene ND 0.0696 0.00935 Mg/Kg 0.014/13 06:01 02/14/13 06:01 02/14/13 21:17 Phenanthrene ND 0.0696 0.00935 Mg/Kg	1
Dibromofiluoromethane (Surr) 98 70 - 130 02/13/13 15:19 02/14/13 16:46	1
Method: 8270D - Semivolatile Organic Compounds (GC/MS) Result Qualifier RL MDL Unit D Prepared Analyzed Acenaphthene ND 0.0696 0.0104 mg/kg 0.02/14/13 06:01 0.02/14/13 21:17 Acenaphthylene ND 0.0696 0.00935 mg/kg 0.02/14/13 06:01 0.02/14/13 21:17 Anthracene ND 0.0696 0.00935 mg/kg 0.02/14/13 06:01 0.02/14/13 21:17 Benzo[a]anthracene ND 0.0696 0.0125 mg/kg 0.02/14/13 06:01 0.02/14/13 21:17 Benzo[a]pyrene ND 0.0696 0.0125 mg/kg 0.02/14/13 06:01 0.02/14/13 21:17 Benzo[a]pyrene ND 0.0696 0.0125 mg/kg 0.02/14/13 06:01 0.02/14/13 21:17 Benzo[k]fluoranthene ND 0.0696 0.0125 mg/kg 0.02/14/13 06:01 0.02/14/13 21:17 Benzo[k]fluoranthene ND 0.0696 0.0145 mg/kg 0.02/14/13 06:01 0.02/14/13 21:17 Pyrene ND 0.0696 0.01	
Method: 8270D - Semivolatile Organic Compounds (GC/MS) Result Qualifier RL MDL Unit D Prepared Analyzed Acenaphthene ND 0.0696 0.0104 mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Acenaphthylene ND 0.0696 0.00935 mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Anthracene ND 0.0696 0.00935 mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Benzo[a]anthracene ND 0.0696 0.0156 mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Benzo[a]pyrene ND 0.0696 0.0125 mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Benzo[b]fluoranthene ND 0.0696 0.0125 mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Benzo[k]fluoranthene ND 0.0696 0.00935 mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Benzo[k]fluoranthene ND 0.0696 0.0145 mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Henthylnaphthalene ND 0.0696 0	1
Analyte Result Acenaphthene ND Qualifier RL MDL Unit D Prepared Analyzed Acenaphthene ND 0.0696 0.0104 mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Acenaphthylene ND 0.0696 0.00935 mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Anthracene ND 0.0696 0.0156 mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Benzo[a]anthracene ND 0.0696 0.0156 mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Benzo[a]byrene ND 0.0696 0.0125 mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Benzo[g],h.i]perylene ND 0.0696 0.0125 mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Benzo[k]fluoranthene ND 0.0696 0.0035 mg/Kg 0.02/14/13 06:01 02/14/13 21:17 1-Methylnaphthalene ND 0.0696 0.0145 mg/Kg 0.02/14/13 06:01 02/14/13 21:17 Pyrene ND 0.0696 0.0145	
Acenaphthene ND 0.0696 0.0104 mg/Kg 02/14/13 06:01 02/14/13 21:17 Acenaphthylene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Anthracene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Benzo[a]anthracene ND 0.0696 0.0156 mg/Kg 02/14/13 06:01 02/14/13 21:17 Benzo[a]pyrene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 Benzo[a]h,i]perylene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 Benzo[k]fluoranthene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Benzo[k]fluoranthene ND 0.0696 0.0145 mg/Kg 02/14/13 06:01 02/14/13 21:17 Henzo[k]fluoranthene ND 0.0696 0.0145 mg/Kg 02/14/13 06:01 02/14/13 21:17 Henzo[k]fluoranthene ND 0.0696 0.0145 mg/Kg 02/14/13 06:01<	
Acenaphthylene ND 0.0696 0.00935 mg/Kg © 02/14/13 06:01 02/14/13 21:17 Anthracene ND 0.0696 0.00935 mg/Kg © 02/14/13 06:01 02/14/13 21:17 Benzo[a]anthracene ND 0.0696 0.0156 mg/Kg © 02/14/13 06:01 02/14/13 21:17 Benzo[a]pyrene ND 0.0696 0.0125 mg/Kg © 02/14/13 06:01 02/14/13 21:17 Benzo[a]h,i]perylene ND 0.0696 0.0125 mg/Kg © 02/14/13 06:01 02/14/13 21:17 Benzo[k]fluoranthene ND 0.0696 0.00935 mg/Kg © 02/14/13 06:01 02/14/13 21:17 Benzo[k]fluoranthene ND 0.0696 0.0145 mg/Kg © 02/14/13 06:01 02/14/13 21:17 Hotethylnaphthalene ND 0.0696 0.0145 mg/Kg © 02/14/13 06:01 02/14/13 21:17 Pyrene ND 0.0696 0.0145 mg/Kg © 02/14/13 06:01 02/14/13 21:17 Phenanthrene ND 0.0696 0.00935 mg/Kg © 02/14/13	Dil Fac
Anthracene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Benzo[a]anthracene ND 0.0696 0.0156 mg/Kg 02/14/13 06:01 02/14/13 21:17 Benzo[a]pyrene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 Benzo[b]fluoranthene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 Benzo[k]fluoranthene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 Benzo[k]fluoranthene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 1-Methylnaphthalene ND 0.0696 0.0145 mg/Kg 02/14/13 06:01 02/14/13 21:17 1-Methylnaphthalene ND 0.0696 0.0145 mg/Kg 02/14/13 06:01 02/14/13 21:17 Pyrene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 Phenanthrene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 Chrysene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Chrysene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluoranthene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluoranthene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluoranthene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluoranthene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluoranthene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluoranthene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluoranthene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluoranthene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluoranthene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluoranthene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluoranthene ND 0.0696 0.0104 mg/Kg 02/14/13 06:01 02/14/13 21:17	1
Benzo[a]anthracene ND 0.0696 0.0156 mg/kg 0.2/14/13 06:01 0.2/14/13 21:17	1
Benzo[a]pyrene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17	1
Benzo[b]fluoranthene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 Benzo[g,h,i]perylene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Benzo[k]fluoranthene ND 0.0696 0.0145 mg/Kg 02/14/13 06:01 02/14/13 21:17 1-Methylnaphthalene ND 0.0696 0.0145 mg/Kg 02/14/13 06:01 02/14/13 21:17 Pyrene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 Phenanthrene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Chrysene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Dibenz(a,h)anthracene ND 0.0696 0.00727 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluoranthene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluorene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/	1
Benzo[g,h,i]perylene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Benzo[k]fluoranthene ND 0.0696 0.0145 mg/Kg 02/14/13 06:01 02/14/13 21:17 1-Methylnaphthalene ND 0.0696 0.0145 mg/Kg 02/14/13 06:01 02/14/13 21:17 Pyrene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 Phenanthrene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Chrysene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Dibenz(a,h)anthracene ND 0.0696 0.00727 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluoranthene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluorene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 Indeno[1,2,3-cd]pyrene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 0	1
Benzo[k]fluoranthene ND 0.0696 0.0145 mg/kg 02/14/13 06:01 02/14/13 21:17 1-Methylnaphthalene ND 0.0696 0.0145 mg/kg 02/14/13 06:01 02/14/13 21:17 Pyrene ND 0.0696 0.0125 mg/kg 02/14/13 06:01 02/14/13 21:17 Phenanthrene ND 0.0696 0.00935 mg/kg 02/14/13 06:01 02/14/13 21:17 Chrysene ND 0.0696 0.00935 mg/kg 02/14/13 06:01 02/14/13 21:17 Dibenz(a,h)anthracene ND 0.0696 0.00727 mg/kg 02/14/13 06:01 02/14/13 21:17 Fluoranthene ND 0.0696 0.00935 mg/kg 02/14/13 06:01 02/14/13 21:17 Fluorene ND 0.0696 0.0125 mg/kg 02/14/13 06:01 02/14/13 21:17 Indeno[1,2,3-cd]pyrene ND 0.0696 0.0125 mg/kg 02/14/13 06:01 02/14/13 21:17 ND 0.0696 0.0104 mg/kg 02/14/13 06:01 02/14/13 21:17	1
1-Methylnaphthalene ND 0.0696 0.0145 mg/Kg 02/14/13 06:01 02/14/13 21:17 Pyrene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 Phenanthrene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Chrysene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Dibenz(a,h)anthracene ND 0.0696 0.00727 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluoranthene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluorene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 Indeno[1,2,3-cd]pyrene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 Naphthalene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17	1
Pyrene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 Phenanthrene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Chrysene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Dibenz(a,h)anthracene ND 0.0696 0.00727 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluoranthene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluorene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 Indeno[1,2,3-cd]pyrene ND 0.0696 0.0104 mg/Kg 02/14/13 06:01 02/14/13 21:17 ND 0.0696 0.0104 mg/Kg 02/14/13 06:01 02/14/13 21:17 ND 0.0696 0.0104 mg/Kg 02/14/13 06:01 02/14/13 21:17 ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17	1
Phenanthrene ND 0.0696 0.0935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Chrysene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Dibenz(a,h)anthracene ND 0.0696 0.00727 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluoranthene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluorene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 Indeno[1,2,3-cd]pyrene ND 0.0696 0.0104 mg/Kg 02/14/13 06:01 02/14/13 21:17 Naphthalene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17	1
Chrysene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Dibenz(a,h)anthracene ND 0.0696 0.00727 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluoranthene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluorene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 Indeno[1,2,3-cd]pyrene ND 0.0696 0.0104 mg/Kg 02/14/13 06:01 02/14/13 21:17 Naphthalene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17	1
Dibenz(a,h)anthracene ND 0.0696 0.00727 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluoranthene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17 Fluorene ND 0.0696 0.0125 mg/Kg 02/14/13 06:01 02/14/13 21:17 Indeno[1,2,3-cd]pyrene ND 0.0696 0.0104 mg/Kg 02/14/13 06:01 02/14/13 21:17 Naphthalene ND 0.0696 0.00935 mg/Kg 02/14/13 06:01 02/14/13 21:17	1
Fluoranthene ND 0.0696 0.00935 mg/Kg E 02/14/13 06:01 02/14/13 21:17 Fluorene ND 0.0696 0.0125 mg/Kg Image: 02/14/13 06:01 02/14/13 21:17 Indeno[1,2,3-cd]pyrene ND 0.0696 0.0104 mg/Kg Image: 02/14/13 06:01 02/14/13 21:17 Naphthalene ND 0.0696 0.00935 mg/Kg Image: 02/14/13 06:01 02/14/13 21:17	1
Fluorene ND 0.0696 0.0125 mg/Kg © 02/14/13 06:01 02/14/13 21:17 Indeno[1,2,3-cd]pyrene ND 0.0696 0.0104 mg/Kg © 02/14/13 06:01 02/14/13 21:17 Naphthalene ND 0.0696 0.00935 mg/Kg © 02/14/13 06:01 02/14/13 21:17	1
Indeno[1,2,3-cd]pyrene ND 0.0696 0.0104 mg/Kg □ 02/14/13 06:01 02/14/13 21:17 Naphthalene ND 0.0696 0.00935 mg/Kg □ 02/14/13 06:01 02/14/13 21:17	1
Naphthalene ND 0.0696 0.00935 mg/Kg © 02/14/13 06:01 02/14/13 21:17	1
Maphibilate 100 0.0000 1.00000 mg/mg 02/14/10 00.01 02/14/10 21/14/	1
2-Methylnaphthalene ND 0.0696 0.0166 mg/Kg 02/14/13 06:01 02/14/13 21:17	1
	1
Surrogate %Recovery Qualifier Limits Prepared Analyzed	Dil Fac
2-Fluorobiphenyl (Surr) 51 29 - 120 02/14/13 06:01 02/14/13 21:17	1
Terphenyl-d14 (Surr) 73 13 - 120 02/14/13 06:01 02/14/13 21:17	
Nitrobenzene-d5 (Surr) 48 27 - 120 02/14/13 06:01 02/14/13 21:17	1
General Chemistry	1

Analyzed

02/13/13 14:23

Dil Fac

RL

0.10

RL Unit

0.10

Prepared

Result Qualifier

95

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-19382-1

Client Sample ID: Method Blank

Prep Type: Total/NA

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

Lab Sample ID: MB 490-58452/6

Matrix: Solid

Analysis Batch: 58452

MB MB Dil Fac Prepared Analyte Result Qualifier RL MDL Unit D Analyzed 02/14/13 08:13 Benzene ND 0.00200 0.000670 mg/Kg Ethylbenzene ND 0.00200 02/14/13 08:13 0.000670 mg/Kg Naphthalene ND 0.00500 0.00170 mg/Kg 02/14/13 08:13 02/14/13 08:13 Toluene ND 0.00200 0.000740 mg/Kg Xylenes, Total ND 0.00500 0.000670 mg/Kg 02/14/13 08:13

Dil Fac Limits Prepared Analyzed Surrogate %Recovery Qualifier 1,2-Dichloroethane-d4 (Surr) 91 70 - 130 02/14/13 08:13 107 70 - 130 02/14/13 08:13 4-Bromofluorobenzene (Surr) 70 - 130 02/14/13 08:13 Dibromofluoromethane (Surr) 98 Toluene-d8 (Surr) 94 70 - 130 02/14/13 08:13

Lab Sample ID: LCS 490-58452/3

Matrix: Solid

Analysis Batch: 58452

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.0500 0.04774 mg/Kg 95 75 - 127 Ethylbenzene 0.0500 0.04816 mg/Kg 96 80 - 134 Naphthalene 0.0500 0.05627 mg/Kg 113 69 - 150 Toluene 0.0500 0.04446 mg/Kg 89 80 - 132 Xylenes, Total 0.150 0.1443 mg/Kg 96 80 - 137

LCS LCS

MB MB

%Recovery	Qualifier	Limits
89		70 - 130
98		70 - 130
100		70 - 130
91		70 - 130
	89 98 100	98 100

Lab Sample ID: LCSD 490-58452/4

Matrix: Solid

Analysis Batch: 58452

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

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

The state of the s	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.0500	0.04929		mg/Kg		99	75 - 127	.3	50
Ethylbenzene	0.0500	0.04977		mg/Kg		100	80 - 134	3	50
Naphthalene	0.0500	0.05933		mg/Kg		119	69 - 150	5	50
Toluene	0.0500	0.04612		mg/Kg		92	80 - 132	4	50
Xylenes, Total	0,150	0.1479		mg/Kg		99	80 - 137	2	50

	LUSD	LUSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		70 - 130
4-Bromofluorobenzene (Surr)	100		70 - 130
Dibromofluoromethane (Surr)	101		70 - 130
Toluene-d8 (Surr)	93		70 - 130

TestAmerica Nashville

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-19382-1

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

Lab Sample ID: MB 490-58742/6

Matrix: Solid

Analysis Batch: 58742

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			02/15/13 08:37	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			02/15/13 08:37	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			02/15/13 08:37	1
Toluene	ND		0.00200	0.000740	mg/Kg			02/15/13 08:37	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			02/15/13 08:37	1

MB MB Dil Fac Surrogate %Recovery Qualifier Limits Prepared Analyzed 90 70 - 130 02/15/13 08:37 1,2-Dichloroethane-d4 (Surr) 02/15/13 08:37 106 70 - 130 4-Bromofluorobenzene (Surr) Dibromofluoromethane (Surr) 98 70 - 130 02/15/13 08:37 Toluene-d8 (Surr) 70 - 130 02/15/13 08:37

Lab Sample ID: MB 490-58742/7 Client Sample ID: Method Blank Matrix: Solid Prep Type: Total/NA

Analysis Batch: 58742

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0335	mg/Kg			02/15/13 09:07	1
Ethylbenzene	ND		0.100	0.0335	mg/Kg			02/15/13 09:07	1
Naphthalene	ND		0.250	0.0850	mg/Kg			02/15/13 09:07	1
Toluene	ND		0.100	0.0370	mg/Kg			02/15/13 09:07	1
Xylenes, Total	ND		0.250	0.0335	mg/Kg			02/15/13 09:07	1

MB MB Dil Fac Surrogate %Recovery Qualifier Limits Prepared Analyzed 1,2-Dichloroethane-d4 (Surr) 91 70 - 130 02/15/13 09:07 107 70 - 130 02/15/13 09:07 4-Bromofluorobenzene (Surr) 70 - 130 02/15/13 09:07 95 Dibromofluoromethane (Surr) 02/15/13 09:07 Toluene-d8 (Surr) 87 70 - 130

Lab Sample ID: LCS 490-58742/3

Matrix: Solid

Analysis Batch: 58742

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

	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.0500	0.04395		mg/Kg		88	75 - 127
Ethylbenzene	0.0500	0.04341		mg/Kg		87	80 - 134
Naphthalene	0.0500	0.05558		mg/Kg		111	69 - 150
Toluene	0.0500	0.03985		mg/Kg		80	80 - 132
Xylenes, Total	0.150	0.1288		mg/Kg		86	80 - 137

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	88		70 - 130
4-Bromofluorobenzene (Surr)	101		70 - 130
Dibromofluoromethane (Surr)	100		70 - 130
Toluene-d8 (Surr)	89		70 - 130

TestAmerica Nashville

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-19382-1

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

Lab Sample ID: LCSD 490-58742/4

Matrix: Solid

Analysis Batch: 58742

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Spike	LCSD	LCSD				%Rec.		RPD	
Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
0.0500	0.04786		mg/Kg		96	75 - 127	9	50	
0.0500	0.04848		mg/Kg		97	80 - 134	11	50	
0.0500	0.05941		mg/Kg		119	69 - 150	7	50	
0.0500	0.04428		mg/Kg		89	80 - 132	11	50	
0.150	0.1455		mg/Kg		97	80 - 137	12	50	
	Added 0.0500 0.0500 0.0500 0.0500	Added Result 0.0500 0.04786 0.0500 0.04848 0.0500 0.05941 0.0500 0.04428	Added Result Qualifier 0.0500 0.04786 0.0500 0.04848 0.0500 0.05941 0.0500 0.04428	Added Result Qualifier Unit 0.0500 0.04786 mg/Kg 0.0500 0.04848 mg/Kg 0.0500 0.05941 mg/Kg 0.0500 0.04428 mg/Kg	Added Result Qualifier Unit D 0.0500 0.04786 mg/Kg 0.0500 0.04848 mg/Kg 0.0500 0.05941 mg/Kg 0.0500 0.04428 mg/Kg	Added Result Qualifier Unit D %Rec 0.0500 0.04786 mg/Kg 96 0.0500 0.04848 mg/Kg 97 0.0500 0.05941 mg/Kg 119 0.0500 0.04428 mg/Kg 89	Added Result Qualifier Unit D %Rec Limits 0.0500 0.04786 mg/Kg 96 75 - 127 0.0500 0.04848 mg/Kg 97 80 - 134 0.0500 0.05941 mg/Kg 119 69 - 150 0.0500 0.04428 mg/Kg 89 80 - 132	Added Result Qualifier Unit D %Rec Limits RPD 0.0500 0.04786 mg/Kg 96 75 - 127 9 0.0500 0.04848 mg/Kg 97 80 - 134 11 0.0500 0.05941 mg/Kg 119 69 - 150 7 0.0500 0.04428 mg/Kg 89 80 - 132 11	Added Result Qualifier Unit D %Rec Limits RPD Limit 0.0500 0.04786 mg/Kg 96 75 - 127 9 50 0.0500 0.04848 mg/Kg 97 80 - 134 11 50 0.0500 0.05941 mg/Kg 119 69 - 150 7 50 0.0500 0.04428 mg/Kg 89 80 - 132 11 50

LCSD LCSD

	LOOD	LUUD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	88		70 - 130
4-Bromofluorobenzene (Surr)	102		70 - 130
Dibromofluoromethane (Surr)	98		70 - 130
Toluene-d8 (Surr)	91		70 - 130

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 58454

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

Lab Sample ID: MB 490-58454/1-A

Matrix: Solid

Analysis Batch: 58693

Analysis Batch: 58693	МВ	МВ						Prep Batch	1. 30434
Analyte	Result		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg		02/14/13 06:01	02/14/13 17:24	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		02/14/13 06:01	02/14/13 17:24	1
Anthracene	ND		0.0670	0.00900	mg/Kg		02/14/13 06:01	02/14/13 17:24	1
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		02/14/13 06:01	02/14/13 17:24	1
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		02/14/13 06:01	02/14/13 17:24	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		02/14/13 06:01	02/14/13 17:24	1
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		02/14/13 06:01	02/14/13 17:24	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		02/14/13 06:01	02/14/13 17:24	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		02/14/13 06:01	02/14/13 17:24	1
Pyrene	ND		0.0670	0.0120	mg/Kg		02/14/13 06:01	02/14/13 17:24	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		02/14/13 06:01	02/14/13 17:24	1
Chrysene	ND		0.0670	0.00900	mg/Kg		02/14/13 06:01	02/14/13 17:24	1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		02/14/13 06:01	02/14/13 17:24	1
Fluoranthene	ND		0.0670	0.00900	mg/Kg		02/14/13 06:01	02/14/13 17:24	1
Fluorene	ND		0.0670	0.0120	mg/Kg		02/14/13 06:01	02/14/13 17:24	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		02/14/13 06:01	02/14/13 17:24	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		02/14/13 06:01	02/14/13 17:24	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		02/14/13 06:01	02/14/13 17:24	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	65	29 - 120	02/14/13 06:01	02/14/13 17:24	1
Terphenyl-d14 (Surr)	80	13 - 120	02/14/13 06:01	02/14/13 17:24	1
Nitrobenzene-d5 (Surr)	63	27 - 120	02/14/13 06:01	02/14/13 17:24	1

TestAmerica Nashville

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2/25/2013

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

TestAmerica Job ID: 490-19382-1

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

Lab Sample ID: LCS 490-58454/2-A

Matrix: Solid

Analysis Batch: 58693

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 58454

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Acenaphthylene	1.67	1.411		mg/Kg		85	38 - 120	
Anthracene	1.67	1.303		mg/Kg		78	46 - 124	
Benzo[a]anthracene	1.67	1.399		mg/Kg		84	45 - 120	
Benzo[a]pyrene	1.67	1.361		mg/Kg		82	45 - 120	
Benzo[b]fluoranthene	1.67	1.579		mg/Kg		95	42 - 120	
Benzo[g,h,i]perylene	1.67	1.353		mg/Kg		81	38 - 120	
Benzo[k]fluoranthene	1.67	1.242		mg/Kg		75	42 - 120	
1-Methylnaphthalene	1.67	1.383		mg/Kg		83	32 - 120	
Pyrene	1.67	1.383		mg/Kg		83	43 - 120	
Phenanthrene	1.67	1.373		mg/Kg		82	45 - 120	
Chrysene	1.67	1.372		mg/Kg		82	43 - 120	
Dibenz(a,h)anthracene	1.67	1.401		mg/Kg		84	32 - 128	
Fluoranthene	1.67	1.354		mg/Kg		81	46 - 120	
Fluorene	1.67	1.381		mg/Kg		83	42 - 120	
Indeno[1,2,3-cd]pyrene	1.67	1.393		mg/Kg		84	41 - 121	
Naphthalene	1.67	1.380		mg/Kg		83	32 - 120	
2-Methylnaphthalene	1.67	1.401		mg/Kg		84	28 - 120	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	67		29 - 120
Terphenyl-d14 (Surr)	83		13 - 120
Nitrobenzene-d5 (Surr)	66		27 - 120

Lab Sample ID: 490-19382-1 MS

Matrix: Solid

Analysis Batch: 58693

Client Samp	le ID:	436 E	Iderberry
	Prep	Type:	Total/NA

Prep Batch: 58454

Analysis Batch: 58693									Prep
	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthylene	0.553		2.03	2.660		mg/Kg	-	104	25 - 120
Anthracene	0.333		2.03	2.659		mg/Kg	0	115	28 - 125
Benzo[a]anthracene	0.0766	J	2.03	1.866		mg/Kg	9	88	23 - 120
Benzo[a]pyrene	ND		2.03	1.623		mg/Kg	40	80	15 - 128
Benzo[b]fluoranthene	0.0312	J	2.03	1.878		mg/Kg	-0	91	12 - 133
Benzo[g,h,i]perylene	ND		2.03	1.629		mg/Kg	.0	80	22 - 120
Benzo[k]fluoranthene	0.0619	J	2.03	1.606		mg/Kg	3	76	28 - 120
1-Methylnaphthalene	12.0		2.03	19.16	E 4	mg/Kg	ū	353	10 - 120
Pyrene	0.590		2.03	2.574		mg/Kg	Ü	98	20 - 123
Phenanthrene	5.27		2.03	7.890	EF	mg/Kg	(2)	129	21 - 122
Chrysene	0.140		2.03	1.586		mg/Kg	12	71	20 - 120
Dibenz(a,h)anthracene	ND		2.03	1.661		mg/Kg	12	82	12 - 128
Fluoranthene	ND		2.03	2.048		mg/Kg	33	101	10 - 143
Fluorene	2.15		2.03	4.480	E	mg/Kg	a	115	20 - 120
Indeno[1,2,3-cd]pyrene	ND		2.03	1.662		mg/Kg	10	82	22 - 121
Naphthalene	4.37		2.03	5.912	E	mg/Kg	(1)	76	10 - 120
2-Methylnaphthalene	14.5		2.03	23.52	E4	mg/Kg	(2)	446	13 - 120

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-19382-1

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

Lab Sample ID: 490-19382-1 MS

Lab Sample ID: 490-19382-1 MSD

Matrix: Solid

Matrix: Solid

Chrysene

Fluorene

Fluoranthene

Naphthalene

Dibenz(a,h)anthracene

Indeno[1,2,3-cd]pyrene

2-Methylnaphthalene

Analysis Batch: 58693

Client Sample ID: 436 Elderberry Prep Type: Total/NA

Prep Batch: 58454

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	102		29 - 120
Terphenyl-d14 (Surr)	94		13 - 120
Nitrobenzene-d5 (Surr)	63		27 - 120

Client Sample ID: 436 Elderberry

73

79

87

146

78

42

245

72

20 - 120

12 - 128

10 - 143

20 - 120

22 - 121

10 - 120

13 - 120

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 58454

3

2

13

14

3

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19

49

50

50

50

50

50

50

Analysis Batch: 58693 Sample Sample Spike MSD MSD RPD Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit Acenaphthylene 0.553 2.06 3.139 F mg/Kg 126 25 - 120 16 50 Anthracene 0.333 2.06 2.376 mg/Kg 12 99 28 - 125 11 49 Benzo[a]anthracene 0.0766 2.06 1.770 mg/Kg 82 23 - 120 5 50 Benzo[a]pyrene ND 2.06 1.583 mg/Kg 77 15 - 128 2 50 0.0312 J 2.06 1.790 12 - 133 5 50 Benzo[b]fluoranthene mg/Kg 86 ND 2.06 1.577 mg/Kg 0 77 22 - 120 3 50 Benzo[g,h,i]perylene Benzo[k]fluoranthene 0.0619 J 2.06 1.578 mg/Kg 28 - 120 2 45 12.0 2.06 16.26 F4 mg/Kg 208 10 - 120 16 50 1-Methylnaphthalene 2,402 20 - 123 Pyrene 0.590 2.06 mg/Kg 88 7 50 2.06 6.662 E 21 - 122 17 50 Phenanthrene 5.27 mg/Kg

1.636

1.626

1.798

1.607

5.146 EF

5.230 E

19.48 E 4

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

2.06

2.06

2.06

2.06

2.06

2.06

2.06

MSD MSD

0.140

ND

ND

2.15

ND

4.37

14.5

Surrogate	%Recovery Qualifier	Limits
	Activities of the second of th	
2-Fluorobiphenyl (Surr)	88	29 - 120
Terphenyl-d14 (Surr)	92	13 - 120
Nitrobenzene-d5 (Surr)	62	27 - 120

Method: Moisture - Percent Moisture

Lab Sample ID: 490-19377-B-1 DU

Matrix: Solid

Analysis Ratch: 58360

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Percent Solids	96		95		0/0			

TestAmerica Nashville

QC Association Summary

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-19382-1

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Prep Batch: 58390	Pre	рΒ	at	ch	: :	58	39	0
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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-19382-1	436 Elderberry	Total/NA	Solid	5035	

Prep Batch: 58391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-19382-1	436 Elderberry	Total/NA	Solid	5035	
490-19382-2	486 Laural Bay	Total/NA	Solid	5035	
490-19382-3	835 Azalea	Total/NA	Solid	5035	
490-19382-4	834 Azalea	Total/NA	Solid	5035	
490-19382-5	452 Elderberry	Total/NA	Solid	5035	
490-19382-6	513 Laurel Bay	Total/NA	Solid	5035	
490-19382-7	602 Dahlia	Total/NA	Solid	5035	
490-19382-8	837 Azalea	Total/NA	Solid	5035	

Analysis Batch: 58452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-19382-1	436 Elderberry	Total/NA	Solid	8260B	58391
490-19382-2	486 Laural Bay	Total/NA	Solid	8260B	58391
490-19382-4	834 Azalea	Total/NA	Solid	8260B	58391
490-19382-5	452 Elderberry	Total/NA	Solid	8260B	58391
490-19382-6	513 Laurel Bay	Total/NA	Solid	8260B	58391
490-19382-7	602 Dahlia	Total/NA	Solid	8260B	58391
490-19382-8	837 Azalea	Total/NA	Solid	8260B	58391
LCS 490-58452/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-58452/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-58452/6	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 58742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-19382-1	436 Elderberry	Total/NA	Solid	8260B	58390
490-19382-3	835 Azalea	Total/NA	Solid	8260B	58391
LCS 490-58742/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-58742/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-58742/6	Method Blank	Total/NA	Solid	8260B	
MB 490-58742/7	Method Blank	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 58454

The second second					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-19382-1	436 Elderberry	Total/NA	Solid	3550C	
490-19382-1 MS	436 Elderberry	Total/NA	Solid	3550C	
490-19382-1 MSD	436 Elderberry	Total/NA	Solid	3550C	
490-19382-2	486 Laural Bay	Total/NA	Solid	3550C	
490-19382-3	835 Azalea	Total/NA	Solid	3550C	
490-19382-4	834 Azalea	Total/NA	Solid	3550C	
490-19382-5	452 Elderberry	Total/NA	Solid	3550C	
490-19382-6	513 Laurel Bay	Total/NA	Solid	3550C	
490-19382-7	602 Dahlia	Total/NA	Solid	3550C	
490-19382-8	837 Azalea	Total/NA	Solid	3550C	
LCS 490-58454/2-A	Lab Control Sample	Total/NA	Solid	3550C	

TestAmerica Nashville

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QC Association Summary

Prep Type

Prep Type

Total/NA

Prep Type

Total/NA

Total/NA

Matrix

Solid

Matrix

Solid

Matrix

Solid

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

Client Sample ID

Client Sample ID

436 Elderberry

436 Elderberry

436 Elderberry

486 Laural Bay

452 Elderberry

513 Laurel Bay

Lab Control Sample

835 Azalea

834 Azalea

602 Dahlia

837 Azalea

Method Blank

Client Sample ID

436 Elderberry

Method Blank

GC/MS Semi VOA (Continued)

Prep Batch: 58454 (Continued)

Lab Sample ID

Lab Sample ID

490-19382-1 MS

490-19382-1 MSD

490-19382-1

490-19382-2

490-19382-3

490-19382-4

490-19382-5

490-19382-6

490-19382-7

490-19382-8

LCS 490-58454/2-A

MB 490-58454/1-A

Lab Sample ID

490-19382-1

MB 490-58454/1-A

Analysis Batch: 58693

TestAmerica Job ID: 490-19382-1

Method

3550C

Method

8270D

Method

8270D

Prep Batch

Prep Batch

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Prep Batch

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General Chemistry

Analysis Batch: 58909

Analysis Batch: 58360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-19377-B-1 DU	Duplicate	Total/NA	Solid	Moisture	
190-19382-1	436 Elderberry	Total/NA	Solid	Moisture	
190-19382-2	486 Laural Bay	Total/NA	Solid	Moisture	
90-19382-3	835 Azalea	Total/NA	Solid	Moisture	
190-19382-4	834 Azalea	Total/NA	Solid	Moisture	
190-19382-5	452 Elderberry	Total/NA	Solid	Moisture	
90-19382-6	513 Laurel Bay	Total/NA	Solid	Moisture	
190-19382-7	602 Dahlia	Total/NA	Solid	Moisture	
190-19382-8	837 Azalea	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-19382-1

Client Sample ID: 436 Elderberry

Date Collected: 02/04/13 15:30 Date Received: 02/13/13 08:30 Lab Sample ID: 490-19382-1

Matrix: Solid Percent Solids: 81.0

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		E
NSH		

Batch Batch Dilution Batch Prepared Prep Type Method Type Run Factor Number or Analyzed Analyst Lab Total/NA Prep 5035 58391 02/13/13 15:19 ML TAL Total/NA Analysis 8260B 58452 02/14/13 13:14 TALI Total/NA 5035 Prep 02/13/13 15:17 TAL 58390 MI Total/NA 8260B Analysis 58742 1 02/15/13 10:37 TALI Total/NA Prep 3550C 58454 02/14/13 06:01 TAL Total/NA Analysis 8270D 58693 02/14/13 18:07 BS TAL NSH Total/NA Analysis 8270D TAL NSH 5 58909 02/15/13 17:48 Total/NA Analysis Moisture 58360 02/13/13 14:23 RS TAL NSH

Client Sample ID: 486 Laural Bay

Date Collected: 02/05/13 14:10 Date Received: 02/13/13 08:30 Lab Sample ID: 490-19382-2

Matrix: Solid Percent Solids: 97.6

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	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			58391	02/13/13 15:19	ML	TAL NSH
Total/NA	Analysis	8260B		1	58452	02/14/13 13:45	AF	TAL NSH
Total/NA	Prep	3550C			58454	02/14/13 06:01	AK	TAL NSH
Total/NA	Analysis	8270D		1	58693	02/14/13 19:10	BS	TAL NSH
Total/NA	Analysis	Moisture		1	58360	02/13/13 14:23	RS	TAL NSH

Client Sample ID: 835 Azalea

Date Collected: 02/06/13 13:30

Date Received: 02/13/13 08:30

Lab Sample ID: 490-19382-3

Matrix: Solid

Percent Solids: 76.5

Туре	Method	Run	Factor	44			
			ractor	Number	or Analyzed	Analyst	Lab
Prep	5035			58391	02/13/13 15:19	ML	TAL NSH
Analysis	8260B		1	58742	02/15/13 10:07	AF	TAL NSH
Prep	3550C			58454	02/14/13 06:01	AK	TAL NSH
Analysis	8270D		1	58693	02/14/13 19:31	BS	TAL NSH
Analysis	Moisture		1	58360	02/13/13 14:23	RS	TAL NSH
	Analysis Prep Analysis	Analysis 8260B Prep 3550C Analysis 8270D	Analysis 8260B Prep 3550C Analysis 8270D	Analysis 8260B 1 Prep 3550C Analysis 8270D 1	Analysis 8260B 1 58742 Prep 3550C 58454 Analysis 8270D 1 58693	Analysis 8260B 1 58742 02/15/13 10:07 Prep 3550C 58454 02/14/13 06:01 Analysis 8270D 1 58693 02/14/13 19:31	Analysis 8260B 1 58742 02/15/13 10:07 AF Prep 3550C 58454 02/14/13 06:01 AK Analysis 8270D 1 58693 02/14/13 19:31 BS

Client Sample ID: 834 Azalea

Date Collected: 02/07/13 10:45

Date Received: 02/13/13 08:30

Lab Sample ID: 490-19382-4

Matrix: Solid

Percent Solids: 97.7

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			58391	02/13/13 15:19	ML	TAL NSH
Total/NA	Analysis	8260B		1	58452	02/14/13 14:45	AF	TAL NSH
Total/NA	Prep	3550C			58454	02/14/13 06:01	AK	TAL NSH
Total/NA	Analysis	8270D		1	58693	02/14/13 19:53	BS	TAL NSH
Total/NA	Analysis	Moisture		1	58360	02/13/13 14:23	RS	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-19382-1

Client Sample ID: 452 Elderberry

Client Sample ID: 513 Laurel Bay

Date Collected: 02/05/13 14:00

Date Received: 02/13/13 08:30

Date Collected: 02/04/13 15:30 Date Received: 02/13/13 08:30

Lab Sample ID: 490-19382-5

Matrix Solid

	INICICITIAL C	Jones
Percen	t Solids:	84.0

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			58391	02/13/13 15:19	ML	TAL NSH
Total/NA	Analysis	8260B		1	58452	02/14/13 15:15	AF	TAL NSH
Total/NA	Prep	3550C			58454	02/14/13 06:01	AK	TAL NSH
Total/NA	Analysis	8270D		1	58693	02/14/13 20:14	BS	TAL NSH
Total/NA	Analysis	Moisture		1	58360	02/13/13 14:23	RS	TAL NSH

Lab Sample ID: 490-19382-6

Matrix: Solid

Percent Solids: 94.6

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			58391	02/13/13 15:19	ML	TAL NSH
Total/NA	Analysis	8260B		1	58452	02/14/13 15:45	AF	TAL NSH
Total/NA	Prep	3550C			58454	02/14/13 06:01	AK	TAL NSH
Total/NA	Analysis	8270D		1	58693	02/14/13 20:35	BS	TAL NSH
Total/NA	Analysis	Moisture		1	58360	02/13/13 14:23	RS	TAL NSH

Client Sample ID: 602 Dahlia

Date Collected: 02/05/13 16:00

Date Received: 02/13/13 08:30

Lab Sample ID: 490-19382-7

Matrix: Solid

Percent Solids: 90.6

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			58391	02/13/13 15:19	ML	TAL NSH
Total/NA	Analysis	8260B		1	58452	02/14/13 16:16	AF	TAL NSH
Total/NA	Prep	3550C			58454	02/14/13 06:01	AK	TAL NSH
Total/NA	Analysis	8270D		1	58693	02/14/13 20:56	BS	TAL NSH
Total/NA	Analysis	Moisture		1	58360	02/13/13 14:23	RS	TAL NSH

Client Sample ID: 837 Azalea

Date Collected: 02/06/13 12:45

Date Received: 02/13/13 08:30

Lab Sample ID: 490-19382-8

Matrix: Solid

Percent Solids: 95.2

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			58391	02/13/13 15:19	ML	TAL NSH
Total/NA	Analysis	8260B		1	58452	02/14/13 16:46	AF	TAL NSH
Total/NA	Prep	3550C			58454	02/14/13 06:01	AK	TAL NSH
Total/NA	Analysis	8270D		1	58693	02/14/13 21:17	BS	TAL NSH
Total/NA	Analysis	Moisture		1	58360	02/13/13 14:23	RS	TAL NSH

Laboratory References:

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

TestAmerica Nashville

Method Summary

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

TestAmerica Job ID: 490-19382-1

в

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

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

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Certification Summary

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-19382-1

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 Dat
	ACIL		393	10-30-13
A2LA	ISO/IEC 17025		0453.07	12-31-13
Alabama	State Program	4	41150	05-31-13
Alaska (UST)	State Program	10	UST-087	07-24-13
Arizona	State Program	9	AZ0473	05-05-13
Arkansas DEQ	State Program	6	88-0737	04-25-13
California	NELAP	9	1168CA	10-31-13
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Colorado	State Program	8	N/A	02-28-13
Connecticut	State Program	1	PH-0220	12-31-13
Florida	NELAP	4	E87358	06-30-13
Illinois	NELAP	5	200010	12-09-13
lowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-13
Kentucky (UST)	State Program	4	19	09-15-13
Louisiana	NELAP	6	30613	06-30-13
Maryland	State Program	3	316	03-31-13
Massachusetts	State Program	1	M-TN032	06-30-13
Minnesota	NELAP	5	047-999-345	12-31-13
Mississippi	State Program	4	N/A	06-30-13
Montana (UST)	State Program	8	NA	01-01-15
Nevada	State Program	9	TN00032	07-31-13
New Hampshire	NELAP	1	2963	10-09-13
New Jersey	NELAP	2	TN965	06-30-13
New York	NELAP	2	11342	04-01-13
North Carolina DENR	State Program	4	387	12-31-13
North Dakota	State Program	8	R-146	06-30-13
Ohio VAP	State Program	5	CL0033	01-19-14
Oklahoma	State Program	6	9412	08-31-13
Oregon	NELAP	10	TN200001	04-30-13
Pennsylvania	NELAP	3	68-00585	06-30-13
Rhode Island	State Program	1	LAO00268	12-30-13
South Carolina	State Program	4	84009 (001)	02-28-13
South Carolina	State Program	4	84009 (002)	02-23-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-13
JSDA	Federal		S-48469	11-02-13
Jtah	NELAP	8	TAN	06-30-13
Virginia	NELAP	3	460152	06-14-13
Vashington	State Program	10	C789	07-19-13
Visconsin	State Program	5	998020430	08-31-13
Wyoming (UST)	A2LA	8	453.07	12-31-13



COOLER RECEIPT FORM



Cooler Received/Opened On 2/13/2013 @ 0830	
1. Tracking #(last 4 digits, FedEx)	
Courier: Fedex IR Gun ID 94660220	
2. Temperature of rep. sample or temp blank when opened: 2. Degrees Celsius	
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank froz	en? YES NO. NA
4. Were custody seals on outside of cooler? If yes, how many and where: (2) Tzon+/Back	TESNONA
5. Were the seals intact, signed, and dated correctly?	ES.).NONA
6. Were custody papers inside cooler?	(FES).NONA
I certify that I opened the cooler and answered questions 1-6 (intial)	@
7. Were custody seals on containers: YES (NO) and Intact	YESNO. CNA
Were these signed and dated correctly?	YESNO. NA
8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert P	
0.000	ice Other None
10. Did all containers arrive in good condition (unbroken)?	(YES).NONA
11. Were all container labels complete (#, date, signed, pres., etc)?	VES NONA
12. Did all container labels and tags agree with custody papers?	YES NONA
13a. Were VOA vials received?	YES. NO. NA
b. Was there any observable headspace present in any VOA vial?	YESNO(NA
14. Was there a Trip Blank in this cooler? YESNO. NA If multiple coolers, sequ	uence # M
I certify that I unloaded the cooler and answered questions 7-14 (intial)	<u>F</u>
15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH lev	el? YESNO.NA
b. Did the bottle labels indicate that the correct preservatives were used	YES .NONA
16. Was residual chlorine present?	YESNO. NA
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intid	al) E
17. Were custody papers properly filled out (ink, signed, etc)?	YES).NONA
18. Did you sign the custody papers in the appropriate place?	YES .NONA
19. Were correct containers used for the analysis requested?	YES .NONA
20. Was sufficient amount of sample sent in each container?	YES NONA
certify that I entered this project into LIMS and answered questions 17-20 (intial)	Ø-
certify that I attached a label with the unique LIMS number to each container (intial)	F

Relinquished by	Relinquist	Special i						5	N	8th 1	· H	Sampie I	1							THE U
ned by: \	and the second	Special instructions:						34 Aralan	35 AZAlak	6 LAUREL BAY	6 Elbach	a ID / Description		Sampler Signature:	Sample: Name: (Print)	Telephone Number: 843,412,2097	Project Manager: Tom McElwee emzil: mcelwee@eeginc.net	City/State/Zip: Ladson, SC 2945%	Address: 10179 High	THE LEADER IN ENVIRONMENTAL TESTING
, 6	2//							1/2/18	2/0/1	2/5/	2/4/1	Date Sampled	,	1	Cho	843.412.209	Tom McElwe	State/Zip: Ladson, SC 2945%	10179 Highw	TESTING
one	1/1/2						1	13 1045	31330	31410	13/530	Time Sampled	-	D	1 Tynsta	7	se emzil: most	29458	VAV 78	Moshville Division 2960 Foster Creighton Neshville, TN 37204
7	8 =		-				1	13	5	4	CY	No. of Containers Shipped	1	1	12		weede	П		stor Cre e, TN 37
Time	Sound						1	X	×	×	X	Grab					ginc		1	ighto 7204
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11 14		ship					\square	-		1		NaOH (Orange Label)	120	l	1	13	1			Fa
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300	P (-				1	1	15	1	1	Other+Spacify) ////	1	10		00	1			Phone: 615-726-0177 Toll Free: 800-765-0980 Fax: 615-726-3404
0			****	a galax				1				Groundwater	1	1	1	3		11		980
S												Wastewater]	1	1	1				
Date	Date											Drinking Water	Matrix			6	1	1		
2-12-12	8					1		1	_			Sludge	×	1		171	1	- 1	1	
		FEDEX	_	_		4	-	~	7	7	×	Soll	-			0				
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C. 2.	Time							~	X	×	1	BTEX + Napth - 8260	E	Proj	Proje	TA Quote #:		Site State: SC		
0								Y	7	×	X	PAH - 8270D		roject #:	roject ID: Laurel Bay Housing Project	oto #	PO#:	statu		
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		Laboratory Comments: Temperature Upon Receipt VOCs Free of Headspace?			11										Say H		1			methods, is this work regulatory purposes?
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		atory Comments: Temperature Upon Receipt: VOCs Free of Headspace?							1			-	1			1	1	}	Enforcement Action?	to assist us in using me proper analytical methods, is this work being conducted for regulatory purposes?
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		7	1						_		_	Fax Results	-							
			1							1	1	Send OC with report	1			1	1	1		

B Lot 2

2/25/2013

Relinquished by: / Date	Relinquispectory 2/2/13	al instructions.	Special backwaitings		,	7	7 AZA/ZA 2/6/15/	x 602 Dansia- 2 2/5/1 × 1608	V 5/3 Laurel Bay 2/5/13/1480	5 452 Elbenbracy 24/15 1530	Sample ID / Description Date Sampled Time Sampled		Sampler Signature:	Sampler Name: (Print) 1/2 WAR	Telephone Number: 843,412,2097	Project Manager: Tom McEiwee email: mceiwee@eeginc.net	Address: 10179 Highway 78 City/State/Zip: Ladson, SC 29456	Client Name/Account #: EEG - SBG # 2449	THE LEADER IN ENVIRONMENTAL TESTING Nashvil	
Time Received by a	0900 Fro						×	2 5 X	57%	SX	No. of Containers Shippe Grab Composite Field Filtered		1	Carrie	Fax No.:	vee@eeginc.net			Nashville Division 2960 Foster Creighton Nashville, TN 37204	
120 to 20	lex	Method of Shipment:					7	2 21	22	2	HNOx (Red Label) HCL(Blus Label) NaOH (Oranga Label) H ₂ SO ₄ Plastic (Yellow Label) H ₂ SO ₄ Glass(Yellow Label) None (Black Label) Groundwater	Peservative 3	0/	1	843-879				Phone: 615-726-0177 Toll Free: 800-765-0980 Fax: 615-726-3404	
23-13 QS	Date	FEDEX					7	4 5	X X	· 人	Wastewater Drinking Water Sludge Soil Other (specify):	Matrix	77	P	-040/ TA		S			
Time	Time	Temperature Upon Receipt VOCs Free of Headspace?					×	**	XX	* *	PAH - 8270D	Analyze For:	Project 共	Project ID: Laurel Bay Housing Project	TA Quote #:	PO#: 1063	Enforcement Action? Site State: SC	Compliance Monitoring?	To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?	PS Rot R
		≺ z							Pag	ne 2	RUSH TAT (Pre-Schedu Standard TAT Fax Results Send QC with report	lo:					YesNo		2/	(25/2013

Login Sample Receipt Checklist

Client: Environmental Enterprise Group

Job Number: 490-19382-1

Login Number: 19382 List Number: 1 List Source: TestAmerica Nashville

List Number: 1 Creator: Ford, Easton

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

Residual Chlorine Checked.

N/A

ATTACHMENT A



NON-HAZARDOUS MANIFEST

7	1. Generator's US E	PA ID No.	Manifest Doc	No.	2. Page 1	of		10.2	
NON-HAZARDOUS MANIFEST	2.1		7.00.46.73		1			1	
3 Concrete la Mailing Address			Company of the company		1		_		_
3. Generator's Mailing Address:	Ge	enerator's Site Addre	ess (If different than m	nailing):		st Number	1		
MCAS BEAUFORT					W	MNA	01519	110	
LAUREL BAY HOUSING	1					B. State	Generator's	ID	
BEAUFORT, SC 29904									
4. Generator's Phone 843-8	879-0411								
5. Transporter 1 Company Name S	con Il how are	6. US	EPA ID Number			. P			
10179 Hwy 78	town to made and	ort.			C. State T	ransporter's I	D		
1-1 - 56 79	VIT-					orter's Phone			
7. Transporter 2 Company Name	Tilly	8. US	EPA ID Number	_	Di Trensp				
Tritiansperies a sempany thanks		30	-1111-11-111-1		F State T	ransporter's I	D		
						orter's Phone			
9. Designated Facility Name and Sit	e Address	10. U	S EPA ID Number		T. Hansp	orter 5 (none			
HICKORY HILL LANDFILL	e nauress		o al filip (talling)		G. State F	acility (D			
2621 LOW COUNTRY DRIVE					The state of the state of	aron reason a	040.0	07.464	_
TO THE STREET WAS INVESTIGATION OF THE PROPERTY OF THE PROPERT					H. State F	acility Phone	843-9	87-464	3
RIDGELAND, SC 29936									
		100	1 33 -	ontainers		1	T		
11. Description of Waste Materials			No.	Type	13. Total Quantity	14. Unit Wt./Vol.	1. M	isc. Commer	nts
a, HEATING OIL TANK FILLED	WITH SAND						16	1.	3
a. HEATING OIL TAINT TELED	WITH SAILE		1 7	2011	7.87	TON	70	604	3
11/14 0	# 103CFFCC		-	70	1001	100	1		
	ofile # 102655SC			-			-		
b.									
V Co. J. Lácio									
WM Profile #									
c.									
WM Profile #			1						
d.									
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J. Additional Descriptions for Mate	erials Listed Above		K. Dispo	sal Location					
part of the part of									
			Cell				Level		
			Grid		A 15		1 1	1	- 5
15. Special Handling Instructions an	the second state of the second second second	on - 11	1	4)	5151	MER	1 BA-1	6)8	2,1 h
UST'S FROM	x: 3	732 KIN	ELBRER	IV	wet v	- 1	^	1	124
1) 424 Elden	OPRKU 3)	436 Eld	ENDORRE	145)	484 1	mun /	BAVE		
Purchase Order #	1	EMERGEN	CY CONTACT / PH	ONE NO.:			/		
16. GENERATOR'S CERTIFICATE:									_
			- d-6d b.: 40.0	CD Dark 261		abla state la		£	
I hereby certify that the above-described accurately described, classified and							w, nave beer	i rully and	3
Printed Name	packaged and are in pr	Signature "Or		Jiuling to ap	plicable regu	lations.	Month	Day	Year
2 A. /	File	Signature of	raciian or	-te			CV.	10	15
17. Transporter 1 Acknowledgemen	nt of Receipt of Materia	als .							-
Printed Name	/ Neceipt of Materia	Signature	1111	/			Month ,	Day	Year
Printed Name How H	Shari	Signature	0/1/1	1			4	11/1	1-3
10 7 11 11	211412	-	1.	_			1	10	11)
18. Transporter 2 Acknowledgemen	it of Receipt of Materia						Lucia	2	
Printed Name		Signature	1	Λ.,			Month	Day	Year
JAMES RAI	Lutial	(Wan	nes Pr	Va			4	17	13
19. Certificate of Final Treatment/D	isposal	- Arri	- F-L						-
		at to the host of mu	knowledge the a	hove-describ	ned waste w	as managed	in compliance	e with all	
I certify, on behalf of the above liste applicable laws, regulations, permits			knowledge, the a	הסאפ-מפצכווו	Jeu waste W	as managed	m compliant	e with all	
			rials covered by	hic manifort					
20. Facility Owner or Operator: Cer	uncation of receipt of i		ilais covered by t	ins mannest			1.44.0.0	100	Lace
Printed Name	1 -1	Signature	0.1	10			Month	Day	Year
1674. 60	112/0/-	100	L Che	2010			14	17	10
White-TREATMENT, STORAGE, DISP	POSAL FACILITY COPY	Blue- GENER	ATOR #2 COPY		Ye	llow- GENER	ATOR #1 CO	PΥ	
Pink- FACILITY USE (ONLY	Gold- TRANSF	ORTER #1 COPY	/					

Appendix C Laboratory Analytical Report - Groundwater



Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Description: BEALB436TW01WG20151113

Laboratory ID: QK13041-010

Matrix: Aqueous

Date Sampled:11/13/2015 0930

Date Received: 11/13/2015 Run Prep Method Analytical Method Dilution Analysis Date Analyst Batch **Prep Date**

1	5030B	8260B	1 11/25	5/2015 1504 ALL		90579			
			CAS	Analytical					
Parame	eter		Number	Method	Result Q	LOQ	LOD	DL	Un
Donzon	_		74 40 0	00000	0.45 11		0.45	0.04	

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

Su	rrogate	Run 1 Q % Recovery	Acceptance Limits	
Bro	omofluorobenzene	100	75-120	
1,2	2-Dichloroethane-d4	100	70-120	
То	luene-d8	96	85-120	
Dib	oromofluoromethane	97	85-115	

PQL = Practical quantitation limit ND = Not detected at or above the MDL B = Detected in the method blank

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

H = Out of holding time

Q = Surrogate failure L = LCS/LCSD failure

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

N = Recovery is out of criteria

S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS (SIM)

Client: AECOM - Resolution Consultants

Description: BEALB436TW01WG20151113

Laboratory ID: QK13041-010

Matrix: Aqueous

Date Sampled: 11/13/2015 0930 Date Received: 11/13/2015

3520C

Run Prep Method

1

Analytical Method Dilution Analysis Date Analyst Batch **Prep Date** 8270D (SIM) 11/25/2015 1115 RBH 11/18/2015 1236 89918

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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Methylnaphthalene-d10		90	15-139
Fluoranthene-d10		102	23-154

PQL = Practical quantitation limit ND = Not detected at or above the MDL B = Detected in the method blank

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

H = Out of holding time

Q = Surrogate failure L = LCS/LCSD failure

 $J = Estimated result < PQL and <math>\geq MDL$ Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" N = Recovery is out of criteria

S = MS/MSD failure

Appendix D Regulatory Correspondence





Catherine E. Heigel, Director Promoting and protecting the health of the public and the environment

July 1, 2015

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

RE: IGWA

Laurel Bay Underground Storage Tank Assessment Reports for:

See attached sheet

Dear Mr. Drawdy,

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

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

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

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

Sincerely,

Kent Krieg

Department of Defense Corrective Action Section

Bureau of Land and Waste Management

South Carolina Department of Health and Environmental Control

Cc: Russell Berry (via email)

Craig Ehde (via email) Bryan Beck (via email)



Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

Krieg to Drawdy **Attachment to:**

Subject: IGWA Dated 7/1/2015

Laurel Bay Underground Storage Tank Assessment Reports for: (97 addresses/110 tanks)

118 Banyan	343 Ash Tank 2
126 Banyan	344 Ash Tank 2
127 Banyan	347 Ash Tank 2
130 Banyan Tank 1	378 Aspen Tank 2
141 Laurel Bay	379 Aspen
151 Laurel Bay	382 Aspen Tank 1
224 Cypress	382 Aspen Tank 2
227 Cypress	394 Acorn Tank 2
256 Beech Tank 2	400 Elderberry
257 Beech Tank 2	432 Elderberry
257 Beech Tank 1 257 Beech Tank 2	436 Elderberry
264 Beech	473 Dogwood Tank 2
265 Beech Tank 2	482 Laurel Bay
265 Beech Tank 2	517 Laurel Bay
275 Birch	586 Aster
277 Birch Tank 1	632 Dahlia
285 Birch	639 Dahlia Tank 2
292 Birch Tank 3	643 Dahlia Tank 1
297 Birch	644 Dahlia Tank 1
301 Ash	644 Dahlia Tank 2
306 Ash	646 Dahlia Tank 1
310 Ash Tank 1	646 Dahlia Tank 2
313 Ash	665 Camellia
315 Ash Tank 2	699 Abelia
316 Ash	744 Blue Bell
319 Ash	745 Blue Bell Tank 1
320 Ash	747 Blue Bell Tank 1
321 Ash	747 Blue Bell Tank 2
329 Ash	747 Blue Bell Tank 3
330 Ash Tank 2	749 Blue Bell Tank 1
331 Ash	749 Blue Bell Tank 2
332 Ash	751 Blue Bell
333 Ash	762 Althea
335 Ash Tank 1	765 Althea Tank 2
335 Ash Tank 2	766 Althea Tank 4
341 Ash	767 Althea Tank 1
342 Ash Tank 1	768 Althea Tank 2
342 Ash Tank 2	768 Althea Tank 3

Laurel Bay Underground Storage Tank Assessment Reports for: (98 addresses/110 tanks) cont.

768 Althea Tank 4	1067 Gardenia
769 Althea Tank 1	1077 Heather
769 Althea Tank 2	1081 Heather
775 Althea	1101 Iris Tank 2
819 Azalea	1104 Iris
840 Azalea	1105 Iris Tank 2
878 Cobia	1124 Iris Tank 2
891 Cobia	1142 Iris Tank 2
913 Barracuda	1146 Iris Tank 2
916 Barracuda	1218 Cardinal
923 Albacore	1240 Dove
1004 Bobwhite	1266 Dove
1022 Foxglove	1292 Eagle
1031 Foxglove	1299 Eagle Tank 1
1034 Foxglove Tank 2	1302 Eagle
1061 Gardenia Tank 3	1336 Albatross
1064 Gardenia	1351 Cardinal



Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

Division of Waste Management Bureau of Land and Waste Management

June 8, 2016

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

RE: Approval and Concurrence with Draft Final Initial Groundwater Investigation Report-November and December 2015

Laurel Bay Military Housing Area Multiple Properties

Dated April 2015

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received groundwater data in the above referenced Groundwater Investigation Report for the attached addresses on May 2, 2016. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

Per the Department's request, groundwater samples were collected from the attached referenced addresses. The Department reviewed the groundwater data and previous investigations and it agrees with the conclusions and recommendations included in the document. To further assess the impact to groundwater, permanent wells should be installed at the 15 stated addresses. For the remaining 80 addresses, there is no indication of contamination on the property and therefore no further investigation is required at this time.

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

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

Sincerely,

Laurel Petrus

NETS

RCRA Federal Facilities Section

Attachment: Specific Property Recommendations

Cc: Russell Berry, EQC Region 8 (via email)

Shawn Dolan, Resolution Consultants (via email) Bryan Beck, NAVFAC MIDATLANTIC (via email)

Craig Ehde (via email)

Attachment to: Petrus to Drawdy

Subject: Draft Final Initial Groundwater Investigation Report-November and December 2015

Specific Property Recommendations

Dated June 8, 2016

Draft Final Initial Groundwater Investigation Report for (95 addresses)

Permanent Moni	toring Well Investigation recommendation (15 addresses)
130 Banyan Drive	473 Dogwood Drive
256 Beech Street	747 Blue Bell Lane
285 Birch Drive	749 Blue Bell Lane
292 Birch Drive	775 Althea Street
330 Ash Street	1034 Foxglove Street
331 Ash Street	1104 Iris Lane
335 Ash Street	1124 Iris Lane
342 Ash Street	
2 2 1112	

118 Banyan Drive	644 Dahlia Drive	
126 Banyan Drive	646 Dahlia Drive	
127 Banyan Drive	665 Camellia Drive	
141 Laurel Bay Blvd	699 Abelia Street	
151 Laurel Bay Blvd	744 Blue Bell Lane	
224 Cypress Street	745 Blue Bell Lane	
227 Cypress Street	751 Blue Bell Lane	
257 Beech Street	762 Althea Street	
264 Beech Street	765 Althea Street	
265 Beech Street	766 Althea Street	
275 Birch Drive	767 Althea Street	
277 Birch Drive	768 Althea Street	
297 Birch Drive	769 Althea Street	
301 Ash Street	819 Azalea Drive	
306 Ash Street	840 Azalea Drive	
310 Ash Street	878 Cobia Drive	
313 Ash Street	891 Cobia Drive	
315 Ash Street	913 Barracuda Drive	
316 Ash Street	916 Barracuda Drive	
319 Ash Street	923 Wren Lane	
320 Ash Street	1004 Bobwhite Drive	
321 Ash Street	1022 Foxglove Street	
329 Ash Street	1031 Foxglove Street	
332 Ash Street	1061 Gardenia Drive	
333 Ash Street	1064 Gardenia Drive	
341 Ash Street	1067 Gardenia Drive	
347 Ash Street	1077 Heather Street	
378 Aspen Street	1081 Heather Street	
379 Aspen Street	1101 Iris Lane	
382 Aspen Street	1105 Iris Lane	
394 Acorn Street	1142 Iris Lane	
400 Elderberry Drive	1146 Iris Lane	
432 Elderberry Drive	1218 Cardinal Lane	,300
436 Elderberry Drive	1240 Dove Lane	
482 Laurel Bay Blvd	1266 Dove Lane	
517 Laurel Bay Blvd	1292 Eagle Lane	p.6
586 Aster Street	1299 Eagle Lane	
632 Dahlia Drive	1302 Eagle Lane	
639 Dahlia Drive	1336 Albatross Drive	
643 Dahlia Drive	1351 Cardinal Lane	

Attachment to: Petrus to Drawdy
Subject: Draft Final Initial Groundwater Investigation Report-November and December 2015
Specific Property Recommendations
Dated June 8, 2016, Page 2